



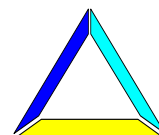
OSTEUEropa-INSTITUT MÜNCHEN

COPENHAGEN ECONOMICS

INSTITUTE FOR ECONOMIC RESEARCH AND POLICY CONSULTING

Reytarska 8/5-A, 01034 Kyiv, Tel. (+38044) 278-6342, 278-6360, Fax 278-6336

E-mail: institute@ier.kiev.ua, <http://www.ier.kiev.ua>



Analysis of Economic Impacts of Ukraine's Accession to the WTO

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Study on Service Sectors in Ukraine

Copenhagen, Kyiv, Munich, December 2005

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* Corresponding author: Email to movchan@ier.kiev.ua

Table of contents

List of Abbreviations.....	5
PART I. GENERAL OVERVIEW	7
WTO and services: general overview.....	9
Ukraine and WTO: negotiations on services.....	10
Role of services in Ukraine's economy	11
Trade restrictiveness index and its ad valorem equivalents: general methodology of the estimate	15
Overview of results	16
PART II. ANALYSIS OF EXISTING TRADE RESTRICTION.....	19
Existing trade restrictions	21
Results of questionnaire and construction of the trade restrictiveness index.....	21
Estimating the tariff equivalents	25
Expected changes in trade regime as a result of WTO accession.....	27
PART III. FINANCIAL SERVICES	29
Overview of financial intermediation sector	31
Details of the calculations of the restrictiveness indexes for banking services	33
Details of the calculations of tariff equivalents for banking services	36
Details of the calculations of the restrictiveness indexes for insurance services	37
Details of the calculations of tariff equivalents for the insurance sub-sector	40
Details of the calculations of the restrictiveness indexes for securities services.....	41
Details of the calculations of tariff equivalents for security services	44
PART IV. TELECOMMUNICATION SERVICES	47
Overview of the telecommunications sector.....	49
Details of restrictiveness index calculation for fixed lines services.....	51
Details of the calculations of tariff equivalents for fixed lines services	54
Details of restrictiveness index calculation for mobile phone services	56
Details of the calculations of tariff equivalents for mobile phone services.....	59
Details of restrictiveness index calculation for Internet services	61
Details of the calculations of tariff equivalents for Internet services	63
PART V. TRANSPORTATION SERVICES	65
Overview of transportation sector	67

Details of the calculations of the restrictiveness indexes for freight transportation.....	69
Details of the calculations of tariff equivalents for freight transportation.....	71
Details of the calculations of the restrictiveness indexes for passenger transportation.....	72
Details of the calculations of tariff equivalents for passenger transportation.....	74
REFERENCES	76
ANNEX A. TECHNICAL NOTE	77
ANNEX B. QUESTIONNAIRES.....	81
Financial Services: Banking	83
Financial Services: Insurance	97
Financial Services: Securities	110
Telecommunications – Fixed Line Services	124
Telecommunications – Mobile Services	134
Telecommunications – Internet Services.....	142
Freight Transportation	148
Passenger Transportation	152
ANNEX C. TRADE RESTRICTIVENESS INDEX TABLES.....	157

List of Abbreviations

bn	billion
CMU	Cabinet of Ministers of Ukraine
EU	European Union
GATS	General Agreement of Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
m	million
MFN	Most Favoured Nation
NBU	National Bank of Ukraine
R&D	Research and Development
TE	tariff equivalent
TRI	trade restrictiveness index
UAH	Ukrainian Hryvnia
USD	United States dollar
WTO	World Trade Organisation

PART I

GENERAL OVERVIEW

WTO and services: general overview

The general public traditionally associates the WTO with a liberalisation of commodity markets, in particular the reduction and binding of tariffs, the elimination of quantitative restrictions, and a reduction of subsidies. Trade liberalisation in agriculture and food industry attracts in particular a lot of attention. Still, another important – and gaining even higher importance – aspect of international trade is trade in services, the liberalisation of which was launched only recently.

Today services gained an importance in their own right, and also as a crucial complement to a production sphere of the economy. The increased weight of services in world trade put this issue on the agenda of the Uruguay Round of trade negotiations and led to the establishment of the General Agreement of Trade in Services (GATS).

The introduction of GATS signified a broader movement of the WTO regime into traditionally territory of domestic policies.¹ If the GATT was concerned mostly with border policies with minor exemptions, the GATS and other agreements signed as an outcome of the Uruguay Round, have stepped into the domestic policy agenda in an attempt to converge institutions worldwide.

Unlike traditional merchandise cross-border trade, both the location of the consumer and supplier define the provision of services. In order to capture the peculiarities, the GATS defines four ways (or “modes”) of trading services:²

Mode 1: cross-border supply. Services are supplied from one country to another (e.g. international telephone calls).

Mode 2: consumption abroad. Consumers or firms make use of a service in another country (e.g. tourism).

Mode 3: commercial presence. In this case a foreign company sets up subsidiaries or branches to provide services in another country (e.g. foreign banks setting up operations in a country).

Mode 4: presence of natural persons. This mode envisages that individuals travel from their own country to supply services in another (e.g. fashion models or consultants).

The WTO identifies more than 150 services sectors. The importance of each mode as well as the mechanics of transactions differs widely across sectors.

Under the GATS, as well as under the GATT, the MFN principle is one of the cornerstones of the agreement. This principle envisages that if a country allows foreign competition in a sector, equal opportunities should be given to service providers from all other WTO members. This rule applies even if a country has made no specific commitment to provide foreign companies access to its markets

¹ Kimura F., Ando M., Fujii T. (2003) *Estimating the Ad Valorem Equivalent of Barriers to Foreign Direct Investment in Financial Services Sectors in Russia*.

² http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm6_e.htm.

under the WTO. Also, although the MFN principle applies to all services, some special temporary exemptions have been allowed under the GATS. However, they could only be made once, and nothing can be added to the lists.

According to the GATS, individual countries' commitments to open markets in specific sectors — and how open those markets will be — are the outcome of negotiations. That is, countries are not obliged to open all service sectors. The commitments appear in "schedules" that list the sectors being opened, the extent of market access being given in those sectors (e.g. whether there are any restrictions on foreign ownership), and any limitations on national treatment (whether some rights granted to local companies will not be granted to foreign companies). These clearly defined commitments are "bound": like bound tariffs for trade in goods, they can only be modified after negotiations with affected countries. Because "unbinding" is difficult, the commitments are virtually guaranteed conditions for foreign exporters and importers of services and investors in the sector to do business.

Ukraine and WTO: negotiations on services

At present Ukraine is in the final stage of negotiating the membership in the WTO. Although the Government's ambitious plan to complete all talks before the Ministerial Conference in Hong-Kong held in December 2005 could not be realized, Ukraine succeeded to conclude bilateral talks on access to markets of goods and services with 38 countries, including protocols with Canada (2002), the EU (2003), Poland (2003), and Japan (2005). Also, most of legislative changes required for the harmonisation of Ukraine's legislation with the WTO rules were passed by the Parliament.

Alongside with talks on liberalisation of commodity trade, Ukraine has negotiated liberalisation in services trade. Topics of negotiations included the elimination or weakening of restrictions on the foreign ownership in various sectors, removal of citizenship requirements for service providers, non-discriminating licensing and tariff setting, requirements on specific forms of establishment, etc.

By now Ukraine passed several key laws regulating the provision of services and eliminating the discrimination against foreign suppliers. In particular, in 2001 laws were passed eliminating a 49 per cent cap on foreign ownership in insurance. In 2003 the cap on foreign ownership in information agencies was increased from 30 per cent to 35 per cent. In June 2005 the Parliament eliminated citizenship requirement in provision of auditing services. A draft law on the elimination of citizenship requirement for law attorneys is pending in the Parliament.

However, as allowed by the GATS, Ukraine is not committed to fully open services. For instance, it is expected that some services will be exempted from the MFN regime. That concerns some audiovisual services; systems of computer tickets reservation; and inland water, railways, and motor vehicles freight and passenger transportation regulated by other international agreements. Also, citizenship requirements for notaries and for heads of educational institutions are supposed to be preserved after Ukraine's accession to the WTO.

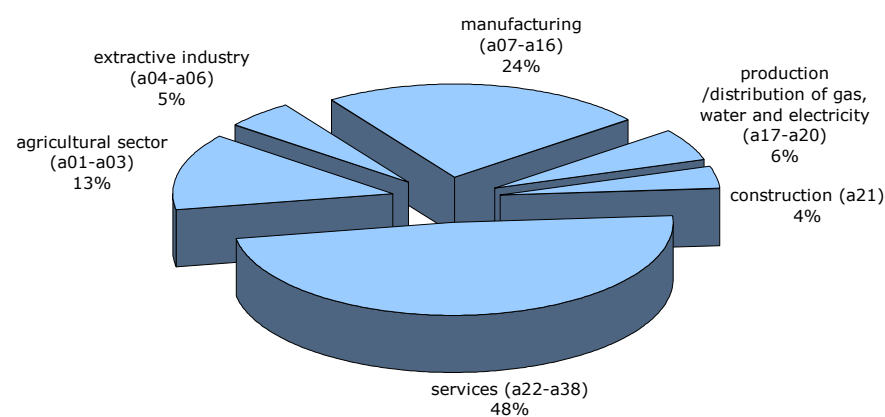
Financial intermediation, especially banking and insurance, received the special attention during negotiations. The discussion concentrated on providing equal market access, namely the permission for foreign banks and insurance companies to set up branches in Ukraine. In July 2005 Ukraine's Parliament passed a law on setting up branches by foreign insurance companies. This law envisages a 5-year transition period for the elimination of currently applied restrictions and the development of necessary legislation. Such provisions are in line with suggestions expressed by the USA, with which Ukraine has not yet signed a bilateral protocol on access to markets of goods and services. As of banking services, the draft law granting such a permission was adopted in the first reading. The WTO members, including the USA, are waiting for the final version of the law.

Role of services in Ukraine's economy

The importance of service sectors in Ukraine's economy should not be underestimated. They create fairly half of value added in the economy (Figure 1.1), and their steady growth explains approximately 57% of overall real GDP increase in 2000-2004. The largest sectors are trade and transport, each accounting for approximately one fifth of total value added created in service sectors (Figure 1.2). Wholesale and retail trades grew especially strong in 2000-2004, more than doubling the value added in real terms.

Figure 1.1

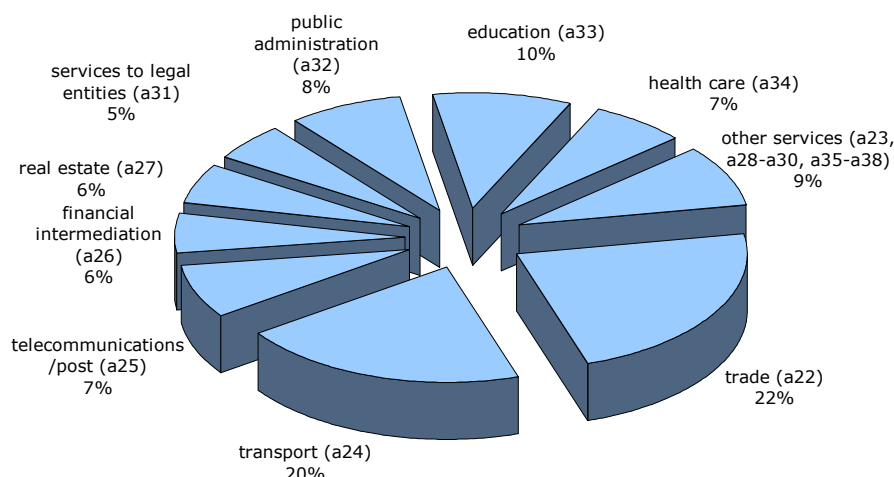
Structure of value added by major sectors in the economy in 2002, % of total value added



Source: State Statistic Committee

Figure 1.2

Value added produced in service sectors, % of total services value added



Source: State Statistic Committee

However, the strong domestic development of services was not mirrored by equally vigorous development of foreign trade in services. Most of services are traditionally domestic-market-oriented (Table 1.1). Export-oriented service sectors³ are hotels and restaurants, and transport. At the same time, the R&D and hotels and restaurants are the only two sectors that import more than 50% of their products. Here, an important role of imports in R&D may be a sign of inflow of new technologies into Ukraine.

Table 1.1

Share of exports and imports in total output of services sectors in 2002, %

		Exports	Imports
a21	Construction	1%	6%
a22	Trade	0%	0%
a23	Hotels and restaurants	52%	51%
a24	Transport	48%	9%
a25	Post and telecommunications	4%	5%
a26	Financial intermediation	1%	14%
a27	Real estate transactions	5%	0%
a28	Renting	7%	2%
a29	Informatisation activities	21%	24%
a30	Research and development	12%	66%
a31	Services to legal entities	4%	12%
a32	Public administration	0%	11%
a33	Education	1%	1%

³ That is, sectors that export around or more than 50% of their output.

Table 1.1 (cont.)

Share of exports and imports in total output of services sectors in 2002, %

a34	Health care and social assistance	1%	1%
a35	Sewage, cleaning of streets and refuse disposal	0%	0%
a36	Social activities	0%	0%
a37	Recreational, entertainment, cultural and sporting activities	0%	1%

Source: State Statistic Committee

According to the balance of payments data, in 2004 the merchandise trade turnover was 5.5 times higher than service trade turnover, despite a steady growth of exports and imports of services (Table 1.2). Between 1998 and 2004 exports of services increased by 60% in dollar terms, thus growing at an almost twice slower rate than merchandise exports. At the same time, the growth rate of imports was much more significant, and the volume of imported services more than doubled in dollar terms during the past six years.

Table 1.2

Trade in goods and services in Ukraine, USD m

	1998	2004	Change (in %)
Exports of goods	13699	33432	144
Imports of goods	16283	29691	82
Turnover of trade in goods	29982	63123	111
Exports of services	3922	6287	60
Imports of services	2545	5155	103
Turnover of trade in services	6467	11442	77
Turnovers of trade in goods/ turnover of trade in services	4.6	5.5	

Source: NBU, IER estimates

The structure of Ukraine's service exports is biased towards one sector, namely transport. Despite increased importance of other services, in particular travel and other commercial services, in 2004 transport still accounted for nearly two thirds of overall services exports (Table 1.3). That differs from the world services exports structure, in which, according to the WTO,⁴ transport accounted for less than one quarter of overall commercial services in 2004. This bias is explained by large share of pipelines transportation, the network for which was inherited from the Soviet Union (see Box 1.1). Imports of services are more diversified.

⁴ http://www.wto.org/english/res_e/statis_e/its2005_e/charts_e/chart_iv02.xls.

Table 1.3

Structure of trade in services by major types of services, % of total

	1998		2004	
	Credit	Debit	Credit	Debit
Transport	82.2	19.1	64.3	31.6
<i>Including pipelines</i>	<i>48.3</i>	<i>0.0</i>	<i>30.0</i>	<i>12.5</i>
Travel	8.0	13.4	18.2	19.3
Telecommunication	2.6	5.2	2.0	2.0
Construction	1.1	7.7	1.2	3.9
Financial services	0.6	3.5	0.4	2.4
Public administration services	0.0	13.4	3.9	8.9
Other commercial services	5.6	37.8	10.1	31.8

Source: NBU

The geography of trade in services has been changed during the last six years. In exports, the diminishing role of pipeline transit was mirrored by the decrease in the CIS share, mostly Russia. At the same time, the importance of services exports to the EU-25 increased. On the import side, the role of trade with the EU-25 is even more prominent, as 43% of all services imports originate there.

Table 1.4

Geographic structure of trade in services

	Exports of services		Imports of services	
	1998	2004	1998	2004
CIS	61.6	47.4	25.6	19.8
EU-25	15.1	28.7	17.7	43.0
Asia	7.5	7.7	4.6	10.9
Africa	1.3	1.0	0.4	1.0
America	5.7	7.7	22.5	13.8
ROW	8.9	7.6	29.1	11.5

Source: State Statistic Committee

Box 1.1.**Pipeline transportation**

Ukraine is a major transit country for energy. The Ukrainian gas and oil transit systems are completely state owned: Ukrtransgaz manages gas transit and Ukrtransnafta manages the oil transit system. Both companies are subsidiaries of the NAK Naftogaz Ukraine, the state energy company, which is the monopolist on the internal gas market and also controls domestic extraction of natural gas. Ukraine transports through its territory about 80% of all Russian gas exports to Europe as well as gas to Moldova, and to the South of Russia.

Most of the oil transited through Ukraine belongs to Russian companies. Both gas and oil transit are conducted in accordance to intergovernmental agreements between Russia and Ukraine. The oil transit system operates under more competitive pressure from alternative routes of oil transportation than the gas transit system*.

However, the Ukrainian gas transit system is not subject to WTO accession related changes.

In the Draft Schedule of Ukraine's Commitments on Services the government agrees to guarantee transparency in access to and trade by the services of the pipeline transport. Non-discrimination practices on access and pricing policies of the pipelines are to be guaranteed.

* Further information is provided in: Pavel, F., B. Meinhart and C.v.Hirschhausen (2005). Transporting Russian Gas to Western Europe - A Simulation Analysis. "The Energy Journal" (Vol.26, No 2). and in: International Practices on Pipeline Operations. German Advisory Group on Economic Reforms with the Ukrainian Government, Policy paper T27, available http://www.ier.kiev.ua/English/papers/t27_en.pdf

Trade restrictiveness index and its ad valorem equivalents: general methodology of the estimate

When foreign service providers try to enter the market of Ukraine and provide services, they face two kinds of barriers. Barriers that affect foreign service providers in a discriminatory manner and barriers that affect both foreign and domestic service providers alike. The barriers are necessarily of a qualitative nature since they originate from legislation. For the analysis of the barriers economy wide effects we transformed the qualitative barrier measures into quantitative measures. We developed questionnaires for each services sector and ranked and scored and finally summarised the answers into a single Trade Restrictiveness Index (TRI) for each services sector⁵. All questionnaires and answers are provided in the Annex A.

The TRI covers all the barriers affecting foreign providers, both the barriers that affect foreign and domestic providers alike and the discriminatory barriers affecting foreign providers alone. The latter one we isolated in the index labelled Trade Restrictiveness Index *discriminatory* abbreviated *TRId*. The TRI and the *TRId* are bounded between zero and one, where zero reflects no barriers and one reflects most barriers.

While the TRI's in themselves provide valuable insight into the level of barriers to trade, they cannot directly be used for economic modelling to produce results on an economy wide basis. For that the values of the TRI's need to be converted into tariff equivalents. Tariff equivalents are hypothetical taxes implying an effect on a firms' performance similar to the barriers captured by the TRI. In other words, the tariff equivalents can be thought of as theoretical tariffs computed to create economic effects that are equivalent to the economic effects of the actual barriers.

Higher tariffs mean higher prices, so the tariff equivalents measure the percentage increase in prices due to barriers compared to a situation without barriers:

$$TE (\%) = [(P_{f1} - P_{f0}) / P_{f0}] \cdot 100 ,$$

where P_{f1} is the price of services provided with the current level of barriers as measured by the TRI, and P_{f0} is the price of services provided without any barriers.

⁵ The TRI for each sector is calculated on the basis of answers from a detailed questionnaire. The questionnaires and the method for constructing the TRI closely follow those used in the study on Russia's WTO accession as described in Kimura et al (2003a, b).

We find that the current barriers give rise to trade restrictiveness indices (TRI's) for telecommunications and financial services between 0.15 and 0.42 while they are noticeably higher for railway transport 0.64, cf. Table 1.5. The tariff equivalents are not necessarily proportional to the TRI values because they are calculated from TRI values as well as from econometric estimates linking TRI's to prices. The differences in econometric estimates are the reason why we find smaller tariff equivalents for railway transport than for finance even though the TRI's are higher in railway than in finance.

Table 1.5

Trade restrictiveness index and tariff equivalents

	TRI	TE
Telecom		
- Fixed	0.22	0.052
- Internet	0.15	0.034
- Mobile	0.18	0.061
Railway		
- Freight	0.64	0.167
- Passenger	0.64	0.167
Finance		
- Banking	0.27	0.219
- Insurance	0.42	0.360
- Securities	0.35	0.287

Note: The TRI is bounded between zero and one; zero reflects no barriers and one reflects many barriers

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting

Overview of results

The WTO accession is likely to reduce discriminatory barriers, that is, the barriers affecting foreign firms only. The discriminatory barriers are measured by the Trade Restrictiveness Index *discriminatory* (TRId) a subset of the TRI. A probable and very interesting scenario is one where no discriminatory barriers exist meaning that the TRI will be reduced by the size of the TRId such that only barriers affecting domestic and foreign firms alike prevail. This will cause sharp drops in TRI and consequently in the tariff equivalent (TE) in most services sectors. For example, the current TRI in fixed telecommunications of 0.22 declines to a mere 0.12 due to elimination of the TRId which has a value of 0.10, cf. Table 1.6. This implies a fall in the tariff equivalents from approximately 5 percent to 3 percent.

Table 1.6

Trade restrictiveness index and tariff equivalents before and after WTO accession

	TRI	TRId	TRI after WTO¹	TE²	TE after WTO³
Telecom					
- Fixed	0.22	0.10	0.12	0.052	0.027
- Internet	0.15	0.10	0.05	0.034	0.011
- Mobile	0.18	0.10	0.08	0.061	0.025
Railway					
- Freight	0.64	0.00	0.64	0.167	0.167
- Passenger	0.64	0.00	0.64	0.167	0.167
Finance					
- Banking	0.27	0.20	0.07	0.219	0.053
- Insurance	0.42	0.30	0.12	0.360	0.092
- Securities	0.35	0.23	0.12	0.287	0.092

Notes:

1: WTO accession is assumed to eliminate all foreign discriminatory barriers. Therefore "TRI after WTO" is calculated as TRI minus TRId from the preceeding columns.

2: Calculated from values in "TRI" column.

3: Calculated from values in "TRI after WTO" column.

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting

PART II
ANALYSIS OF EXISTING TRADE RESTRICTION

Existing trade restrictions

This study analyses the trade restrictions in eight services sectors. These are banking, insurance and securities services (financial intermediation); fixed line, mobile and internet communication (telecommunication) and railway transportation of freight and passengers (transport). For each of the eight sectors, the objective is to calculate an index for barriers to trade and to convert this index into a tariff equivalent that can be used in the CGE model described later in this report. A WTO accession implies a change in barriers to trade in services and in the corresponding tariff equivalents thereby affecting overall economic performance in Ukraine.

In this chapter *we first* calculate an index measuring the level of barriers to trade. The index is labelled the Trade Restrictiveness Index (TRI). The index is bounded between zero and one, where zero reflects no barriers and one reflects the highest level of barriers. In addition we calculate an index measuring the foreign *discriminatory* part of the index. This index is labelled *TRId* for Trade Restrictiveness Index *discriminatory*. The *TRId* constitute a subset of the TRI and measure the barriers that apply to foreign firms only, hence, are discriminatory; while the TRI measure the sum of these discriminatory barriers as well as general barriers to trade affecting both foreign and domestic firms. We use the *TRId* when interpreting the effect of WTO accession. Both indices are calculated on the basis of answers from the same detailed questionnaire.

Second, we convert the value of the TRI into a tariff equivalent that can be used in a CGE model. The tariff equivalents measure how much larger prices are due to barriers compared to the situation without barriers. For converting the TRI's into tariff equivalents, we need econometric estimates linking the TRI's to prices in each of the services sectors covered. We apply econometric estimates from similar analyses in Kimura et al.(2003a, b). We find that the estimates are positive indicating that a country with many barriers (large TRI), experiences higher prices than a country with fewer barriers (low TRI).

The next section presents the TRI's and how they are constructed for each of the eight services sectors covered in this study, followed by a section presenting the tariff equivalents.

Results of questionnaire and construction of the trade restrictiveness index

When foreign services providers try to enter the market of Ukraine and provide services, they face barriers. However, the barriers are necessarily of qualitative nature since they originate from legislation. To analyse the economy wide effects of the barriers we must transform the qualitative barrier measures into quantitative measures. This is done by setting up questionnaires for each services sector whose answers can be ranked and scored and finally summarised into a single Trade Restrictiveness Index (TRI). Once the TRI has been calculated the discriminatory part may easily be isolated into the *TRId*.

The TRI and TRI_d are bounded between zero and one, where zero reflects no barriers and one reflects many barriers. The indices are calculated on the basis of answers from a detailed questionnaire. The questionnaires and the method for constructing the TRI's closely follow those used in the study on Russia's WTO accession as described in Kimura et al (2003a, b).

For all eight services sectors covered the questionnaires are centered around three of the four modes for trading services:⁶

Mode 1: cross-border trade. Services are supplied from one country to another;

Mode 3: commercial presence. In this case a foreign company sets up subsidiaries or branches to provide services in another country (e.g. foreign banks setting up operations in a country);

Mode 4: Movement of natural persons. This mode envisages that individuals travel from their own country to supply services in another (e.g. fashion models or consultants).

Modes 1, 3 and 4 are included in the questionnaire, whereas the absent mode 2 consumption abroad, is not covered because it does not seem relevant for our sectors (it is more applicable for tourism activities). In addition to these three modes a category reflecting barriers to operating in the Ukraine markets labelled "other restrictions" is included.

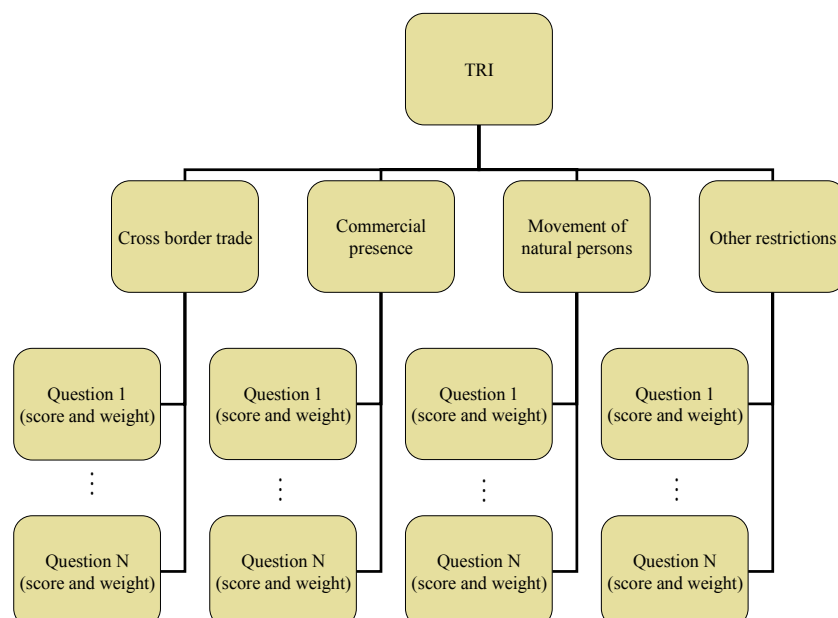
Each category consists of several questions each assigned a weight. The weights for all questions sum to 1. For each question a score is assigned between 0 (least restrictive or few barriers) and 1 (most restrictive or many barriers). Summing the scores multiplied by their respective weights results in the TRI.

The figure below illustrates the basic structure of the TRI. The four main categories are shown. Each category consists of a number of questions with weights, and scores are attached to the answer.

⁶ http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm6_e.htm.

Figure 2.1

The structure of the TRI



Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting

To further illustrate how the TRI and TRI_d is calculated we look at a example of one question in the category of cross border supply for banking services. The question relates to how many barriers there are for a foreign bank (residing outside of Ukraine) to raising funds in Ukraine. The weight attached to this specific question is 0.10 and the possible answers are scored from 0.0 to 1.0, cf. Table 2.1. Foreign banks residing outside of Ukraine are permitted to have cross border deposits of Ukrainian banks, coporations and households with licenses. Hence, the score attached to the answer is 0.50. When the TRI is calculated this specific question will contribute with (score x weight) = (0.50 x 0.10) = 0.05.

Table 2.1

An example of a question in cross border supply in banking services

Weight	Score	Foreign firms	Domestic firms	Question
0.10				Raising funds by foreign banks
	1.00			foreign banks are not permitted to have cross-border deposits of Ukrainian banks, corporations, and households
	0.75			foreign banks are permitted to have cross-border deposits of only some types of Ukrainian residents or any type of Ukrainian residents with specific ceiling amount
	0.50	0.50	0.00	foreign banks are permitted to have cross-border deposits of Ukrainian banks, corporations, households with licenses
	0.00			foreign banks are permitted to have cross-border deposits of any type of Ukrainian residents without restrictions

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2003

The table shows that the lowest possible score of 0.00 is assigned to domestic firms. This is because the question does not really apply to domestic firms, whereby there are no restrictions and consequently the lowest score is chosen.

The contribution of this question to the TRI_d, the discriminatory part of the TRI, is calculated from the difference between the score reflecting barriers to foreign firms and the score reflecting barriers to domestic firms. This measures the discriminatory barriers. In this example the contribution is $([\text{score foreign} - \text{score domestic}] \times \text{weight}) = (0.50 - 0.00 \times 0.10) = 0.05$. This is identical to the contribution to the TRI because the barrier reflected in the question is of a purely discriminatory nature.

The choice of weights and scores for each question is based on the importance of the category in terms of how significantly the restriction of the category limit services suppliers from entering or operating in the market. This means that weights to otherwise similar questions may be different between the eight services sectors. Again we have relied on the weights chosen in Kimura et al. (2003a, b).

We now turn to the complete questionnaires and TRI's for each of the eight services sectors covered in this study. In Ukraine different restrictions apply to foreign firms depending on whether they reside in Ukraine or not. For each services sector we therefore answer the questions for foreign firms not residing in Ukraine, foreign firms residing in Ukraine and domestic firms (residing in Ukraine).

Whether it is the score to non-resident or resident foreign firms that enter the TRI (and TRI_d) depends on whether the question is relevant for the former or later type of firms. As noted before, the questions are grouped into four restriction categories. Each of these categories apply to foreign non-resident firms or foreign resident firm in the following way:

1. Cross border trade - this is the foreign non-resident firm wanting to supply services from its own country. Hence, the score for foreign non-residents enter the TRI.
2. Commercial presence - this is the foreign non-resident firm wanting to enter or establish it self in Ukraine for the first time. Hence, the score for foreign non-residents enter the TRI.
3. Movement of natural persons - this is the foreign resident firm, now being established in Ukraine, wanting to use people from own country. Hence, the score for foreign residents enter the TRI.
4. Other restrictions (often to do with regulation in Ukraine) - this is relevant for the foreign firm now being established in Ukraine. Hence, the score for foreign residents enter the TRI.

The division is often self evident. For example, cross border trade is only relevant for a non-resident firm. Similary, the questions in the category other restrictions often consists of regulation relevant when operating in Ukraine. Hence, they only apply to a foreign firm residing in Ukraine.

Applying the index methodology to the eight services sectors in this study produces the TRI values shown in Table 1.5.

Table 2.2

Trade restrictiveness index

	TRI
Telecom	
- Fixed	0.22
- Internet	0.15
- Mobile	0.18
Railway	
- Freight	0.64
- Passenger	0.64
Finance	
- Banking	0.27
- Insurance	0.42
- Securities	0.35

Note: The TRI is bounded between zero and one; zero reflects no barriers and one reflects many barriers

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting

Estimating the tariff equivalents

In this section we give an outline of how we use the Trade Restrictiveness Index (TRI) values to obtain estimates of the economic impact of barriers. The key results of this section are the so-called tariff equivalents. The tariff equivalents are the inputs to the economic modelling in the CGE analysis, because only tariff equivalents and not index values may enter the general equilibrium model.

Tariff equivalents are hypothetical taxes – implying a similar effect on firms' performance as the actual barriers captured by TRI. In other words, the tariff equivalents can be thought of as theoretical tariffs computed to create economic effects that are equivalent to the economic effects of the actual barriers.

The first and most intuitive way to interpret the effects of barriers to trade in services is that of protecting domestic service providers from competition abroad (discriminatory barriers), thereby allowing for higher prices. In some cases the barriers are of such a nature that even domestic competition is hampered, as e.g. the case of monopolies in the infrastructure sectors.

Kimura et al (2004) briefly explain the theoretical foundation of tariff equivalents. Consider a simple partial equilibrium model of a service sector under perfect competition and assume that the service supply by foreign services providers is perfectly elastic; i.e., the foreign supply curve is supposed to be horizontal.⁷ Now all discriminatory restrictions to free services provision will shift the foreign supply curve upwards implying (i) a higher (domestic) market price, (ii) less services provision and (iii) a smaller market share for foreign firms.

⁷ If the foreign supply curve is upward-sloping, the increase in the domestic price of the services concerned may be smaller than the tariff equivalent of impediments imposed on the foreign suppliers. For a detailed discussion, see Deardorff and Stern (2003, pp. 4-8).

Having established that prices should increase from trade barriers we measure the TE as:

$$TE (\%) = [(P_{f1} - P_{f0}) / P_{f0}] \cdot 100 ,$$

where P_{f1} is the price of services provided by foreign suppliers with restrictions and P_{f0} is the price of services provided by foreign suppliers without restrictions.

In order to calculate the tariff equivalents we need to find the counterfactual, P_{f0} ; the price if no restrictions were imposed. To this mean we will apply econometric estimates that represent marginal effects from barriers to prices. This is the standard procedure in the literature and we will apply econometric estimates from acknowledged empirical studies on barriers to services trade, e.g. Warren (2000).

In the following we will describe in more detail the basics of the underlying empirical models and the connection to tariff equivalents. The main idea of the empirical models is to estimate the link between the TRI and sector prices. This link will be reflected in coefficient estimates; the higher the estimates, the more influential are the barriers.

Practically, the empirical models are normally of the form:

$$P_i = \mathbf{x}_i \boldsymbol{\beta} + \delta TRI_i + \varepsilon_i$$

where P_i are prices in country i , \mathbf{x}_i is a vector of explanatory variables, and TRI_i is the tariff index value in country i . ε_i is the regression error term and $\boldsymbol{\beta}$ and δ are parameter values to be estimated. The explanatory variables to be included depend on the sector we are considering. The exact functional form vary from study to study; Warren (2000) even chooses to estimate the model on quantities instead of prices and afterwards translates all effects by deploying a price elasticity.

The most interesting parameter in the current context is δ as it describes how much prices change when barriers increase or decrease. Theory suggests that δ should be positive, implying that prices increase when trade restrictiveness increases, but eventually this is an empirical matter. In fact all studies on which we base our calculations (and to our knowledge all similar studies) find a positive impact on prices from barriers.

By using this model we can now construct the counterfactual price, P_{f0} . This is done by setting the TRI_i to zero as this is the value the index would obtain if there were no barriers. Having obtained P_{f0} and already knowing the true price, P_{f1} , it is straightforward to calculate the tariff equivalents.

In this study we use the same estimates as Kimura et al (2004a, b) in order to calculate tariff equivalents for the three sectors of interest; telecommunications, rail transport and financial services. These studies actually build on empirical models from other studies – for telecommunications and rail it is the investigations of Warren (2000) and for financial services it is Kalirajan et al (2000). In the sector chapters we will go into more detail with the exact calculations.

Converting the eight Trade Restrictiveness Indices (TRI's) from the eight services sectors into tariff equivalents (TE's) produce results shown in Table 2.3.

Table 2.3

Trade restrictiveness index and tariff equivalents

	TRI	TE
Telecom		
- Fixed	0.22	0.052
- Internet	0.15	0.034
- Mobile	0.18	0.061
Railway		
- Freight	0.64	0.167
- Passenger	0.64	0.167
Finance		
- Banking	0.27	0.219
- Insurance	0.42	0.360
- Securities	0.35	0.287

Note: The TRI is bounded between zero and one; zero reflects no barriers and one reflects many barriers

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting

Expected changes in trade regime as a result of WTO accession

The accession of Ukraine into the WTO is expected to lead to lower barriers to the trade in the eight services sectors. This will reduce the value of the trade restrictiveness index and consequently the tariff equivalents. This will cause lower prices for business and household increasing economic activity and welfare.

A WTO accession is likely to push down the discriminatory barriers, that is, the barriers affecting foreign firms only. They are measured by the Trade Restrictiveness Index *discriminatory* (TRId) a subset of the TRI. A probable and very interesting scenario is one where no discriminatory barriers exist meaning that the TRI will be reduced by the size of the TRId such that only barriers affecting domestic and foreign firms alike prevail. This will cause sharp drops in TRI's and consequently in the tariff equivalents (TE's) in most services sectors. For example, the current TRI in fixed telecommunications of 0.22 will drop to a mere 0.12 due to elimination of the TRId which has a value of 0.10, cf. Table 2.4.

We evaluate this scenario by reducing tariff equivalents for all eight services sectors from the values in "TE" to the values in "TE after WTO" in the general equilibrium model later in the report.

Table 2.4

Trade restrictivnes index and tariff equivalents before and after WTO accession

	TRI	TRId	TRI after WTO¹	TE²	TE after WTO³
Telecom					
- Fixed	0.22	0.10	0.12	0.052	0.027
- Internet	0.15	0.10	0.05	0.034	0.011
- Mobile	0.18	0.10	0.08	0.061	0.025
Railway					
- Freight	0.64	0.00	0.64	0.167	0.167
- Passenger	0.64	0.00	0.64	0.167	0.167
Finance					
- Banking	0.27	0.20	0.07	0.219	0.053
- Insurance	0.42	0.30	0.12	0.360	0.092
- Securities	0.35	0.23	0.12	0.287	0.092

1: WTO accession is assumed to eliminate all foreign discriminatory barriers. Therefore "TRI after WTO" is calculated as TRI minus TRId from the preceeding columns. 2: Calculated from values in "TRI" column. 3: Calculated from values in "TRI after WTO" column

Note: The table shows TRI's and TE's presently and after a WTO accession that is assumed to remove all discriminatory barriers

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting

PART III
FINANCIAL SERVICES

Overview of financial intermediation sector

Table 3.1

Overview of financial intermediation sector

		2000	2001	2002	2003
Output	UAH m	5763.0	8526.0	9948.0	15030.0
	% total output	1.0	2.0	2.0	2.0
	% services output	5.0	5.0	6.0	7.0
Value added	% GDP	2.0	3.0	3.0	4.0
Value added / output	%	56.0	62.0	62.0	62.0
Structure of value added:					
Compensation to employees	% sector VA	40.0	38.0	40.0	31.0
Profit, mixed income	% sector VA	49.0	60.0	58.0	67.0
Net taxes on production and imports	% sector VA	11.0	2.0	2.0	2.0
Employment	thous people	147.0	151.0	156.0	169.0
	% total employed	1.0	1.0	1.0	1.0
Average wage	UAH	560.0	833.0	976.0	1051.0
Exports	UAH m	120.0	97.0	128.0	182.0
	% total exports	0.0	0.0	0.0	0.0
	% sector output	2.0	1.0	1.0	1.0
Imports	UAH m	864.0	810.0	1364.0	3535.0
	% total imports	1.0	1.0	1.0	2.0
	% sector output	15.0	10.0	14.0	24.0
Exports/imports	index	0.1	0.1	0.1	0.1

Source: State Statistic Committee

The Ukrainian financial sector⁸ remains extremely small: it constituted only 2% of total output and 5-7% of service output. The restoration of confidence in financial intermediation after 1998 crisis resulted in acceleration of sector's growth. Over 2000-2003 financial intermediation output almost tripled with the banking services and insurance experiencing the fastest expansion. However, the growth of the financial intermediation market didn't exceed total output growth rates resulting in an unchanged share of financial services in total output over 2001-2003.

On the value added side, financial intermediation grew from 2 to 4% of GDP over 2000-2003. The share of sector's value added in output constitutes, on average, 60%. Financial sector entrepreneurs benefit the most from value added distribution.

⁸ Hereinafter by referring to financial intermediation (services) sector we mean banking, insurance, and nonbank financial intermediation including capital markets.

Their profit and mixed income accounted for 58% of sector value added in 2002 and further increased to almost 70% in 2003. Correspondingly, compensation to employees decreased from 40% in 2002 to 31% of sector value added in 2003. The least share in financial intermediation value added stands for government receipts (net taxes on production and imports) – about 2% over 2001-2003.

The sector employs, on average, 1% of total number of employed in Ukraine and the ratio has seen no changes from 2001. An average wage in the sector constituted UAH 976 in 2002.

The contribution of financial intermediation sector in Ukraine's trade is vastly limited. Exports of financial intermediation services amount to less than 1% of total exports, whereas imports have slightly increased from 1 to 2% in 2003. This is foremost attributable to considerable restrictions on cross-border financial services trading imposed by effective Ukrainian regulation. The financial intermediation sector is presumably more import-oriented (the ratio of exports to imports is 0.1), although imports are also not significant.

Concerning the financial sector structure, the banking sector is the most important, followed by the insurance market. Since 2000 both bank deposits and bank lending have been expanding at exceptionally high rates, and also the insurance sector has been growing rapidly. Commercial banks dominate the financial system: assets in Ukraine's 157 active banks at end-2002 totaled to UAH 68 bn, equivalent to 31 percent of GDP. The capital markets are small, with capitalization equal less than 3 percent of GDP. The other financial sub-sector of significance is insurance, where premiums accounted to about 1.9 percent of GDP in 2002. Assets of other financial institutions such as pension funds, credit unions, and leasing companies together account for less than 1 percent of GDP.

The banking system in Ukraine is highly concentrated. The largest 10 banks (out of 157) accounted for 54% of total assets and almost 40% of banking capital in 2002. The fragmentation of the banking system may in part be attributable to the status of many (around 100) small banks as "pocket banks" of enterprise groups, which use them for treasury operations, and as sources of cheap liquidity and equity investment.

The insurance sector is small, despite the large number of companies, but is growing quickly. Aggregate revenues were about 1.9 percent of GDP in 2002, and density is approximately UAH 85 per capita. There are 338 licensed companies, which is high for the volume of annual premium revenues generated. Gross insurance premium income has been growing at an average rate of over 50 percent for the last several years. This is in part the result of regulatory and tax arbitrage. Many insurance companies are linked to banks or corporations, which find it attractive to transfer some operations or assets to their insurance subsidiaries largely for tax reasons.

The role in financial intermediation of other non-bank financial institutions remains negligible, with total assets estimated at less than 1 percent of GDP. A number of privately run pension schemes are in operation, with total estimated assets amounting to UAH 55 million at the end of 2002. Credit unions are generally limited in their resource base and lending flows. Housing finance and commercial property

development has increased recently. However, most of this financing is derived from personal sources and sources outside the formal sector. Confidence in non-bank financial institutions has been largely affected by a number of episodes where fraudulent schemes were established in 1990s. The reputational effect seems to have been significant on this part of the financial market.

Details of the calculations of the restrictiveness indexes for banking services

Table 3.2

The trade restrictiveness index on banking in Ukraine

Category	Weight	Score NON RESIDENTS	Score foreign RESIDENTS	Score domestic RESIDENTS	TRI	TRId
Licensing of banks	0.10	0.20		0.20	0.02	0.00
Form of commercial presence	0.10	1.00		0.00	0.10	0.10
Direct investment: equity participation permitted	0.20	0.00		0.00	0.00	0.00
Direct investment: restrictions on certain types of services	0.10	0.00		0.00	0.00	0.00
Joint venture arrangements	0.10	0.00		0.00	0.00	0.00
Permanent movement of people	0.02		0.00	0.00	0.00	0.00
Raising funds by foreign banks	0.10	0.50		0.00	0.05	0.05
Lending funds by foreign banks	0.10	0.50		0.00	0.05	0.05
Other business of banks - insurance and securities	0.10		0.50	0.50	0.05	0.00
Expanding the number of banking outlets	0.05		0.00	0.00	0.00	0.00
Composition of the board of directors	0.02		0.00	0.00	0.00	0.00
Temporary movement of people	0.01		0.00	0.00	0.00	0.00
	1.00				0.27	0.20

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2003

The table shows the TRI and TRId and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRId, measuring the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

For calculation of restrictiveness index we consider restrictions against foreign banking services suppliers and assign weights for these restrictions. Among restrictions on commercial presence, a category for "licensing of banks" has a weight 0.1 and includes five levels of restrictiveness: "no new license is allowed" (1.0), "licenses are issued through complicated and costly procedure" (0.75),

"licenses are generally issued with application fee and several requirements" (0.2), "licenses are generally issued with application fee" (0.1), "licenses are automatically issued upon application without any cost" (0.0). In banking sector in Ukraine licensing requirements are equivalent for domestic and foreign founders. These include establishment of a legal resident entity, capital requirements, application fee payment and several others.⁹ For foreign as well as domestic founders the licensing procedure involves application fee and several requirements, that is, we assign 0.2 to this sector.

The types of restrictions included in the category for "forms of commercial presence", which has a weight of 0.1, are "measures which restrict or require a specific type of establishments" (1.0) and "no restriction on establishments" (0.0). In Ukraine, legal forms of establishment allowed for foreign bank are only subsidiaries. Therefore, "measures which restrict or require a specific type of establishments" is chosen for nonresidents, whereas for residents 0.0 is assigned since no restriction on establishment for them.¹⁰

Among three categories directly related to foreign direct investment, the category for "direct investment: equity participation permitted" has the weight 0.2 and is assigned the score inversely proportional to the maximum equity participation permitted. In Ukraine, the maximum foreign equity participation for each bank is not restricted.¹¹ Thus, the assigned score is 0.0 both for residents and nonresidents.

The category for "direct investment: restrictions on certain types of services", with a weight of 0.1, includes two types of restrictiveness: "restrictions on providing some types of banking services" (1.0) and "no restriction on providing any type of banking services" (0.0). In Ukraine banks with foreign ownership participation generally are not prohibited from supplying certain types of banking services.¹² Thus, the assigned score is 0.0 for banks with any share of foreign ownership.

Regarding the category for "joint venture arrangements" with a weight 0.1, three degrees of restrictiveness are considered: "issues no new banking licenses and no entry is allowed through a joint venture with a domestic bank" (1.0), "bank entry is only through a joint venture with a domestic bank" (0.5), "no requirement for a bank to enter through a joint venture with a domestic bank" (0.0). In Ukraine there is no any requirement to enter banking sector through a joint venture with a domestic bank.¹³ We put 0.0 score for resident and nonresident entities.

Next we consider restrictions that relate to cross-border trade. Both of the categories for "raising funds by foreign banks" and "lending funds by foreign banks" have weights of 0.1. The former includes four degrees of restrictiveness: "foreign banks are not permitted to have cross-border deposits of Ukrainian banks,

⁹ See Q.19 in the questionnaire "Banking".

¹⁰ See Q.4 in the questionnaire "Banking".

¹¹ See Q.13 in the questionnaire "Banking".

¹² See Q.8 in the questionnaire "Banking".

¹³ See Q.13 in the questionnaire "Banking".

corporations and households" (1.0), "foreign banks are permitted to have cross-border deposits of only some types of Ukrainian residents or any type of Ukrainian residents with specific ceiling amount" (0.75), "foreign banks are permitted to have cross-border deposits of Ukrainian banks, corporations, households with licenses" (0.5), "foreign banks are permitted to have cross-border deposits of any type of Ukrainian residents without restrictions" (0.0). In Ukraine domestic banks, corporations and households are required to obtain a special permission of the National Bank of Ukraine (an individual license) to open an account abroad, except for the event when a Ukrainian resident opens an account abroad for the duration of such resident's stay abroad.¹⁴ Thus, we assign the score 0.5 for this kind of restriction. The same relates to lending restriction for foreign banks. This category comprises of the same degrees of restrictiveness as for raising funds and the same scores are assigned. Ukrainian corporations and households can borrow in foreign banks after a special permit is provided by the NBU.¹⁵ Therefore, we choose "foreign banks are permitted to have cross-border lending to Ukrainian banks, corporations and households with licenses" with a 0.5 score.

Concerning other business of banks, the category is assigned a weight 0.1, and includes three degrees of restrictiveness: "banks can only provide banking services" (1.0), "banks can provide banking services plus another line of business – insurance or security services" (0.5), "banks have no restrictions on conducting other lines of business" (0.0). In Ukraine banks are allowed to provide securities services but are not permitted to supply insurance services.¹⁶ Therefore, "banks can provide banking services plus another line of business – insurance or securities services" is chosen for this category.

The category for the expansion of the number of bank outlets has a weight 0.05 and has the following degrees of restrictiveness: "one banking outlet with no new banking outlet permitted" (1.0), "number of banking outlets is limited in number and location" (0.75), "expansion of banking outlets is subject to non-prudential regulatory approval" (0.25), and "no restrictions on banks expanding operations" (0.0). For this category, "no restrictions on banks expanding operations" is chosen, since bank outlets can be opened with no restrictions only by means of notification of the NBU.¹⁷

As for movement of people, there are three categories. One is a category for "composition of the board of directors" with a weight of 0.02. The restrictiveness score for this category is inversely proportional to the percentage of the board that can comprise foreigners. Since in Ukraine there is no restriction on foreigners' participation in board formation, we assign 0.0 score to this category. The other one is a category for "temporary movement of people" with a weight of 0.01. It comprises of five levels of restrictiveness depending on the number of entry days allowed in domestic banks for foreign executives, senior managers and specialists.

¹⁴ See Q.11 in the questionnaire "Banking".

¹⁵ See Q.9 in the questionnaire "Banking".

¹⁶ See Q.8 in the questionnaire "Banking".

¹⁷ See Q.19 in the questionnaire "Banking".

Scores for levels of this category vary from 1.0 to 0.0. For Ukraine “temporary movement of people, including executives, senior managers and specialists over 90 days” is chosen with a score 0.0, since there is no explicit regulation on the movement of people. The category for a “permanent movement of people” has a weight of 0.02. It describes the restrictiveness of entry for executives, specialists and senior managers for a long-term period. Since there is no regulation on the movement of people with regard to the duration of their stay, we choose the least restricted level, particularly, “executives, specialists and senior managers can stay a period of 5 years or more” with a 0.0 score.

Details of the calculations of tariff equivalents for banking services

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

For banking services we can turn to Kimura et al (2004a) who apply the estimates from Kalirajan et al (2000). The Kalirajan-study investigates the impact from trade restrictions on the net interest margins (*NIM*) of banks. Applying a two-stage estimation procedure, a significant effect from the trade restrictiveness index is found using a sample of 694 banks from 27 countries. All variables are based on late 1997 values. The first stage model specification was:

$$\ln NIM_{ij} = \alpha_0 + \alpha_1 \ln K_{ij} + \alpha_2 \ln L_{ij} + \alpha_3 NIE_{ij} + \sum_i D_i + \varepsilon_{ij}$$

where K_{ij} represents the capital of bank j in country i , L_{ij} is liquidity, NIE_{ij} are non-interest operating expenses and D_i are country-specific dummies. ε_{ij} is the error term. In the second stage model the country-specific effects ($S_i = \alpha_0 + D_i$) are modelled by:

$$S_i = \beta_0 + \beta_1 IV_i + \beta_2 MS_i + \beta_3 TRI_i + \eta_i$$

where IV_i is interest volatility in country i , MS_i is a market structure variable and TRI_i is the trade restrictiveness index. η_i is the regression error term. The coefficient of interest is β_3 as it tells how much country-specific net interest margin increases with barriers. Since the empirical model of Kalirajan et al (2000) apply log-transformed net interest margins (prices) and the direct index value, we can interpret β_3 as a semi-elasticity. This, actually, eases the calculations of the tariff equivalents considerably. It is immediate to show that

$$TE = \frac{P_{f1} - P_{f0}}{P_{f0}} = \exp(\hat{\beta}_3 \cdot TRI) - 1$$

applies in this case. Notice, that we do not have to calculate the counterfactual, P_{j0} , explicitly. We simply need the trade restrictiveness index values and the coefficient estimate, which Kalirajan et al (2000) estimate to 0.732.¹⁸

Using this formula we can calculate the tariff equivalent for Ukraine for the baseline case (current restrictions):

$$TE = \exp(0.732 \cdot 0.27) - 1 = 0.22$$

and for the case of WTO accession (reduced restrictions):

$$TE = \exp(0.732 \cdot 0.07) - 1 = 0.05.$$

Details of the calculations of the restrictiveness indexes for insurance services

Table 3.3

The trade restrictiveness index on insurance in Ukraine

Category	Weight	Score NONRESI DENTS	Score foreign RESIDENTS	Score domestic RESIDENTS	TRI	TRId
Licensing of insurance companies	0.10	0.20		0.20	0.02	0.00
Form of commercial presence	0.10	1.00		0.00	0.10	0.10
Direct investment: equity participation permitted	0.20	0.00		0.00	0.00	0.00
Direct investment: restrictions on certain types of services	0.10	0.00		0.00	0.00	0.00
Joint venture arrangements	0.10	0.00		0.00	0.00	0.00
Permanent movement of people	0.02		0.00	0.00	0.00	0.00
Cross-border insurance supply by foreign insurance companies	0.20	1.00		0.00	0.20	0.20
Other business of insurance companies - banking and securities	0.10		1.00	1.00	0.10	0.00
Expanding the number of insurance outlets	0.05		0.00	0.00	0.00	0.00
Composition of the board of directors	0.02		0.00	0.00	0.00	0.00
Temporary movement of people	0.01		0.00	0.00	0.00	0.00
	1.00				0.42	0.30

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2003

The table shows the TRI and TRId and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRId, measuring

¹⁸ Notice, the interpretation of this number. If TRI_i increases with one unit, i.e. from zero to one, net interest margins will increase by 73.2%. In other words; trade barriers can account for price increases of around 73.2% at the highest.

the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

Among restrictions on commercial presence, a category for "licensing of insurance companies" has a weight 0.1 and includes five levels of restrictiveness: "no new license is allowed" (1.0), "licenses are issued through complicated and costly procedure" (0.75), "licenses are generally issued with application fee and several requirements" (0.2), "licenses are generally issued with application fee" (0.1), "licenses are automatically issued upon application without any cost" (0.0). For foreigners as well as domestic residents, "licenses are generally issued with an application fee and several requirements"¹⁹ and 0.2 score is assigned to both domestic and foreign resident insurers.

The types of restrictions included in the category for "forms of commercial presence", which has a weight of 0.1, are "measures which restrict or require a specific type of establishments" (1.0) and "no restriction on establishments" (0.0). In Ukraine, legal forms of establishment allowed for foreign insurance companies are only subsidiaries, since only subsidiaries constitute separate legal entities registered as residents of Ukraine.²⁰ Therefore, "measures which restrict or require a specific type of establishments" is chosen for nonresidents, whereas for residents 0.0 is assigned since no restriction on establishment for them is valid.

Among three categories directly related to foreign direct investment, the category for "direct investment: equity participation permitted" has the weight 0.2 and is assigned the score inversely proportional to the maximum equity participation permitted in an existing domestic insurance company. In Ukraine, the maximum foreign equity participation for a domestic insurance company is not restricted.²¹ Thus, the assigned score is 0.0 both for foreign residents and nonresidents.

The category for "direct investment: restrictions on certain types of services", with a weight of 0.1, includes two types of restrictiveness: "restrictions on providing some types of insurance services" (1.0) and "no restriction on providing any type of insurance services" (0.0). In Ukraine insurance companies with foreign ownership participation are not prohibited from supplying any types of insurance services.²² Thus, the assigned score is 0.0 for insurers with any share of foreign ownership.

Regarding the category for "joint venture arrangements" with a weight 0.1, three degrees of restrictiveness are considered: "issues no new insurance licenses and no entry is allowed through a joint venture with a domestic insurance company" (1.0), "foreign company entry is only through a joint venture with a domestic insurance company" (0.5), "no requirement for a insurer to enter through a joint venture with a domestic insurance company" (0.0). In Ukraine there is no any requirement to

¹⁹ See Q.17 in the questionnaire "Insurance".

²⁰ See Q.3 in the questionnaire "Insurance".

²¹ See Q.11 in the questionnaire "Insurance".

²² See Q.4 in the questionnaire "Insurance".

enter insurance market through a joint venture with a domestic insurance company.²³ We put 0.0 score for resident and nonresident foreign insurance entities.

Next we consider restriction that relates to cross-border trade. The category for "cross-border insurance supply by foreign insurance companies" has a weight of 0.2. It includes four degrees of restrictiveness: "foreign insurance companies are not permitted to provide Ukrainian residents with any type of cross-border insurance services in Ukraine" (1.0), "foreign insurance companies are permitted to provide Ukrainian residents with certain type of cross-border insurance services in Ukraine" (0.75), "foreign insurance companies are permitted to provide Ukrainian residents with any type of cross-border insurance services with licenses in Ukraine" (0.5), "foreign insurance companies are permitted to provide Ukrainian residents with any type of cross-border insurance services without restrictions in Ukraine" (0.0). According to effective Ukrainian legislation, only insurance companies registered in Ukraine can provide insurance services to Ukrainian residents. Cross-border insurance supply is prohibited, except for reinsurance.²⁴ Therefore, "foreign insurance companies are not permitted to provide Ukrainian residents with any type of cross-border insurance services in Ukraine" is chosen with a 1.0 score.

Concerning other business of insurance companies, the category is assigned a weight 0.1, and includes three degrees of restrictiveness: "insurance companies can only provide insurance services" (1.0), "insurance companies can provide insurance services plus another line of business –banking or security services" (0.5), "insurance companies have no restrictions on conducting other lines of business" (0.0). In Ukraine insurance companies are allowed to provide only insurance services. Therefore, "insurance companies can only provide insurance services" is chosen for this category.

The category for the expansion of the number of insurance outlets has a weight 0.05 and has the following degrees of restrictiveness: "one insurance outlet with no new insurance outlet permitted" (1.0), "number of insurance outlets is limited in number and location" (0.75), "expansion of insurance outlets is subject to non-prudential regulatory approval" (0.25), and "no restrictions on insurance companies expanding operations" (0.0). For this category, "no restrictions on insurance companies expanding operations" is chosen, since insurance outlets can be opened with no restrictions only by means of notification of the state regulator.²⁵

As for movement of people, there are three categories. One is a category for "composition of the board of directors" with a weight of 0.02. The restrictiveness score for this category is inversely proportional to the percentage of the board that can comprise foreigners. Since in Ukraine there is no restriction on foreigners' participation in board formation, we assign 0.0 score to this category. The other one is a category for "temporary movement of people" with a weight of 0.01. It comprises of five levels of restrictiveness depending on the number of entry days

²³ See Q.11 in the questionnaire "Insurance".

²⁴ See Q.7-Q.9 in the questionnaire "Insurance".

²⁵ See Q.17 in the questionnaire "Insurance".

allowed in domestic insurance company for foreign executives, senior managers and specialists. Scores for levels of this category vary from 1.0 to 0.0. For Ukraine “temporary movement of people, including executives, senior managers and specialists over 90 days” is chosen with a score 0.0, since there is no explicit regulation on temporary movement of people. The category for a “permanent movement of people” has a weight of 0.02. It describes the restrictiveness of entry for executives, specialists and senior managers for a long-term period. Since there is no regulation on the long-term movement of people, we choose the least restricted level for this category, particularly, “executives, specialists and senior managers can stay a period of 5 years or more” with a 0.0 score.

Details of the calculations of tariff equivalents for the insurance sub-sector

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

For the insurance sub-sector we can turn to Kimura et al (2004a) who – in a similar exercise – apply the estimates from Kalirajan et al (2000). This rests on the assumption that insurance services are similar to banking services and therefore the same estimates apply. The Kalirajan-study investigates the impact from trade restrictions on the net interest margins (*NIM*) of banks. Applying a two-stage estimation procedure, they find a significant effect from the trade restrictiveness index using a sample of 694 banks from 27 countries. All variables were based on late 1997 values. The first stage model specification is:

$$\ln NIM_{ij} = \alpha_0 + \alpha_1 \ln K_{ij} + \alpha_2 \ln L_{ij} + \alpha_3 NIE_{ij} + \sum_i D_i + \varepsilon_{ij}$$

where K_{ij} represents the capital of bank j in country i , L_{ij} is liquidity, NIE_{ij} are non-interest operating expenses and D_i are country-specific dummies. ε_{ij} is the error term. In the second stage model the country-specific effects ($S_i = \alpha_0 + D_i$) are modeled by:

$$S_i = \beta_0 + \beta_1 IV_i + \beta_2 MS_i + \beta_3 TRI_i + \eta_i$$

where IV_i is interest volatility in country i , MS_i is a market structure variable and TRI_i is the trade restrictiveness index. η_i is the regression error term. The coefficient of interest is β_3 as it tells how much country-specific net interest margin increases with barriers. Since the empirical model of Kalirajan et al (2000) apply log-transformed net interest margins (prices) and the direct index value, we can interpret β_3 as a semi-elasticity. This, actually, eases the calculations of the tariff equivalents considerably. It is immediate to show that

$$TE = \frac{P_{f1} - P_{f0}}{P_{f0}} = \exp(\hat{\beta}_3 \cdot TRI) - 1$$

applies in this case. Notice, that we do not have to calculate the counterfactual, P_{j0} , explicitly. We simply need the trade restrictiveness index values and the coefficient estimate, which Kalirajan et al (2000) estimate to 0.732.²⁶

Using this formula we can calculate the tariff equivalent for Ukraine for the baseline case (current restrictions):

$$TE = \exp(0.732 \cdot 0.42) - 1 = 0.36$$

and for the case of WTO accession (reduced restrictions):

$$TE = \exp(0.732 \cdot 0.12) - 1 = 0.09.$$

Details of the calculations of the restrictiveness indexes for securities services

Table 3.4

The trade restrictiveness index on securities in Ukraine

Category	Weight	Score NONRESI DENT	Score foreign RESIDENT	Score domestic RESIDENT	TRI	TRId
Licensing of securities services	0.10	0.20		0.20	0.02	0
Form of commercial presence	0.10	1.00		0.00	0.1	0.1
Direct investment: equity participation permitted	0.20	0.00		0.00	0	0
Direct investment: restrictions on certain types of services	0.10	0.00		0.00	0	0
Joint venture arrangements	0.10	0.00		0.00	0	0
Permanent movement of people	0.02		0.00	0.00	0	0
Cross-border securities supply by foreign securities companies	0.10	0.75		0.00	0.075	0.075
Cross-border securities purchase by Ukrainian residents	0.10	0.50		0.00	0.05	0.05
Other business of securities companies - banking and insurance	0.10		1.00	1.00	0.1	0
Expanding the number of securities outlets	0.05		0.00	0.00	0	0
Composition of the board of directors	0.02		0.00	0.00	0	0
Temporary movement of people	0.01		0.00	0.00	0	0
	1.00				0.35	0.23

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2003

²⁶ Notice, the interpretation of this number. If TRI_i increases with one unit, i.e. from zero to one, net interest margins will increase by 73.2%. In other words; trade barriers can account for price increases of around 73.2% at the highest.

The table shows the TRI and TRI_d and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRI_d, measuring the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

Among restrictions on commercial presence, a category for "licensing of securities services" has a weight 0.1 and includes five levels of restrictiveness: "no new license is allowed" (1.0), "licenses are issued through complicated and costly procedure" (0.75), "licenses are generally issued with application fee and several requirements" (0.2), "licenses are generally issued with application fee" (0.1), "licenses are automatically issued upon application without any cost" (0.0). Domestic companies as well as foreign-owned (registered as legal entities on the territory of Ukraine) are allowed to obtain license with an application fee and several requirements.²⁷ Therefore, we choose "licenses are generally issued with application fee and several requirements" for foreign and domestic residents.

The types of restrictions included in the category for "forms of commercial presence", which has a weight of 0.1, are "measures which restrict or require a specific type of establishments" (1.0) and "no restriction on establishments" (0.0). In Ukraine, the forms of establishment allowed for foreign securities companies are only subsidiaries, since only subsidiaries are separate from parent company legal entities.²⁸ Therefore, "measures which restrict or require a specific type of establishments" is chosen for nonresidents (1.0), whereas for residents 0.0 is assigned since no restriction on types of establishment for them is imposed.

Among three categories directly related to foreign direct investment, the category for "direct investment: equity participation permitted" has the weight 0.2 and is assigned the score inversely proportional to the maximum equity participation permitted. In Ukraine, the maximum foreign equity participation for securities company is not restricted.²⁹ Thus, the assigned score is 0.0 both for residents and nonresidents.

The category for "direct investment: restrictions on certain types of services", with a weight of 0.1, includes two types of restrictiveness: "restrictions on providing some types of securities services" (1.0) and "no restriction on providing any type of securities services" (0.0). In Ukraine securities companies with foreign ownership participation are not prohibited from supplying certain types of securities services.³⁰ Thus, the assigned score is 0.0 for securities companies with any share of foreign ownership.

²⁷ See Q.17 in the questionnaire "Securities".

²⁸ See Q.3 in the questionnaire "Securities".

²⁹ See Q.11 in the questionnaire "Securities".

³⁰ See Q.4 in the questionnaire "Securities".

Regarding the category for "joint venture arrangements" with a weight 0.1, three degrees of restrictiveness are considered: "issues no new securities licenses and no entry is allowed through a joint venture with a domestic securities company" (1.0), "foreign securities company entry is only through a joint venture with a domestic securities company" (0.5), "no requirement for a foreign securities company to enter through a joint venture with a domestic securities company" (0.0). In Ukraine there is no any requirement to enter through a joint venture with a domestic securities company.³¹ We put 0.0 score for resident and nonresident entities.

Next we consider restrictions that relate to cross-border trade. Both of the categories for "cross-border securities supply by foreign securities companies" and "cross-border securities purchase by Ukrainian residents" have weights of 0.1. The former includes four degrees of restrictiveness: "foreign securities companies are not permitted to provide Ukrainian residents with any type of cross-border securities services in Ukraine" (1.0), "foreign securities companies are permitted to provide Ukrainian residents with certain types of cross-border securities services in Ukraine" (0.75), "foreign securities companies are permitted to provide Ukrainian residents with any type of cross-border securities services with licenses in Ukraine" (0.5), "foreign securities companies are permitted to provide Ukrainian residents with any type of cross-border securities services with no restriction in Ukraine" (0.0). In Ukraine foreign securities companies are permitted to provide Ukrainian residents with certain types of cross-border securities services in Ukraine, that is we assign 0.75 score for nonresidents in the category "cross-border securities supply by foreign securities companies".³² In contrast, Ukrainian residents are permitted to purchase any type of cross-border securities services abroad with licenses.³³ We assign 0.50 score to "cross-border securities purchase by Ukrainian residents".

Concerning other business of securities companies, the category is assigned a weight 0.1, and includes three degrees of restrictiveness: "securities companies can only provide securities services" (1.0), "securities companies can provide securities services plus another line of business – insurance or banking services" (0.5), "securities companies have no restrictions on conducting other lines of business" (0.0). In Ukraine securities companies are allowed to provide only securities services. Therefore, "securities companies can only provide securities services" is chosen for this category.

The category for the expansion of the number of securities outlets has a weight of 0.05 and has the following degrees of restrictiveness: "one securities outlet with no new securities outlet permitted" (1.0), "number of securities outlets is limited in number and location" (0.75), "expansion of securities outlets is subject to non-prudential regulatory approval" (0.25), and "no restrictions on securities companies expanding operations" (0.0). For this category, "no restrictions on securities companies expanding operations" is chosen, since securities outlets can be opened with no restrictions only by means of notification of the state regulator.

³¹ See Q.11 in the questionnaire "Securities".

³² See Q.8 in the questionnaire "Securities".

³³ See Q.7 in the questionnaire "Securities".

As for movement of people, there are three categories. One is a category for “composition of the board of directors” with a weight of 0.02. The restrictiveness score for this category is inversely proportional to the percentage of the board that can comprise foreigners. Since in Ukraine there is no restriction on foreigners’ participation in board formation, we assign 0.0 score to this category. The other one is a category for “temporary movement of people” with a weight of 0.01. It comprises of five levels of restrictiveness depending on the number of entry days allowed in domestic securities companies for foreign executives, senior managers and specialists. Scores for levels of this category vary from 1.0 to 0.0. For Ukraine “temporary movement of people, including executives, senior managers and specialists over 90 days” is chosen with a score 0.0, since there is no explicit regulation on the movement of people. The category for a “permanent movement of people” has a weight of 0.02. It describes the restrictiveness of entry for executives, specialists and senior managers for a long-term period. Since there is no regulation on the movement of people with regard to the duration of their stay, we choose the least restricted level, particularly, “executives, specialists and senior managers can stay a period of 5 years or more” with a 0.0 score.

Details of the calculations of tariff equivalents for security services

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

For security services we can turn to Kimura et al (2004a) who in a similar exercise apply the estimates from Kalirajan et al (2000). This rests on the assumption that security services are similar to banking services and therefore the same estimates apply. The Kalirajan-study investigates the impact from trade restrictions on the net interest margins (*NIM*) of banks. Applying a two-stage estimation procedure, a significant effect from the trade restrictiveness index is found using a sample of 694 banks from 27 countries with all variables based on late 1997 values. The first stage model specification was:

$$\ln NIM_{ij} = \alpha_0 + \alpha_1 \ln K_{ij} + \alpha_2 \ln L_{ij} + \alpha_3 NIE_{ij} + \sum_i D_i + \varepsilon_{ij}$$

where K_{ij} represents the capital of bank j in country i , L_{ij} is liquidity, NIE_{ij} are non-interest operating expenses and D_i are country-specific dummies. ε_{ij} is the error term. In the second stage model the country-specific effects ($S_i = \alpha_0 + D_i$) are modeled by:

$$S_i = \beta_0 + \beta_1 IV_i + \beta_2 MS_i + \beta_3 TRI_i + \eta_i$$

where IV_i is interest volatility in country i , MS_i is a market structure variable and TRI_i is the trade restrictiveness index. η_i is the error term. The coefficient of interest is β_3 as it tells how much country-specific net interest margin increases with barriers. Since the empirical model of Kalirajan et al (2000) apply log-transformed net interest margins (prices) and the direct index value, we can interpret β_3 as a semi-

elasticity. This, actually, eases the calculations of the tariff equivalents considerably. It is immediate to show that

$$TE = \frac{P_{f1} - P_{f0}}{P_{f0}} = \exp(\hat{\beta}_3 \cdot TRI) - 1$$

applies in this case. Notice, that we do not have to calculate the counterfactual, P_{f0} , explicitly. We simply need the trade restrictiveness index values and the coefficient estimate, which Kalirajan et al (2000) estimate to 0.732.³⁴

Using this formula we can calculate the tariff equivalent for Ukraine for the baseline case (current restrictions):

$$TE = \exp(0.732 \cdot 0.35) - 1 = 0.29$$

and for the case of WTO accession (reduced restrictions):

$$TE = \exp(0.732 \cdot 0.12) - 1 = 0.09 .$$

³⁴ Notice, the interpretation of this number. If TRI_i increases with one unit, i.e. from zero to one, net interest margins will increase by 73.2%. In other words; trade barriers can account for price increases of around 73.2% at the highest.

PART IV
TELECOMMUNICATION SERVICES

Overview of the telecommunications sector

Table 4.1

Economic Indicators of the Post and Communications Sector

		2000	2001	2002	2003
Output	UAH m	7057.0	8965.0	11587.0	14268.0
	% total output	1.6	1.7	2.0	2.1
	% services output	5.8	5.8	6.5	6.4
Value added	% GDP	2.6	3.0	3.5	3.6
Value added / output	%	61.7	68.4	69.1	66.8
Structure of value added:					
Compensation to employees	% sector VA	38.9	36.0	36.5	33.5
Profit, mixed income	% sector VA	47.1	55.8	52.1	56.0
Net taxes on production and imports	% sector VA	14.0	8.2	11.5	10.5
Employment	thous people	256.0	256.0	255.0	252.0
	% total employed	1.9	2.0	2.1	2.2
Average wage	UAH	317.0	402.0	469.0	548.0
Exports	UAH m	484.0	499.0	475.0	443.0
	% total exports	2.6	3.0	3.5	3.6
	% sector output	6.9	5.6	4.1	3.1
Imports	UAH m	539.0	542.0	533.0	421.0
	% total imports	0.6	0.5	0.5	0.3
	% sector output	7.6	6.0	4.6	3.0
Exports/imports	Index	0.9	0.9	0.9	1.1

Source: State Statistic Committee

While the role of post and communications sector in the total output is not very significant, the sector has been steadily gaining importance during the last years: from 1.6% to 2.1% of total output (from 5.8% to 6.4% in services output, see the table above). Taking into account the exponential growth of volumes of mobile communication and Internet services provision, the sector will certainly increase its contribution to Ukraine's economy. This tendency reveals itself in the growth of value added to 3.6% of GDP in 2003 and growing share of value added in the sector's output (around 70%). Revenues are distributed almost completely among enterprises of public (91%) and state (8.7%) property, with communal and private-owned enterprises accounting for the rest. Leadership in profit generation is held by fixed line phone call services (in 2002, 39% for interregional and international calls, and 21% for local calls) and mobile communications (25%; data from State Statistic Committee).

The employment level in the industry during 2000 – 2003 showed a slight downward tendency to 252,000 people, while value added produced by the sector increased, thus indicating increasing labor efficiency. On the other hand, sector's share in the total employment increased to 2.2%. This means that the sector is quite labor-intensive (as compared to its output), probably especially so in state-owned low income-generating postal services and electric communications services. Official average wage in the industry is approximately 30% higher than the country's average.

During the period 2000-2003, post and communications sector sharpened its orientation towards services provision and consumption on domestic markets: shares in sector output of both export and import decreased from approximately 7% to 3%, with export/import ratio to be 1.1. It should be noted, however, that sector's share in total exports increased by 1% to 3.6% in 2003.

During the period 2000-2003 telecommunications sector was one of the most rapidly growing (up to 30% of profit growth per year) sectors of Ukraine's economy. The gap with corresponding European sectors' development has been closed by 5 times in mobile services, by 2 times – in Internet, and no change – in fixed lines phone services.

Telecommunication services still has very low degree of penetration (data for 2001, users per 100 people: 21 for fixed, 4.5 for mobile, 1.5 for Internet, – as compared to 41,44, and 18, correspondingly, in Europe), and so average user growth rates were as high as 130% in mobile and 70% in Internet sectors. Still, internet services provision mostly concentrated in 7 largest Ukrainian cities (80% of users).

Despite the existence of 5 operators, mobile market was in fact in the state of duopoly, with two operators accounting for more than 90% subscribers. In fixed line phone services, there is an unchallenged monopolistic position of state-owned operator Ukrtelecom, which accounts for 80% of market volume. Internet sector is the most competitive one: licensing had been cancelled, and around 270 operators entered the market. However, Internet market experienced rapid consolidation: in 2002, 15 companies accounted for 80% of market share.

It seems that in the long-run perspective, the Ukraine-Europe gap in fixed-line phone penetration would be preserved, and mobile penetration will exceed fixed in the near future. And Internet services sector would remain the most underdeveloped one, mainly due to its crucial dependence on Ukrtelecom's fixed line network with limited capability, absence of financing for alternative networks development, and low level of computer base growth.

Details of restrictiveness index calculation for fixed lines services

Table 4.2

The trade restrictiveness index on fixed telecommunications in Ukraine

Category	Weight	Score NONRESI DENTS	Score foreign RESIDENTS	Score domestic RESIDENTS	TRI	TRId
Licensing of fixed line services	0.20	0.20		0.20	0.04	0.00
- <i>Regional</i>		0.20		0.20		
- <i>Domestic</i>		0.20		0.20		
- <i>International</i>		0.20		0.20		
Form of commercial presence	0.10	1.00		0.00	0.10	0.10
- <i>Regional</i>		1.00		0.00		
- <i>Domestic</i>		1.00		0.00		
- <i>International</i>		1.00		0.00		
Direct investment: equity participation permitted	0.20	0.00		0.00	0.00	0.00
Direct investment: restrictions on certain types of services	0.10	0.00		0.00	0.00	0.00
Joint venture arrangements	0.10	0.00		0.00	0.00	0.00
Permanent movement of people	0.02		0.00	0.00	0.00	0.00
Third party resale of leased lines	0.10		0.00	0.00	0.00	0.00
End user tariff	0.05		0.50	0.50	0.03	0.00
Regulation of network interconnection	0.05		0.50	0.50	0.03	0.00
Market structure	0.05		0.67	0.67	0.03	0.00
- <i>Regional</i>			0.00	0.00		
- <i>Domestic</i>			1.00	1.00		
- <i>International</i>			1.00	1.00		
Composition of the board of directors	0.02		0.00	0.00	0.00	0.00
Temporary movement of people	0.01		0.00	0.00	0.00	0.00
	1.00				0.22	0.10

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2004

The table shows the TRI and TRId and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRId, measuring the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

According to the Law "On Telecommunications", only residents of Ukraine can operate on the market. Thus we introduced separate scoring for nonresidents, residents-foreign, and residents-domestic for all categories.

Among restrictions on commercial presence, a category for "licensing of fixed line services" has a weight 0.2 in total. There are three types of fixed lines services, that is, domestic regional line services, domestic long distance line services, and international line services, and we give a score for each of them. Each sub category has five degrees of restrictiveness: "no new license is allowed" (score 1.0), "licenses are issued through complicated (discriminately) and costly procedure" (score 0.75), "licenses are generally issued with application fee and several requirements" (score 0.2), "licenses are generally issued with application fee" (score 0.1), and "licenses are automatically issued upon application without any cost" (score 0.0). In the fixed line services sector in Ukraine, licenses are generally issued with application fee and several requirements for all three types of services (corresponding score is 0.2).³⁵

The category for "forms of commercial presence" has a weight 0.1. Again, since there are three types of fixed lines services, (domestic regional line services, domestic long distance line services, and international line services), we give a score for each of them. Two degrees of restrictiveness are considered here, that is, "measures which restrict or require a specific type of establishments" (score 1.0) and "no restrictions on establishment" (score 0.0). In Ukraine, there is no legal regulation on establishment for resident. The score therefore for each service type in the category is 0.0. As for non-residents, there exist a requirement to register and become a resident, so corresponding score is 1.00.³⁶

Regarding the category for "direct investment: equity participation permitted" with a weight 0.2, there is no regulation on the maximum foreign equity participation. Indeed, foreign equity participation can be found. Thus, the score, which is inversely proportional to the maximum equity participation, is 0.0.³⁷

As for the category for "direct investment: restrictions on certain types of services" with a weight 0.1, there are two types of restrictiveness: "restrictions on providing some types of telephone services" (score 1.0) and "no restriction on providing any type of telephone services" (score 0.0). The last type was chosen, as there are no official restrictions on service provision that are based on direct investment (score 0.0).³⁸

The category for "joint venture arrangements" has a weight 0.1 and three degrees of restrictiveness: "issues no new license and no entry is allowed through a joint venture with a domestic company" (score 1.0), "foreign company can enter only through a joint venture with a domestic company" (score 0.5), and "no requirement for foreign companies to enter through a joint venture with a domestic company" (score 0.0). In Ukraine, there is no official limitation (and thus the score chosen for them is 0.0).³⁹

³⁵ For details, see questions 1, 17 in questionnaire "Fixed Lines Services".

³⁶ See questions 1, 17 in questionnaire "Fixed Lines Services".

³⁷ See questions 7-12 in questionnaire "Fixed Lines Services".

³⁸ See questions 1, 7-12, 17 in questionnaire "Fixed Lines Services".

³⁹ See questions 1, 7-12, 17 in questionnaire "Fixed Lines Services".

In the category "permanent movement of people" with weight 0.02, six degrees of restrictiveness are described, ranging from "no entry of executives, senior managers and/or specialists" (score 1.0) to "executives, specialists and/or senior managers can stay a period of 5 years or more" (score 0.0). For foreigners, no limitation on the in-country stay duration is foreseen, and so the corresponding score is 0.0 for both residents and nonresidents.

The category for "third party resale of leased line" with a weight 0.1 has two degrees of restrictiveness. That is, "resale is not permitted" (score 1.0) and "resale is permitted in any market" (score 0.0). Since third party resale of leased line (domestic and international) is permitted in any market (but licensed), "resale is permitted in any market" is selected.⁴⁰

As for end user tariff, the category has a weight 0.05 and has the following degrees of restrictiveness: "end user tariff is determined by rate of return regulation" (score 1.0), "end user tariff is determined by price cap rule established by the authority" (score 0.5), and "end user tariff is determined by market force (no regulation)" (score 0.0). In Ukraine, general terms of interconnection are subject to external regulation if one of the operators has monopolistic power (and state-owned operator "Ukrtelecom" does, especially for inter-regional and international calls service - due to the ownership of main network). In addition, end-user tariffs for universal services (and these include fixed lines phone services) are subject to external regulation by price cap rule (Law "On Telecommunications"). Thus relevant score is 0.5.⁴¹

The category for "regulation of network interconnection" with a weight 0.05 has three types of restrictions; "interconnection is completely regulated by the authority" (score 1.0), "interconnection is determined private negotiations in general, but general terms are determined by the authority" (score 0.5), and "interconnection is completely determined by private negotiations (no regulation)" (score 0.0). Since interconnection is determined by private negotiations in general, but general terms are determined by the authority (in the same cases, as above) the score is chosen accordingly as 0.5.⁴²

The category of market structure has a weight 0.05 in total. Again we assign scores to three types of lines. Each services has two degrees of restrictiveness: "monopoly" (score 1.0) and "competition among plural providers" (score 0.0). Most of incumbent operators of fixed lines service need to use the "Ukrtelecom's" network and international connection points in order to let their customers to make domestic long distance and international calls. Besides, the number of issued licenses for international calls service provision is very limited. So "monopoly" is selected for domestic long distance line services and international line services while "competition among plural providers" is selected for domestic regional line services.⁴³

⁴⁰ The score is thus 0.0. See questions 1, 6, 13, 14, 17 in questionnaire "Fixed Lines Services".

⁴¹ See questions 19, 24-26 in questionnaire "Fixed Lines Services".

⁴² See questions 16, 18 in questionnaire "Fixed Lines Services".

⁴³ See question 5 in questionnaire "Fixed Lines Services".

As for category for “the composition of the board of directors” (weight 0.02), the score is assigned inversely proportional to the percentage of the board that can comprise foreigners. Since there is no limitations on the share of the board that can comprise foreigners, the estimated score is 0.0.

The last category is “temporary movement of people” with a weight 0.01. The degrees of restrictiveness varies from “no temporary entry of executives, senior managers and/or specialists” (1.0) to “temporary entry of executives, senior managers and/or specialists over 90 days” (0.0). Here the entry “temporary entry of executives, senior managers and/or specialists over 90 days” was chosen, because there is no explicit regulation on the movement of people.

Details of the calculations of tariff equivalents for fixed lines services

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

In order to calculate the tariff equivalents we need empirical estimates of how much barriers to trade influence prices. For fixed telecommunications Warren (2000) estimates the relation between total quantities, in terms of mainlines per 100 inhabitants, and barriers. Thus, we will need to transform quantity effects to price effects, but here we start with a short description of his model.

Warren (2000) estimate different models of barrier impact on fixed lines output and we will focus on the most complete of these models.⁴⁴ The empirical specification is given by:

$$Q_i = \alpha_0 + \alpha_1 GDP_i + \alpha_2 GDP_i^2 + \alpha_3 GDP_i^3 + \alpha_4 HD_i + \alpha_5 Qual_i + \alpha_6 UD_i + \alpha_7 (1 - TRI_i) + \varepsilon_i,$$

where i is a country index. The regression error term is given by ε_i . Notice that we use one minus the value of the TRI. This has no bearing on the results, but is simply a consequence of Warren (2000) applying a market opening variable instead of the barrier (“market closure”) index. The variables are:

Q : Mainlines per 100 inhabitants (a proxy for quantity)

GDP : Gross domestic product per capita

$Qual$: Percentage of mainlines attached to a digital switch

HD : Household density per square kilometre

UD : Waiting lists for connection to the public switched network (estimate)

TRI : Trade restrictiveness index

From this empirical equation we can obtain a quantity impact from total liberalisation by inserting the counterfactual (full liberalisation, $TRI = 0$) in the formula

⁴⁴ In Warren (2000) this will be ‘model 5’.

$$QI(current) = \frac{\hat{Q}_{f0} - \hat{Q}_{f1}}{\hat{Q}_{f1}} = \frac{\hat{Q}(TRI = 0) - \hat{Q}(TRI = current)}{\hat{Q}(TRI = current)}$$

where a 'hat' represents a prediction from the empirical model and all other variables are held constant.⁴⁵ The quantity impact tells us how much output would increase if we moved from current to no barriers. Data for Ukraine used in these predictions stem from two sources; the World Bank and the State Statistic Committee. The Ukrainian data and the econometric estimates from Warren (2000) can be found in Table 4.3.

Table 4.3

Estimates and value used to predict mainlines per 100 inhabitants

Variable	Econometric estimate	Value for Ukraine
		Current: (1-TRI) = 1-0.22 = 0.78 WTO: (1-TRI) = 1-0.12 = 0.88
Policy	5,26	
Y	0,004	882,62
Y ²	-6,83E-08	779018,0644
Y ³	1,30E-13	687576924
HD	0,003	29,22
UD	-0,08	0,208593826
Qual	-0,13	0,7
PD		78
Constant	12,26	

Note: Y equals GDP

Source: Warren (2000). Data for Ukraine stem from the World Bank and the State Statistic Committee in Ukraine

It is easy to verify that the quantity impacts amount to

$$QI(current) = \frac{20.98 - 19.80}{19.80} = 0.06$$

$$QI(WTO) = \frac{20.98 - 20.33}{20.33} = 0.03$$

Now we have to move from quantities to prices and this is done by dividing the quantity impact by the price elasticity. Thus, we obtain the equivalent price impact, $PI = QI/e$.⁴⁶ Notice, that this gives us the price reduction when going from the current level of barriers to no barriers, but in fact we are interested in the reverse – the price increase when going from no barriers to the current level of barriers. Therefore we have to “turn the price impact around” to get the tariff equivalent:

$$TE = \frac{1}{1 + PI} - 1.$$

⁴⁵ Notice, that the formula implies predicting actual quantities. Even though we do possess better information of the actual quantities (since these were directly observable and used in the estimations) this is the only consistent way of calculating the quantity impact of liberalisation.

⁴⁶ The price elasticity is set to -1.2 as found by Albon et al (1997).

Using these formulas we can calculate the tariff equivalent for Ukraine for the baseline case (current restrictions, $QI = 0.06$):

$$TE = \frac{1}{1 + 0.06/(-1.2)} - 1 = 0.05$$

and the WTO accession case (reduced restrictions, $QI = 0.03$):

$$TE = \frac{1}{1 + 0.03/(-1.2)} - 1 = 0.03 .$$

Details of restrictiveness index calculation for mobile phone services

Table 4.4

The trade restrictiveness index on mobile telecommunications in Ukraine

Category	Weight	Score NONRESI DENTS	Score foreign RESIDENTS	Score domestic RESIDENTS	TRI	TRId
Licensing of mobile phone services	0.20	0.20		0.20	0.04	0
Form of commercial presence	0.10	1.00		0.00	0.1	0.1
Direct investment: equity participation permitted	0.20	0.00		0.00	0	0
Direct investment: restrictions on certain types of services	0.10	0.00		0.00	0	0
Joint venture arrangements	0.10	0.00		0.00	0	0
Permanent movement of people	0.02		0.00	0.00	0	0
Regulation of interconnection between fixed line and mobile or between mobiles	0.05		0.50	0.50	0.025	0
End user tariff	0.10		0.00	0.00	0	0
Allocation of radio spectrum	0.05		0.20	0.20	0.01	0
Market structure	0.05		0.00	0.00	0	0
Composition of the board of directors	0.02		0.00	0.00	0	0
Temporary movement of people	0.01		0.00	0.00	0	0
	1.00				0.18	0.10

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2004

The table shows the TRI and TRId and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRId, measuring the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to

find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

According to the Law "On Telecommunications", only residents of Ukraine can operate on the market. Thus we introduced separate scoring for nonresidents, residents-foreign, and residents-domestic for all categories.

Among restrictions on commercial presence, a category for "licensing of mobile phone services" has a weight 0.2 in total and five degrees of restrictiveness: "no new license is allowed" (score 1.0), "licenses are issued through complicated (discriminately) and costly procedure" (score 0.75), "licenses are generally issued with application fee and several requirements" (score 0.2), "licenses are generally issued with application fee" (score 0.1), and "licenses are automatically issued upon application without any cost" (score 0.0). The category "licenses are generally issued with application fee and several requirements" (score 0.2) is chosen since an applicant have to prove to satisfy several requirements of technical and financial nature when applying for the licence.⁴⁷

The category for "forms of commercial presence" has a weight 0.1. Two degrees of restrictiveness are considered here, that is, "measures which restrict or require a specific type of establishments" (score 1.0) and "no restrictions on establishment" (score 0.0). In Ukraine, there is no legal regulation on establishment. The score for residents in this category is 0.0. Non-residents however face some restrictions as for commercial presence, i.e. they have to register in Ukraine as residents. This we consider to be an additional barrier and choose the score of 1.00 for non-residents.

Regarding the category for "direct investment: equity participation permitted" (not applicable for residents) with a weight 0.2, there is no regulation on the maximum foreign equity participation in mobile phone services. Indeed, foreign equity participation can be found, sometimes with shares up to 100%. Thus, the score, which is inversely proportional to the maximum equity participation, is 0.0 for all categories of investors.

As for the category for "direct investment: restrictions on certain types of services" (again, applicable to non-residents only) with a weight 0.1, there are two types of restrictiveness: "restrictions on providing some types of telephone services" (score 1.0) and "no restriction on providing any type of telephone services" (score 0.0). The last type was chosen, as there are no official restrictions on service provision that are based on direct investment (score 0.0).

The category for "joint venture arrangements" has a weight 0.1 and three degrees of restrictiveness: "issues no new license and no entry is allowed through a joint venture with a domestic company" (score 1.0), "foreign company can enter only through a joint venture with a domestic company" (score 0.5), and "no requirement for foreign companies to enter through a joint venture with a domestic company" (score 0.0). In Ukraine, there is no official limitation as long as foreign company becomes a resident (and thus the score chosen for them is 0.0), and non-residents can enter the market only through becoming a resident, however this barrier has

⁴⁷ More details are discussed in q. 8 in "Telecommunication – Mobile Services" questionnaire.

been already accounted for in "form of commercial presence" question. Thus the corresponding score is also 0.0. Scoring is not applicable to residents-domestic.

In the category "permanent movement of people" with weight 0.02, six degrees of restrictiveness are described, ranging from "no entry of executives, senior managers and/or specialists" (score 1.0) to "executives, specialists and/or senior managers can stay a period of 5 years or more" (score 0.0). For foreigners, no limitation on the in-country stay duration is foreseen, and so the corresponding score is 0.0 for both residents and non-residents.

The category for "regulation of interconnection between fixed line and mobile or between mobiles" with a weight 0.05 has three degrees of restrictiveness. That is, "interconnection is completely regulated by the authority" (score 1.0), "interconnection is determined by private negotiations in general, but general terms is determined by the authority" (score 0.5), and "interconnections is completely determined by private negotiations (no regulation)" (score 0.0). We chose "interconnection is determined by private negotiations in general, but general terms is determined by the authority", because interconnection between non-monopolists operators are generally negotiated by parties, but in case one of the parties is monopolist, conditions of interconnection are determined by a regulator.⁴⁸ The score is thus 0.5.

As for "end user tariff", the category has a weight 0.1 and has the following degrees of restrictiveness: "end user tariff is determined by rate of return regulation" (score 1.0), "end user tariff is determined by price cap rule established by the authority" (score 0.5), and "end user tariff is determined by market force (no regulation)" (score 0.0). In Ukraine, general terms of interconnection are determined by contracting parties.⁴⁹ Thus relevant score is 0.0.

The category for "allocation of radio spectrum" with a weight 0.05 has four types of restrictions: "allocation is discriminatory decided by the authority" (score 1.0), "allocated by auction with application fee" (score 0.2), "allocated by auction without application fee" (score 0.1), and "radio frequencies are obtained with mobile services" (score 0.0). In Ukraine, if spectrum is technically available and unlimited, than the spectrum is allocated through the mechanism "First come, first served" with a fee. In case there are two or more identical applications received simultaneously, the spectrum is allocated through a competitive tender with a fee.⁵⁰ Correspondingly, the score is chosen as 0.2.

The category "market structure" has a weight 0.05 in total, with two degrees of restrictiveness: "monopoly" (score 1.0) and "competition among plural providers" (score 0.0). We select "competition among plural providers" for mobile phone services, as there are several mobile phone services providers on the market.⁵¹ The corresponding score is 0.0.

⁴⁸ See q 10 in "Telecommunication – Mobile Services" questionnaire.

⁴⁹ See q.11 in "Telecommunication – Mobile Services" questionnaire.

⁵⁰ See q. 9 in "Telecommunication – Mobile Services" questionnaire.

⁵¹ See q. 6 in "Telecommunication – Mobile Services" questionnaire.

As for category for “composition of the board of directors” (weight 0.02), the score is assigned inversely proportional to the percentage of the board that can comprise foreigners. Since there is no limitations on the share of the board that can comprise foreigners, the estimated score is 0.0 (relative only for foreigners).

The last category is “temporary movement of people” with a weight 0.01. The degrees of restrictiveness varies from “no temporary entry of executives, senior managers and/or specialists” (1.0) to “temporary entry of executives, senior managers and/or specialists over 90 days” (0.0). Here the entry “temporary entry of executives, senior managers and/or specialists over 90 days” was chosen, because there are no explicit limitations on the movement of people.

Details of the calculations of tariff equivalents for mobile phone services

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

In order to calculate the tariff equivalents we need empirical estimates of how much barriers to trade influence prices. For mobile telecommunications Warren (2000) estimates the relation between number of cellular mobile subscribers per 100 inhabitants, and barriers. Warren (2000) estimate different models of barrier impact on fixed lines output and we will focus on the most complete of these models.⁵² The empirical specification is given by:

$$Q_i = \alpha_0 + \alpha_1 GDP_i + \alpha_2 PD_i + \alpha_3 (1 - TRI_i) + \varepsilon_i,$$

where i is a country index. The variables are:

Q : Cellular mobile subscribers per 100 inhabitants

GDP : Gross domestic product per capita

PD : Population density per square kilometre

TRI : Trade restrictiveness index

The regression error term is given by ε_i . Notice that we use one minus the value of the TRI. This has no barring on the results, but is simply a consequence of Warren (2000) applying a market opening variable instead of the barrier (“market closure”) index. From this equation Warren (2000) which is copied by Kimura et al. (2004b) we can obtain a quantity impact from total liberalisation by inserting the counterfactual (full liberalisation, $TRI = 0$) in the formula

$$QI(current) = \frac{Q_{f0} - Q_{f1}}{Q_{f1}} = \frac{\hat{Q}(TRI = 0) - \hat{Q}(TRI = current)}{\hat{Q}(TRI = current)}$$

where a ‘hat’ represents a prediction from the empirical model and all other variables are held constant.

⁵² In Warren (2000) this will be ‘model 7’.

However, this prediction equation is not suitable for Ukraine. With the current level of barriers it predicts the existence of around 2.6 mobile subscribers per 100 inhabitants while the official statistics show there to be 7.7 mobile subscribers per 100 inhabitants in 2002.⁵³ The predictions are poor for Ukraine because the countries included in the original estimation sample in Warren (2000) primarily consists of developed market economies different from Ukraine, such as the EU countries, USA and Japan. For these countries the model predicts fairly well. As a consequence, we do not use the model to predict the number of mobile subscribers per 100 inhabitants and then use this prediction to turn our tariff equivalents from the TRI. Rather, we use the actual value in this case 7.7 mobile subscribers per 100 inhabitants combined with the estimation coefficient to TRI being the α_3 in the estimation model above. Both are shown in Table 4.5.

Table 4.5

Estimates and value used to predict mainlines per 100 inhabitants

Variable	Econometric estimate	Value for Ukraine
Policy	3.05	Current: TRI = 0.18 WTO: TRI = 0.08
Q_{fl}		7.69

Source: ITU, International Telecommunications Union and Warren (2000)

Using just this information we predict the quantity impact from total liberalisation by inserting the counterfactual (full liberalisation, $TRI = 0$) in the formula

$$QI(current) = \frac{7.69 + 3.05 \cdot 0.82 - 7.69}{7.69} = 0.07$$

$$QI(WTO) = \frac{7.69 + 3.05 \cdot 0.92 - 7.69}{7.69} = 0.03$$

Now we have to move from quantities to prices and this is done by dividing the quantity impact by the price elasticity. Thus, we obtain the equivalent price impact, $PI = QI/e$.⁵⁴ Notice, that this gives us the price reduction when going from the current level of barriers to no barriers, but in fact we are interested in the reverse – the price increase when going from no barriers to the current level of barriers. Therefore we have to “turn the price impact around” to get the tariff equivalent:

$$TE = \frac{1}{1 + PI} - 1.$$

Using these formulas we can calculate the tariff equivalent for Ukraine for the baseline case (current restrictions, $QI = 0.07$):

$$TE = \frac{1}{1 + 0.07/(-1.2)} - 1 = 0.06$$

and the WTO accession case (reduced restrictions, $QI = 0.03$):

⁵³ ITU, International Telecommunications Union.

⁵⁴ The price elasticity is set to -1.2 as found by Albon et al (1997).

$$TE = \frac{1}{1 + 0.03/(-1.2)} - 1 = 0.03 .$$

Details of restrictiveness index calculation for Internet services

Table 4.6

The trade restrictiveness index on internet services in Ukraine

Category	Weight	Score NONRESI DENTS	Score foreign RESIDENTS	Score domestic RESIDENTS	TRI	TRId
Licensing of internet services	0.20	0.00		0.00	0.00	0.00
Form of commercial presence	0.10	1.00		0.00	0.1	0.1
Direct investment: equity participation permitted	0.20	0.00		0.00	0	0
Direct investment: restrictions on certain types of services	0.10	0.00		0.00	0	0
Joint venture arrangements	0.10	0.00		0.00	0	0
Permanent movement of people	0.02		0.00	0.00	0	0
Regulation of network interconnection	0.10		0.50	0.50	0.05	0
Infrastructure	0.10		0.00	0.00	0	0
Market structure	0.05		0.00	0.00	0	0
Composition of the board of directors	0.02		0.00	0.00	0	0
Temporary movement of people	0.01		0.00	0.00	0	0
	1.00				0.15	0.10

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2004

The table shows the TRI and TRId and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRId, measuring the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

According to the Law "On Telecommunications", only residents of Ukraine can operate on the market. Thus we introduced separate scoring for nonresidents, residents-foreign, and residents-domestic for all categories.

Among restrictions on commercial presence, a category for "licensing of internet services" has a weight 0.2 and has five degrees of restrictiveness: "no new license is allowed" (score 1.0), "licenses are issued through complicated (discriminately) and costly procedure" (score 0.75), "licenses are generally issued with application

fee and several requirements" (score 0.2), "licenses are generally issued with application fee" (score 0.1), and "licenses are automatically issued upon application without any cost" (score 0.0). In the internet services sector in Ukraine, no license is required, and so "licenses are automatically issued upon application without any cost" is selected corresponding to a score of 0.0.⁵⁵

The category for "forms of commercial presence" has a weight 0.1 and has two degrees of restrictiveness: "measures which restrict or require a specific type of establishments" (score 1.0) and "no restriction on establishment" (score 0.0). Since there is no regulation on establishment for residents, "no restrictions" is chosen. But for nonresidents, score is 1.0.⁵⁶

Regarding the category for "direct investment: equity participation permitted" with a weight 0.2, there is no regulation on the maximum foreign equity participation for both nonresidents and residents-foreign – and so the score chosen is 0.0.⁵⁷

Category for "direct investment: restrictions on certain types of services" with a weight 0.1, there are two types of restrictiveness: "restrictions on providing some types of Internet services" (score 1.0) and "no restriction on providing any type of Internet services" (score 0.0). Since there is no restriction on any types of services, the score is chosen accordingly.⁵⁸

The category for "joint venture agreements" has a weight 0.1 and has three degrees of restrictions: "issues no new license and no entry is allowed through a joint venture with a domestic company" (score 1.0), "foreign company can enter only through a joint venture with a domestic company" (score 0.5), and "no requirement for foreign companies to enter through a joint venture with a domestic company" (score 0.0). In Ukraine, there is no official limitation, and thus the score chosen for them is 0.0.⁵⁹

In the category "permanent movement of people" with weight 0.02, six degrees of restrictiveness are described, ranging from "no entry of executives, senior managers and/or specialists" (score 1.0) to "executives, specialists and/or senior managers can stay a period of 5 years or more" (score 0.0). For foreigners, no limitation on the in-country stay duration is foreseen, and so the corresponding score is 0.0 for both residents and nonresidents.

The category for "regulation of network interconnection" (applicable only to residents) with a weight 0.1 has three types of restrictions; "interconnection is completely regulated by the authority" (score 1.0), "interconnection is determined by private negotiations in general, but general terms are determined by the authority" (score 0.5), and "interconnection is completely determined by private negotiations (no regulation)" (score 0.0). In Ukraine, interconnection terms are

⁵⁵ See questions 1, 7 in questionnaire "Internet Services".

⁵⁶ See questions 1, 7 in questionnaire "Internet Services".

⁵⁷ See questions 3, 4 in questionnaire "Internet Services".

⁵⁸ See questions 3, 4 in questionnaire "Internet Services".

⁵⁹ See questions 1, 6, 7 in questionnaire "Internet Services".

determined by private negotiations, but state operator "Ukrtelecom" has almost monopolistic position in providing access to international data gateways, and so general terms of such interconnections have to be determined by the authority. The score is chosen accordingly at 0.5.⁶⁰

As for the category for "infrastructure" with a weight 0.1, there are three degrees of restrictiveness: "providers are not allowed to either built their own network or own/lease their international data gateways" (score 1.0), "providers are allowed to built their own network or own/lease their international data gateways" (score 0.5), and "providers are allowed to built their own network as well as own/lease their international data gateways" (score 0.0). Providers are allowed to built their own network or own/lease their international data gateways, so the score chosen is 0.0.⁶¹

For market structure, the category has a weight 0.05 and two degrees of restrictiveness: "monopoly" (score 1.0) and "competition among plural providers" (score 0.0). Since the market is competitive among plural providers, "competition among plural providers" is chosen for this category, with the score 0.0.⁶²

Category for "the composition of the board of directors" has a weight 0.02. Score is assigned inversely proportional to the percentage of the board that can comprise foreigners. Since there is no regulation on the share of the board that can comprise foreigners, the score is 0.0.

The last category is "temporary movement of people" with a weight 0.01. The degrees of restrictiveness varies from "no temporary entry of executives, senior managers and/or specialists" (1.0) to "temporary entry of executives, senior managers and/or specialists over 90 days" (0.0). Here the entry "temporary entry of executives, senior managers and/or specialists over 90 days" was chosen, because there is no explicit regulation on the movement of people.

Details of the calculations of tariff equivalents for Internet services

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

To our knowledge there exist no studies on the barrier impacts in internet services, but Kimura et al (2004b) suggest applying the estimates from fixed telecommunications as these services share many characteristics, e.g. the dependence on cable networks. Thus, we follow Kimura et al (2004b) and apply the estimates from fixed telecommunications.⁶³

⁶⁰ See question 8 in questionnaire "Internet Services".

⁶¹ See question 8 in questionnaire "Internet Services".

⁶² See questions 5, 6 in questionnaire "Internet Services".

⁶³ We refer the reader to the section on fixed telecommunications for further details.

Using these estimates and the formulas derived for fixed telecommunications, we can calculate the tariff equivalent for Ukraine for the baseline case. First we find the quantity impacts:

$$QI(current) = \frac{20.98 - 20.19}{20.19} = 0.04$$

$$QI(WTO) = \frac{20.98 - 20.71}{20.71} = 0.01$$

Hereafter we can calculate the tariff equivalents (current restrictions, $QI = 0.05$):

$$TE = \frac{1}{1 + 0.04/(-1.2)} - 1 = 0.03$$

and the WTO accession case (reduced restrictions, $QI = 0.01$):

$$TE = \frac{1}{1 + 0.01/(-1.2)} - 1 = 0.01 .$$

PART V
TRANSPORTATION SERVICES

Overview of transportation sector

Table 5.1

Economic indicators of transportation services

		2000	2001	2002	2003
Output	UAH m	28771	35520	38353	49155
	% total output	7	7	7	7
	% services output	24	23	21	22
Value added	% GDP	10	11	10	11
Value added / output	%	62	61	59	59
Structure of value added:					
Compensation to employees	% sector VA	37	38	50	47
Profit, mixed income	% sector VA	51	47	40	44
Net taxes on production and imports	% sector VA	11	16	11	10
Employment	thous people	850.0	791.0	759.0	742.0
	% total employed	6	6	6	6
Average wage	UAH	338.4	479.1	607.4	731.8
Exports	UAH m	15886	15903	18576	20008
	% total exports	15	14	15	13
	% sector output	55	45	48	41
Imports	UAH m	3400	2196	3469	4805
	% total imports	3	2	3	3
	% sector output	12	6	9	10
Exports/imports	index	4.7	7.2	5.4	4.2

Source: State Statistic Committee

Transportation services play an important role in the services sectors of Ukraine as well as in the whole economy. It is the second most important sector in services after trade services, ranging between 21-24% in services output over the last years and accounting for 7% in total output. The share of the sector's value added ranges between 10-11% of total value added, value added to output ratio ranges between 59-62%. The structure of value added changed in 2002. Since 2002 most of the value added has been distributed to employees as salaries (47-50%), slightly lower share of value added is a profit of enterprises (40-44%), the lowest share (10-11%) is net taxes to the government.

6% of labor force is occupied in the sector. The average wage in the sector is around 50% higher than in the whole economy and it rises constantly over the last years with an increase of average wage in the economy.

The transportation services is an export-oriented sector since the exports to imports ratio ranges constantly between 4 and 7. However, the ratio is falling during the last years. The export of transportation services plays a significant

role in Ukraine's exports, the share of the services' export ranges between 13-15%. In 2002 48% of the services were exported. Import of the services is less important in the sector, around 10% of the services are imported. The share of transportation services in the country's import is moderate (3%).

The transportation services sector consists of the following sub-sectors: railway, automobile, pipeline, maritime and river, and air freight and passenger transportation. Most freight is transported by the mean of automobile, railway and pipeline transportation. Considering a turnover of freight and international trade in transportation services, the most important transportation means are railways (45-49% of total freight turnover) and pipeline (42-47%) transportation. The railway transport plays the most important role here; the share of this transportation accounts for around 45% in total turnover of passengers. We consider railway transportation in the following service sector study due to its exceptional importance in transportation services in Ukraine. Pipelines transportation is not considered in this study since the tariffs for the pipeline transport are not subject to the WTO regulations at the moment.

The sector of railway transportation in Ukraine is monopolized by state railways. Six regional railways are regulated by the State Railways Administration, which is integrated into the Ministry of Transport and Communications. Railways infrastructure, freight, and passenger operations are strongly integrated. The Ukrainian railways also incorporate ancillary services and quite an extensive social infrastructure.

Table 5.2

Structure of transportation services sector

	2001	2002	2003
Shares of means of transport in total freight transportation, %			
railway	23	25	27
automobile	62	61	59
pipeline	14	13	13
maritime and river	1	1	1
air	0	0	0
Shares of means of transport in total freight transportation turnover, %			
railway	45	47	49
automobile	5	5	5
pipeline	47	45	42
maritime and river	3	3	3
air	0	0	0

Source: State Statistic Committee

Details of the calculations of the restrictiveness indexes for freight transportation

Table 5.3

The trade restrictiveness index on railway transportation of freight in Ukraine

Category	Weight	Score NONRESI DENTS	Score foreign RESIDENTS	Score domestic RESIDENTS	TRI	TRId
1. Extent of commercial presence	0.20	1.00		1.00	0.2	0
2. Separation of infrastructure	0.20		0.50	0.50	0.1	0
3. Separation of rolling stock	0.10		0.00	0.00	0	0
4. Direct Investment: Foreign equity participation permitted	0.20	1.00		1.00	0.2	0
5. Permanent movement of foreigners	0.02	0.00		0.00	0	0
6. Destination services	0.10		0.40	0.40	0.04	0
7. End user tariff	0.10		0.50	0.50	0.05	0
8. Discretionary imposition of restrictions	0.05		1.00	1.00	0.05	0
9. Composition of the board of directors	0.02		0.00	0.00	0	0
10. Temporary movement of foreigners	0.01		0.00	0.00	0	0
	1.00				0.64	0.00

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2003

The table shows the TRI and TRId and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRId, measuring the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

Railway transportation is monopolized by state railways. Six regional railways are regulated by a State railway administration, which is highly integrated to the Ministry of Transport.

Among restrictions on commercial presence, a category for "extent of commercial presence" has a weight 0.2 in total. There are four types of railway transportation: transportation within one regional unit, between regional units, international and transit transportation. Each of these categories has a weight of 0.05. Each category has four degrees of commercial presence: no access to the market (score 1.0), access is allowed through complicated and costly procedures (score 0.66); access is allowed with several restrictions (score 0.33); full access without restrictions (score 0.0). Since according to the law management of

railways and railway transportation is an exclusive right of the State Railway Administration the score chosen is 1.0 for all four types of transportation.⁶⁴

A category "separation of infrastructure" has a weight of 0.2. There are three level of separation: no separation, when transportation services, networks, rolling stocks and auxiliary enterprises are managed by a single entity (score 1.0); organizational separation, when transportation services, networks, rolling stocks and auxiliary enterprises are managed by different entities but governed by one organization (score 0.5), and full separation, when all enterprises are independent (score 0.0). Since in Ukraine railway enterprises are managed by different companies but in fact are governed by The State Railways Administration the score of 0.5 is chosen.⁶⁵

A category "separation of rolling stock" has a weight of 0.1. Here we distinguish between four types of transportation, each of which has a weight of 0.025. The category is distinguished into separate group to illustrate a possibility of impossibility of private ownership and investments in rolling stock. There are two levels of separation: full integration with network (score 1.0) and separation (score 0.0). The score of 0.0 is chosen for each type of transportation since rolling stock as separated from the network, and private property is allowed in rolling stock.⁶⁶

Direct investments: Foreign equity participation permitted has a weight of 0.2. The state railways that perform transportation are not corporatized yet. We interpret this as no foreign equity is permitted.⁶⁷ This implies a score of 1.0.

Other restrictions include 5 categories. A category "Destination services" describes a possibility for foreigners to provide services at destination points. The weight of this category is 0.1. We distinguish five sub-categories with a sub-weight of 0.2 for each of them: ownership of train stations, supply of fuel, repair and maintenance services for cars, services trade and marketing and provision of computer reservation systems. For each sub-category the score of 0.2 is chosen if foreigners are not allowed to provide the particular service, otherwise the score of 0.0 is assigned. According to Ukrainian legislation foreigners – residents of Ukraine and foreigners –nonresidents have different permissions as for provision of the services. In particular, foreigners-non residents are allowed only to provide repair and maintenance services for cars and fuel supply services. For these services the score of 0.0 is assigned for all residents, non-residents and domestic operators of Ukraine. Since only residents can provide trade and marketing of the services the score of 0.0 is chosen for residents and 0.2 for non-residents. Neither foreigners-residents nor foreigners-non-residents nor domestic operators can own train stations and provide computer reservation systems (0.2 is assigned for all).

The mechanism of setting end-user tariffs is described by a category "end user tariff", which weight is 0.1. There are three variants: tariffs are determined by rate of return regulation (score is 1.0); tariffs are determined by price cap regulation (score 0.5) and tariffs are determined by market force, that is there is

⁶⁴ See q. 1 in "Freight transportation" questionnaire.

⁶⁵ See q. 2 and 3 in "Freight transportation" questionnaire.

⁶⁶ See q. 3 in "Freight transportation" questionnaire.

⁶⁷ See q. 6 and 7 in "Freight transportation" questionnaire.

no regulation (score is 0.0). Since in Ukraine railway tariffs are set by Cabinet of Ministers we choose the score of 0.5.⁶⁸ A category "discretionary imposition of restriction" describes whether government is able or unable to impose selective restrictions. A score of 1.0 is assigned for the category since the ministry used to grant privileged tariffs for selective transporters.⁶⁹

As for movement of people, there are three categories. One is a category for "composition of the board of directors" with a weight of 0.02. The restrictiveness score for this category is inversely proportional to the percentage of the board that can comprise foreigners. Since in Ukraine there is no restriction on foreigners' participation in board formation, we assign 0.0 score to this category.⁷⁰ The category for a "permanent movement of people" has a weight of 0.02. It describes the restrictiveness of entry for executives, specialists and senior managers for a long-term period. Since there is no regulation on the movement of people with regard to the duration of their stay, we choose the least restricted level, particularly, "executives, specialists and senior managers can stay a period of 5 years or more" with a 0.0 score.⁷¹ The other one is a category for "temporary movement of people" with a weight of 0.01. It comprises of five levels of restrictiveness depending on the number of entry days allowed in domestic banks for foreign executives, senior managers and specialists. Scores for levels of this category vary from 1.0 to 0.0. For Ukraine "temporary movement of people, including executives, senior managers and specialists over 90 days" is chosen with a score 0.0, since there is no explicit regulation on the movement of people.⁷²

Details of the calculations of tariff equivalents for freight transportation

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

Since Kimura et al (2004a, b, c) do not analyse freight transport, we must find econometric estimates to convert the TRI in railway transport into a tariff equivalent elsewhere. We decide to use the estimate that we applied for fixed telecommunications. We prefer this estimate because we believe that the special network characteristics of rail transport are important determinants for the market outcome and that they are reflected in the telecommunications estimate as well.⁷³

Applying the formulas derived for fixed telecommunications we can calculate the tariff equivalents for Ukraine. We start by calculating the quantity impact. When predicting the current and counterfactual quantities we choose to exclude some of the variables which are very specific for telecommunications, e.g. 'Percentage

⁶⁸ See q. 9 in "Freight transportation" questionnaire.

⁶⁹ See q. 10 in "Freight transportation" questionnaire.

⁷⁰ Q. 11, 12 in "Freight transportation" questionnaire.

⁷¹ Q.8 in "Freight transportation" questionnaire.

⁷² See q.13 in "Freight transportation" questionnaire.

⁷³ The reader is referred to that section for further details.

of mainlines attached to a digital switch'. Using the notation from the telecommunication chapter the variables excluded are: Qual and UD. These variables cannot be expected to contribute to explaining the variation in freight output. After removing these variables the quantity impact is given by:

$$QI(current) = \frac{22.96 - 19.60}{19.60} = 0.17$$

for the baseline case (current restrictions). This translates in a tariff equivalent of:

$$TE = \frac{1}{1 + 0.17 / (-1.2)} - 1 = 0.17 .$$

In this case WTO accession does not imply any improvements in the barrier level. Thus, the tariff equivalent remains the same.

Details of the calculations of the restrictiveness indexes for passenger transportation

Table 5.4

The trade restrictiveness index on railway transportation of passengers in Ukraine

Category	Weight	Score NONRESI DENTS	Score foreign RESIDENTS	Score domestic RESIDENTS	TRI	TRId
1. Extent of commercial presence	0.20	1.00		1.00	0.2	0
2. Separation of infrastructure	0.20		0.50	0.50	0.1	0
3. Separation of rolling stock	0.10		0.00	0.00	0	0
4. Direct Investment: Foreign equity participation permitted	0.20	1.00		1.00	0.2	0
5. Permanent movement of foreigners	0.02	0.00		0.00	0	0
6. Destination services	0.10		0.40	0.40	0.04	0
7. End user tariff	0.10		0.50	0.50	0.05	0
8. Discretionary imposition of restrictions	0.05		1.00	1.00	0.05	0
9. Composition of the board of directors	0.02		0.00	0.00	0	0
10. Temporary movement of foreigners	0.01		0.00	0.00	0	0
	1.00				0.64	0.00

Source: Osteuropa-Institut München, Copenhagen Economics, Institut for Economic Research and Policy Consulting based on Kimura et al, 2003

The table shows the TRI and TRId and how they are calculated using weights and scores for each category. The TRI is calculated as the score to foreign firms (nonresidents or residents depending on the character of the category) multiplied by the respective weights and then summing over categories. The TRId, measuring the discriminatory barriers affecting only foreign firms, is calculated in two steps: first one subtracts the score for foreign firms by the score for domestic firms (to find the discriminatory score). Second, one multiplies this difference by the respective weight and sums over the categories.

Railway transportation is monopolized by state railways. Six regional railways are regulated by a State railway administration, which is highly integrated to the Ministry of Transport.

Among restrictions on commercial presence, a category for "extent of commercial presence" has a weight 0.2 in total. There are four types of railway transportation: transportation within one regional unit, between regional units, international and transit transportation. Each of these categories has a weight of 0.05. Each category has four degrees of commercial presence: no access to the market (score 1.0), access is allowed through complicated and costly procedures (score 0.66); access is allowed with several restrictions (score 0.33); full access without restrictions (score 0.0). Since according to the law management of railways and railway transportation is an exclusive right of the State Railway Administration the score chosen is 1.0 for all four types of transportation (see q. 1 in "Passenger transportation" questionnaire). A category "separation of infrastructure" has a weight of 0.2. There are three level of separation: no separation, when transportation services, networks, rolling stocks and auxiliary enterprises are managed by a single entity (score 1.0), organizational separation, when transportation services, networks, rolling stocks and auxiliary enterprises are managed by different entities but governed by one organization (score 0.5) and full separation, when all enterprises are independent (score 0.0). As managing of railway infrastructure is organisationally separated from other services the score of 0.5 is chosen.⁷⁴ A category "separation of rolling stock" has a weight of 0.1. Here we distinguish between four types of transportation, each of which has a weight of 0.025. The category is distinguished into separate group to illustrate a possibility of impossibility of private ownership and investments in rolling stock. There are two levels of separation: full integration with network (score 1.0) and separation (score 0.0). The score of 0.0 is chosen for each type of transportation since rolling stock as separated from the network, and private property is allowed in rolling stock.⁷⁵

Direct investments: Foreign equity participation permitted has a weight of 0.2. The state railways that perform transportation are not corporatized yet. We interpret this as no foreign equity is permitted. The implies a score of 1.0.⁷⁶

Other restrictions include 5 categories. A category "Destination services" describes a possibility for foreigners to provide services at destination points. The weight of this category is 0.1. We distinguish five sub-categories with a sub-weight of 0.2 for each of them: ownership of train stations, supply of fuel, repair and maintenance services for cars, services trade and marketing and provision of computer reservation systems. For each sub-category the score of 0.2 is chosen if foreigners are not allowed to provide the particular service, otherwise the score of 0.0 is assigned. According to Ukrainian legislation foreigners – residents of Ukraine and foreigners –nonresidents have different permissions as for provision of the services. In particular, foreigners-non residents are allowed to provide repair and maintenance services for cars and fuel supply services. For these services the score of 0.0 is assigned for foreign and domestic residents and non-residents of Ukraine. Only residents can provide trade and marketing of

⁷⁴ See q. 2 in "Passenger transportation" questionnaire.

⁷⁵ See q. 3 and 4 in "Passenger transportation" questionnaire.

⁷⁶ Q. 6 and 7 in "Passenger transportation" questionnaire.

the services (the score of 0.0 is chosen for residents and 0.2 for non-residents). Since only Ukrzaliznytsia can reserve tickets we assign the score of 0.2 to the last sub-sector. Neither foreigners-residents or foreigners-non-residents can own train stations (0.2 is assigned for both).⁷⁷

The mechanism of setting end-user tariffs is described by a category "end user tariff", which weight is 0.1. There are three variants: tariffs are determined by rate of return regulation (score is 1.0); tariffs are determined by price cap regulation (score 0.5) and tariffs are determined by market force, that is there is no regulation (score id 0.0). Since in Ukraine railway tariffs are set by Cabinet of Ministers we choose the score of 0.5.⁷⁸ A category "discretionary imposition of restriction" describes whether government is able or unable to impose selective restrictions. A score of 1.0 is assigned for the category since the government performs in a very intransparent manner.⁷⁹

As for movement of people, there are three categories. One is a category for "composition of the board of directors" with a weight of 0.02. The restrictiveness score for this category is inversely proportional to the percentage of the board that can comprise foreigners. In Ukraine there is no restriction on foreigners' participation in board formation, we assign 0.0 score to this category.⁸⁰ The category for a "permanent movement of people" has a weight of 0.02. It describes the restrictiveness of entry for executives, specialists and senior managers for a long-term period. Since there is no regulation on the movement of people with regard to the duration of their stay, we choose the least restricted level, particularly, "executives, specialists and senior managers can stay a period of 5 years or more" with a 0.0 score.⁸¹ The other one is a category for "temporary movement of people" with a weight of 0.01. It comprises of five levels of restrictiveness depending on the number of entry days allowed in domestic banks for foreign executives, senior managers and specialists. Scores for levels of this category vary from 1.0 to 0.0. For Ukraine "temporary movement of people, including executives, senior managers and specialists over 90 days" is chosen with a score 0.0, since there is no explicit regulation on the movement of people.⁸²

Details of the calculations of tariff equivalents for passenger transportation

In this section we give a technical description of how the tariff equivalents were calculated on the basis of TRI values.

Since Kimura et al (2004a, b, c) does not analyse passenger transport, we must find econometric estimates to convert the TRI in railway passenger transport into a tariff equivalent elsewhere. We decide to use the estimate that we applied

⁷⁷ For details see q. 5 in "Passenger transportation" questionnaire.

⁷⁸ See q. 9 in "Passenger transportation" questionnaire.

⁷⁹ See q. 10 in "Passenger transportation" questionnaire.

⁸⁰ See q. 11, 12 in "Passenger transportation" questionnaire.

⁸¹ See q. 8 in "Passenger transportation" questionnaire.

⁸² See q. 13 in "Passenger transportation" questionnaire.

for fixed telecommunications. We prefer this estimate because we believe that the special network characteristics of rail transport are important determinants for the market outcome and that they are reflected in the telecommunications estimate as well.

Applying the formulas derived for fixed telecommunications we can calculate the tariff equivalents for Ukraine. We start by calculating the quantity impact. When predicting the current and counterfactual quantities we choose to exclude some of the variables which are very specific for telecommunications, e.g. 'Percentage of mainlines attached to a digital switch'. Using the notation from the telecommunication chapter the variables excluded are: Qual and UD. These variables cannot be expected to contribute to explaining the variation in freight output. After removing these variables the quantity impact is given by:

$$QI(current) = \frac{22.96 - 19.60}{19.60} = 0.17$$

for the baseline case (current restrictions). This translates in a tariff equivalent of:

$$TE = \frac{1}{1 + 0.17 / (-1.2)} - 1 = 0.17 .$$

In this case WTO accession does not imply any improvements in the barrier level. Thus, the tariff equivalent remains the same.

References

- Albon, Robert, Alexis Hardin and Philippa Dee (1997): "Telecommunications Economics and Policy Issues". Industry Commission Staff Information Paper, Canberra: Productivity Commission, Commonwealth of Australia.
- Copenhagen Economics (2005): "Economic assessment of barriers to the upper and lower bound market for services". Prepared for DG Enterprise, available on Commissions homepage or on www.copenhageneconomics.com.
- Deardorff, Alan V. and Robert M. Stern (2003): "Empirical Analysis of Barriers to International Services Transactions and the Consequences of Liberalization: A World Bank Course. Module 2: Empirical Analysis of Barriers to International Services Transactions and the Consequences of Liberalization", *mimeo*.
- Kalirajan, Kaleeswaran, Greg McGuire, Duc Nguyen-Hong and Michael Shuele (2000): "The Price Impact of Restrictions on Banking Services". In Findlay, Christopher and Tony Warren eds., *Impediments to Trade in Services: Measurement and Policy Implications*, London; Routledge, pp. 215-230.
- Kang, Jong-Soon (2000): "Price Impact of restrictions on maritime transport services". In Findlay, Christopher and Tony Warren eds., *Impediments to Trade in Services: Measurement and Policy Implications*, London; Routledge.
- Kimura F., M. Ando and T. Fujii (2004a): "Estimating the Ad Valorem Equivalent of Barriers to Foreign Direct Investment in Financial Services Sectors in Russia". January 2004, www.worldbank.org/trade/russia-wto.
- Kimura F., M. Ando and T. Fujii (2004b): "Estimating the Ad Valorem Equivalent of Barriers to Foreign Direct Investment in Telecommunication Services Sectors in Russia". January 2004, www.worldbank.org/trade/russia-wto.
- Kimura F., M. Ando and T. Fujii (2004c): "Estimating the Ad Valorem Equivalent of Barriers to Foreign Direct Investment in the Maritime and Air Transportation Services Sectors in Russia". January 2004, www.worldbank.org/trade/russia-wto.
- Warren, Tony (2000): "The Impact on Output of Impediments to Trade and Investment in Telecommunications Services". In Findlay, Christopher and Tony Warren eds., *Impediments to Trade in Services: Measurement and Policy Implications*, London; Routledge.

ANNEX A

TECHNICAL NOTE

To quantify qualitative barriers to service sectors, we conducted two series of questionnaires. On the one hand, following the study by Kimura et al (2004 a, b, c), detailed questionnaires were filled out by the IER experts (see Appendix B for completed questionnaires). On the other hand, we run a survey of representatives of the sectors we studied.

The second survey aims at getting complete and accurate information about main regulations of Ukraine's service sectors from those who establish rule of the game and those who operate under that rules. The special questionnaires with standardized questions have been developed. The list of trade barriers following Kimura et al (2004 a, b, c) was taken as a basis for the questionnaire. Altogether 8 questionnaires were developed: a questionnaire per each services sub-sector covered by Service Sector Study.

List of questionnaires is the following:

1. Questionnaire for Banking Services. Finance sector.
2. Questionnaire for Insurance Services. Finance sector.
3. Questionnaire for Securities Services. Finance sector.
4. Questionnaire for Mobile Phone Services. Telecommunication sector.
5. Questionnaire for Fixed Line Services. Telecommunication sector.
6. Questionnaire for Internet Services. Telecommunication sector.
7. Questionnaire for Railways (Passenger services). Transportation.
8. Questionnaire for Railways (Freight service). Transportation.

The target audience of the survey consisted of two parts:

- Representatives of state authorities who helped understanding current legislation and regulations existing in each particular sector
- Representatives of business entities, which operate in each particular sector. They helped understanding how the legislation and regulation in their sector works *de facto*.

We use the method of the post survey. First, the list of prospective respondents have been developed. Then, questionnaires and invitation letters with explanation of purposes of the survey were distributed by post among leaders of the key companies in each sector and representative of regulatory authorities. After that we call to prospective respondent and remind about the survey.

Results of the representatives surveys were used for filling out detailed questionnaires (Annex B) and the TRI tables presented in Annex C.

ANNEX B

QUESTIONNAIRES

Financial Services: Banking

Note: Unless specified, please give information for the latest year available and indicate which year. If insufficient space is provided, please attach additional information on separate sheets. Please report all monetary values in their reported currencies.

A. Market Access

Macroeconomic policies

1. Are there restrictions on capital flows?

Capital inflows	Capital outflows	If yes, what type of restrictions? Is the authority allowed to impose temporary restrictions?
Short term <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Short term <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Long term <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Long term <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	

Restrictions on transactions with foreign currency

The national currency is the sole legal tender in Ukraine. Payments between residents and non-residents in foreign currency, which are conducted as a part of trade turnover, are administered only through the Ukrainian authorized banks.

Most transactions with foreign currency are subject to licensing. The NBU issues two types of licenses. General licenses are designed for commercial banks and other financial institutions, while individual licenses are provided to residents and non-residents permitting a one-off currency transaction. Among the major exemptions from licensing are the following operations:

- 1) the transfer abroad of foreign currency by a Ukrainian resident or non-resident (legal entity or individual) within the limit of the amount previously imported into Ukraine by such resident or non-resident on a legal basis;
- 2) the payment abroad in foreign currency by a Ukrainian resident (legal entity or individual) in discharge of a contractual obligation in such foreign currency to a non-resident in settlement for goods, services, works, intellectual property rights, or other property rights acquired or received by such resident from such non-resident (please note that an acquisition of securities or other "currency values" does not fall within this exemption);
- 3) the payment abroad in foreign currency of interest under a loan or income earned (dividends) from a foreign investment; and
- 4) the repatriation abroad from Ukraine of the amount of a foreign investment in foreign currency previously made in Ukraine upon the termination of the relevant investment activity.

An individual license of the NBU is required for: 1) depositing funds in UAH or in foreign currency, or depositing other "currency values" (securities, banking metals, etc.), in an account or on deposit outside of Ukraine (except the opening by a Ukrainian commercial bank possessing a banking license of a correspondent account at a foreign bank, and the opening by a Ukrainian resident of his/her bank account at a foreign bank for the duration of such resident's stay abroad); 2) investing in foreign currency outside of Ukraine (by the transfer abroad of such foreign currency from Ukraine); 3) transferring abroad of foreign currency in connection with the acquisition of

securities of Ukrainian issuers; 4) import transactions that require more than 90 days for postponed supply of goods or services (this measure allows keeping foreign currency in the country as long as possible).

The new Commercial Code of Ukraine requires that residents (both individuals and legal entities) opening a foreign bank account must notify the NBU regarding such an account within three days from the date on which such account is opened. This is obligatory for those, who have received an individual license for opening an account abroad and for those, who doesn't need a license (for example, residents opening an account during their stay abroad).

In addition, the receipt by a Ukrainian resident from a non-resident of a foreign currency loan (except when the resident is a Ukrainian commercial bank and the loan is provided by a foreign bank for a term not exceeding one year) is subject to the registration of such loan with the NBU.

Payments for services rendered by non-residents

If the aggregate value of an agreement for the provision of works (services) by a non-resident exceeds EUR 50,000 or its equivalent in any other currency, an act of "price evaluation" issued by the State Information and Analytical Center for the Monitoring of External Commodity Markets (the Center) must be submitted by the payer to a commercial bank in order to effect the remittance of the funds abroad. This act must verify the compatibility of the contractual price of the works (services) with the relevant "regular" market prices. If the Center states in its act of price evaluation that the contractual price exceeds the level of the "regular" market price, then the remittance of funds under the agreement will be permitted only upon an individual approval of the NBU. This regulation does not apply to, among others, financial, insurance, transport and communications services rendered by a non-resident service provider, as long as the resident-recipient possesses a license allowing to engage in the relevant business activity.

Other foreign exchange restrictions:

Return of export receipts in Ukraine. Residents' receipts of foreign currency must be deposited in a resident's foreign currency account in an authorized bank within 90 days following the registration of export custom declaration. The only exemptions are the pharmaceutical industry (180 days for return of export receipts) and the space industry (500 days). In other words, the Ukrainian exporters are obliged to deposit the foreign currency they earn in the Ukrainian banking system, thus, increasing the supply of foreign currency.

Mandatory sale of 50% foreign currency receipt recently abandoned. By April 1, 2005 legal entities – residents of Ukraine were obliged to sell 50% of the foreign currency receipts arriving in their authorized bank account. There were, however, several categories of receipts that were not subject to mandatory sales, including credit in a foreign currency, foreign investments, and deposits in a foreign currency in Ukrainian banks.

Anti-speculation regulations include:

- ban on forward contracts and financial derivatives on transactions with fully convertible currencies and all cashless purchases of foreign currency with hryvnia;
- control of motives behind currency purchases (all applications to make purchases of foreign currency should be accompanied by the relevant documents that prove the non-speculative character of the purchase. All purchased currency must be used in line with claimed objective within five working days of the currency's receipt);
- ban on bank foreign currency speculation (authorized banks are required to submit exactly specified claims for purchases or sales of foreign currencies on the market before the trading session begins).

Commercial presence

2. Are there policy restrictions on new entry of banks?

Entry by any bank

If yes, total number of banks allowed

Entry by foreign

If yes, total number of foreign banks allowed

☐ No ☒ Yes

☐ No ☒ Yes

The number of foreign banks is not restricted, as well as foreign participation in a Ukrainian commercial bank is not limited. However, prior permission of the NBU is required for the establishment of a commercial bank with foreign participation or for the "conversion" of an existing commercial bank into a bank with foreign participation. A bank is qualified as a "bank with foreign investment" if foreign investments in its charter fund amount to at least 10%.

There are indirect restrictions related to the allowed forms of establishment for foreign banks (see answer to question 4).

3. If entry is restricted, what are the reasons provided by the government?

☒ To give state-owned or national banks time to prepare for competition

☐ To increase government revenue from privatization or license fees

☐ Exclusive rights to allow the provision of universal service

☐ To reduce potential systemic risk believed to arise from over-banking

☐ Inadequate regulatory and supervisory capacity

☐ No perceived economic need for new banks

☒ Other: Opponents of foreign branch entry argue that it will open the doors to financially unstable, unreliable and disreputable foreign banks.

4. Which of the following legal forms of establishment are allowed for foreign banks?

☒ Subsidiaries ☐ Branches ☒ Representative office ☐ All

An authorization must be obtained from the National Bank of Ukraine for establishing a subsidiary with foreign capital.

5. Are there restrictions on the number of foreign bank branches?

☐ No ☒ Yes

If yes, what is the maximum number of foreign bank branches permitted? 0

Only a subsidiary, which is registered as a legal entity in Ukraine may open an unlimited number of branches.

6. Are there restrictions on the number of foreign bank ATMs?

☐ No ☒ Yes

If yes, what is the maximum number of foreign bank ATMs permitted? 0

Only foreign banks, registered as a legal entity in Ukraine, may open an unlimited number of ATMs.

7. Are foreign banks allowed to raise capital domestically?

☐ No ☒ Yes

8. Which of the following services are commercial banks permitted to provide domestically?

Services	Domestic banks		Foreign banks	
Real estate lending	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
Insurance services	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Yes
Securities services	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
Foreign currency lending	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
Foreign exchange services	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
Credit cards services	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
Leasing services	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
Other (specify): issuance of monetary guarantees and third party suretyships, the rendering of consulting and information services related to banking operations, lottery activities, trust operations.	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes

Cross-border banking trade

9. Are the following allowed to borrow cross-border from foreign banks?

Domestic banks Yes

Domestic corporations Yes

Domestic households Yes

Domestic corporations and households can borrow from foreign banks only through authorized banks in Ukraine. If the money borrowed from non-residents is to be placed on an account opened abroad, a special NBU permit is required both for domestic corporations and households to open such an account. All loan contracts signed by domestic banks, corporations and individuals with foreign banks are subject to special procedure of registration within the NBU regional branch before the actual loan receipt.

10. Are banks subject to any qualifications in order to be able to access foreign capital?

No

If yes, please specify

11. Are the following allowed to make cross-border deposits with foreign banks?

Domestic banks Yes

Domestic corporations	Yes
Domestic households	Yes
Depositing funds in UAH or in foreign currency, or depositing other "currency values" (securities, banking metals, etc.), in an account or on deposit outside of Ukraine (except the opening by a Ukrainian commercial bank possessing a banking license of a correspondent account at a foreign bank, and the opening by a Ukrainian resident of his/her bank account at a foreign bank for the duration of such resident's stay abroad) requires an individual license of the NBU.	

B. Ownership

12. Is private ownership in the provision of services allowed?			
Existing banks	Max private equity permitted (%)	New banks	Max private equity permitted (%)
Yes	100%	Yes	100%
13. Is foreign ownership in the provision of services allowed?			
Existing banks	Max foreign equity permitted (%)	New banks	Max foreign equity permitted (%)
Yes	100%	Yes	100%
14. Are banks allowed to hold equity in the following firms?			
	Non-financial firms	Financial firms	
Domestic banks	Yes	Yes	
Foreign banks	Yes	Yes	

C. Market Structure

15. Please list the characteristics of the 6 largest banks in the market for deposits:

Market share data as of January 1, 2005

Source: Association of Ukrainian Banks (as reported by banks)

Name of bank	Year of establishment	DOMESTICALLY OWNED EQUITY (%)	Foreign equity (%)	Market share in total deposits (%)	Return over equity (%)
Pryvatbank	1992	100.00		11.85	17.78
Aval	1992	100.00		10.88	1.87
Ukrsotsbank	SUCCESSOR OF THE SOVIET BANK FOR UTILITIES, PRIVATIZED IN 1990s.	100.00		7.27	123.17
Oschadbank	Successor of the Soviet savings bank	100.00		5.41	
Ukrsibbank	1990	100.00		4.21	6.58
State export-import bank	SUCCESSOR OF THE SOVIET BANK FOR FOREIGN TRADE	100.00		4.07	24.5

Total number of banks in the market for deposits: 160

16. Please list the characteristics of the 6 largest banks in the market for loans (include consumer and business loans):

Market share data as of January 1, 2005

Source: Association of Ukrainian Banks (as reported by banks)

Name of bank	Year of establishment	Domestically owned equity (%)	Foreign equity (%)	Market share in total loans (%)	Return over equity (%)
Pryvatbank	1992	100.00		11.81	17.78
Aval	1992	100.00		11.2	1.87
Ukrsotsbank	Successor of the Soviet bank for utilities, privatized in 1990s.	100.00		5.49	123.17
State export-import bank	Successor of the Soviet bank for foreign trade	100.00		4.87	24.5
Ukrsibbank	1990	100.00		4.73	6.58
Raiffaisen Bank Ukraine	1998		100.00	4.47	7.29

Total number of banks in the market for loans: 160

17. Please provide the following information on the actual number of banks:

Number of fully state-owned banks: 2 banks with 100% state ownership

Number of privatized banks: 5 banks

Number of fully domestically owned⁸³ private banks: 141 banks

Number of foreign minority-owned⁸⁴ banks: 5 banks

Number of foreign majority-owned⁸⁵ banks: 14 banks

D. Regulation

18. Characteristics of regulator:

Name of regulator: National Bank of Ukraine (NBU)

Year of establishment: 1991

% of Regulator's finances from:

license and other fees: 90%

budgetary allocation: 10%

⁸³ Banks that are not state owned where the paid-up share capital is entirely held by domestic residents.

⁸⁴ Banks where foreigners hold under 50% of the paid-up share capital of the bank.

⁸⁵ Banks where 50% or more of the paid-up share capital of the bank is held by foreigners.

other

The NBU is an independent economic entity that finances its expenditures from its own revenues and from the state budget if adopted by the Law On the NBU.

Is the Regulator independent of the ministry of finance/economy or other regulatory bodies? Yes

Number of professional regulatory and supervisory staff: 10919 (as of 01.03.2005)

19. How are banking licenses allocated?

- a) If the number of providers is not limited by policy, specify the main conditions new entrants must fulfill.

	Payment of license fee
	Presentation of detailed business plan
	Minimum capital
	Compatible home country regulation
	Other: provision with the adequate banking equipment, computers, software, premises; at least three persons possessing appropriate education and experience appointed by the members of the Board to manage the bank.

- b) If the number of providers is limited by policy, through what mechanism are licenses allocated?

n/a

- c) Once the licenses have been allocated, are there restrictions on banks ability to sell or dispose of these licenses? Yes

If yes, please specify: Banks in Ukraine are not allowed to sell, or otherwise alienate its banking license to the third parties. In case the NBU decides withdrawing a bank's license, the latter is obliged to return it to the NBU within the three days after the decision on withdrawal is announced.

- d) Are foreign banks subject to different licensing requirements from domestic banks?

No

However, the prior permission of the NBU is required for the establishment of a commercial bank with foreign participation on the grounds of the information on bank founders, underwriter, and their reputation, as well as the foreign Regulator's permission to founders to establish a bank in Ukraine.

- e) Are separate licenses required to establish branches in each state/province?

No

Banks that are Ukrainian residents (both domestic and foreign) are allowed to establish branches on the territory of Ukraine with no restrictions only by means of notification of the NBU.

20. Please provide information on the following indicators of prudential regulation for the latest year available

Category	Capital adequacy requirement ⁸⁶	Loan classification requirement	Liquidity ratio	Single exposure limit ⁸⁷	Foreign exchange risk exposure limit	Required deposit scheme?	to join insurance	Lender of last resort facility available?	Required frequency of publication of financial statements
State owned banks	10% for all banks	According to the NBU Decree #279 <i>On Procedure of Reserves Creation and their Management for Compensation of Losses Arising from Credit Operations</i> (06.06.2000), loans are classified as 'standard', 'under control', 'sub-standard', 'doubtful', and 'loss' on the basis of whether they are overdue, and other criteria. A loan is classified as "loss" if it is considered unrecoverable; other types of loans are defined on the basis of the borrower's financial status (A, B, C, D, E class), and the state of debt servicing ('good' - principal and interest payments are paid in time or with the delay up to 7 days; 'weak' - principal payment is overdue 8 – 90 days, or interest payment is overdue up to 30 days;	According to the NBU Decree #368 <i>On Regulation of Banking Activity in Ukraine</i> (28.08.2001), banks are obliged to fulfill immediate liquidity ratio (cash in vault and at corresponding accounts constitute at least 20% of current liabilities); current liquidity ratio (liquid assets at least 40% of liabilities of the corresponding assets term structure);	25% of bank capital	Uncovered foreign currency position ⁸⁸ (UFCP) should not exceed 35% of capital. Separate requirements relate to long and short term uncovered foreign currency positions. Long UFCP should not exceed 30% of capital, short – 5%.	Banks, which are registered in the State Register of Banks and have a license for performing banking activity, are obliged to participate in Deposit Guarantee Fund, according to the Law of Ukraine <i>On Deposit Guarantee Fund</i> . However, the Fund's authorities by their Decree #28 <i>On Banks-Agents of Deposit Guarantee Fund</i> have imposed additional requirements for a bank to be able to participate in the Guarantee Fund. Namely, during the		Yes, for all banks, which meet stated requirements	Banks are obliged to publish balance sheets and income statements on a quarterly basis, as well as annual financial statements
National ly owned banks									
Foreign owned banks:									
Subsidia ries									

⁸⁶ Capital adequacy ratios for a bank are usually measured by the ratio of capital to risk-weighted assets.

⁸⁷ Refers to percentage limits on lending to an individual borrower.

⁸⁸ Foreign currency position refers to the ratio of foreign currency claims and claims on bank metals (balance and off-balance) to liabilities in foreign currency and metals (balance and off-balance). If the ratio equals to 1, that is claims equal liabilities, the foreign currency position is uncovered, and otherwise it is covered. Uncovered foreign currency position, in turn, is distinguished between long and short. Long – if claims exceed liabilities, short – if liabilities exceed claims. The regulation of uncovered foreign currency position by authorities aims at managing exchange risks.

<p>'unsatisfactory' - loan debt is overdue more than 90 days). Loss, doubtful, and sub-standard loans are categorized by authorities as non-performing.</p>	<p>short-term liquidity ratio (the ratio of liquid assets to short-term liabilities (with up to 1-year maturity) at least 20%).</p>	<p>last 6 months a bank must fulfill economic norms as required by the NBU and have a positive audit conclusion. It should also have a wide network of branches. Besides, for the last half a year it should not have been under any sanctions imposed by the NBU because of any rules violations. Each year Fund authorities define banks-agents of the Fund on the basis of their applications and indices and characteristics of their activity. Currently, however, 155 banks out of 160 participate in Deposit Guarantee Fund, although not each one meet all the requirements. The exception is State Savings Bank, which deposits are fully guaranteed by state.</p>
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21. Are banks required to disclose critical information?

Related to performance	Yes
Related to changes on ownership	Yes
Other	No

22. Is home country supervision of foreign banks recognized? No

If yes, please list the countries whose bank supervisory systems are recognized

23. Public consultation and transparency

a) Which of the following are consulted in advance of regulatory decisions?

Service providers	Yes
Consumer groups	No
User industries	No
Other: Association of Ukrainian Banks	

b) How are laws and regulatory decisions made public?

Published on the regulator's website	Yes
Published in an official editions	Yes
Other	No

E. Regional Integration Agreements in Banking

24. Please indicate if there are any preferential arrangements affecting banking services, and list the preferential measures.

There are no arrangements that would grant preferences to banks of any countries on the Ukrainian market or otherwise. However, the NBU have signed several treaties on cooperation in the field of supervision under the crediting institutions with the central banks of Byelorussia, Armenia, Kyrgyz Republic, Cyprus and Latvia. Also the NBU agreed with the European Central Bank on cooperation in counteracting Euro forgery. All these treaties constitute bilateral interagency agreements and do not imply any arrangements that would affect regional integration.

F. Past and Future Changes in Policy

25. Please indicate major changes in market access policies, ownership rules, and regulation since 1990 (e.g., privatization of state-owned banks, introduction of competition, entry of foreign banks, creation of an independent regulatory agency, liberalization of capital account, etc.).

Area of policy change (market access, ownership or regulation)	Year of policy change	Description of policy change
Regulation	1991	Creation of the National Bank of Ukraine on the basis of Ukrainian Republic Office of the State USSR Bank
Ownership	1991	Re-register of the commercial banks on the territory of Ukraine formerly registered by the State USSR Bank (78 banks and 11 branches)
Market access	1992	Switch to the correspondent account settlements with CIS Central Banks
Regulation	1992	Introduction of official exchange rates
Ownership	1990-1994	Major state banks have been privatized
Regulation	1993	Introduction of foreign exchange regulations: mandatory sale of 50% of receipts in foreign currency, licensing of legal entities for goods and services settlements in foreign currency
Regulation	1994	Procedure on individual licensing of investment activities abroad
Regulation	1994	Procedure on licensing the commercial banks with foreign ownership participation
Regulation	1994	Requirement to replace the property claims of shareholders on money claims
Regulation	1994	Credit market liberalization through establishment of equal rights and conditions to access the NBU refinancing means for all commercial banks
Regulation	1994	Foreign exchange market liberalization: mandatory sale of 40% receipts in foreign currency at the interbank foreign exchange market, relinquishing of contract limits at foreign exchange, cancellation of licensing requirement for performing goods and services settlements in foreign currency
Regulation	1995	Introduction of individual licensing on borrowings by Ukrainian residents in foreign currency in foreign banks, and opening accounts in foreign banks
Regulation	1996	Monetary reform: national currency – Hryvnia introduced
Regulation	1998-2000	Strict foreign exchange restrictions were imposed. Namely, mandatory sale of export receipts in foreign currency was increased to 75% requirement, further decreased to 50%. Licensing of transactions with foreign currency was established. Besides, residents' receipts of foreign currency must be deposited in an authorized Ukrainian bank within 90 days after the registration of export custom declaration. Also, several anti-speculation regulations were introduced (see answer to question 1)
Regulation	2001	The Fund for the Guarantee of Deposits of Natural Persons (FGDNP) was established. The participation of commercial banks in Deposit Guarantee Fund is obligatory. The only exception is State Savings Bank, which deposits are granted by state in a full amount. The FGDNP guarantees deposits of natural persons, and the maximum coverage amounts to UAH 3,000 (about USD 560)
Regulation	2002	Amendments to prudential regulation related to strengthening of supervisory control on insider and connected lending and the assessment of exposure to market risk
Regulation	2003	The Law of Ukraine <i>On Prevention and Counteraction of Legalization (Laundering) of Proceeds from Crime</i> (new anti-money laundering law)
Regulation	2004	The Law of Ukraine <i>On Mortgage</i> has been adopted. The State Mortgage Institution has been created, which shall be engaged in refinancing of existing mortgage loans by issuing mortgage securities

26. Please indicate declared or anticipated changes in similar or other policy areas.

Area of policy change (market access, ownership or regulation)	DATE OF ANTICIPATED POLICY CHANGE	Description of policy change
Regulation	2005-2006	Creation of Credit Histories Bureau. The correspondent Draft Law has been already passed in the first reading by parliament. According to it, credit histories bureaus shall be formed in the form of joint stock companies and conduct their activities on gathering and distribution of the information on borrowers upon licensing. Banks, insurance companies, credit unions, leasing companies will be granted access to the bureau's information
Regulation	2005-2006	Adoption of the Law <i>On Mortgage Securities</i> It will provide regulatory framework for the system of refinancing of existing mortgage loans and thereby provide commercial banks with long-term financial resources
Prudential regulation	2005-2007	Further increase of capitalization of Ukrainian banks. Particularly, by the end of 2005 the minimum capital requirement for existing banks operating on the territory of Ukraine shall amount to EUR 7 m, by the end of 2007 – EUR 8 m. For regional banks operating on the territory of one region, and specialized savings and mortgage banks the capital should equal EUR 4,5 m by the end of 2005, and EUR 5 m – by the end of 2006
Market access	2006-2007	Allow branches of foreign banks enter the Ukrainian market of banking services. The Draft Law is under preparation

27. Administered allocation of resources

Category	Controls on deposit rates?	Ceilings on lending rates?	Subject to directed lending?	List of sectors benefiting from directed lending
State owned banks	Yes	No	No	
Private nationally owned banks	No	No	No	
Foreign banks	No	No	No	

In 2003 the Cabinet of Ministers of Ukraine, the NBU and the State Savings Bank have signed joint memorandum upon the relevant requirement of the World Bank. By this document, State Savings Bank is prohibited from increasing its interest rates on household deposits above 80% of the average deposit interest rate of the 10 largest commercial banks on deposit market in Ukraine. Investments in risky assets and lending operations are also restricted above the usual NBU requirements.

Does the government subsidize nationally owned banks?

No

Generally no, the only exception is State Savings Bank, which regularly receives budget funds for capital accumulation. However, the sums are rather low and do not correspond to bank's needs to be able to meet the NBU capital requirements. Therefore, own resources are also used for capital accumulation.

G. Employment

28. Main employment indicators

How many people are employed in the banking sector? 172 525 by the end of 2004

What share of the total labor force is employed in this sector? <1%

What share of banking labor force is employed by state-owned banks? 3%

What share of banking labor force is employed by foreign banks? <1%

What is the annual average wage in the banking sector? UAH 1356.6 in 2004

If time series data on these employment indicators are available, please attach them separately.

H. Investment

29. Investment indicators (for the years 1990 – 2004)

What is the total amount of investment in banking services?

What is the total amount of foreign direct investment in this sector?

What is the total stock of foreign direct investment in this sector?

If time series data from 1990 to 2000 is not available, please collect indicators for the years 1990, 1995 and 2000.

I. Prices and Performance Indicators

30. Please provide information on the following price indicators for the latest year available. For a comprehensive assessment of banking sector performance, it would be extremely useful to have historical data on these prices measures. If time series data are available, please attach them separately (preferably electronically).

Category	Average monthly bank charges for a basic checking account	Average monthly ex-post spread ⁸⁹ as a % of bank assets	Non-performing loans as a % of total bank assets	Ratio of No. of employees to operating income
Nationally owned banks		4.1%	2.4%	Annual gross income of UAH 3,958 per person
Foreign owned banks		4.0%	1.1%	Annual gross income of UAH 37,101 per person

⁸⁹ The ex-post spread of a bank is defined as the accounting value of the difference of the realized interest revenue and total interest cost of that bank and is also referred to as the Net Interest Margin.

J. Quality and Access to Banking Services

31. Which of the following services have been introduced by foreign banks in the last 10 years?

Credit cards Yes
Debit cards Yes
Online banking Yes
ATM network Yes
Other (specify)

32. Do foreign banks participate in rural lending? Yes

If yes, what is the share of foreign banks in total rural loans? About 8% in 2004

33. Please indicate if the following banks make education loans to the poor?

Domestic banks No
Foreign banks No

34. Do spreads between lending and deposit rates differ between large business firms and low-income households (i.e. are there any differences between these two groups in loan interest rates less rates of interest on bank deposits?)

If yes, please give sample spreads for a large business firm and a poor household below.

Spread for large business:

Spread for low-income household:

35. Indicate the following:

Number of banks per 1,000 of the population (or average number of population per bank), including all branches of all banks: 30,553 individuals per bank

Average wait time for loan approval: 15 days (from two days to one month)

Average wait time for credit card approval: 5-10 days

No. of bank failures during 1990 – 2004: 111 banks have been liquidated, 20 banks are currently in the process of liquidation

Please provide the name and contact information of the respondent of this questionnaire, or of a specialist from whom we can obtain clarifications if necessary.

Name: Halyna Herasym

Telephone: (38044) 278-63-58

E-mail address: herasym@ier.kiev.ua

Financial Services: Insurance

Note: Unless specified, please give information for the latest year available and indicate which year. If insufficient space is provided, please attach additional information on separate sheets. Please report all monetary values in their reported currencies.

A. Market Access

Commercial presence

1. Are there policy restrictions on new entry of insurance providers in the following segments?

	Entry by any insurance providers	If yes, total number of firms allowed	Entry by foreign insurance providers	If yes, total number of foreign firms allowed
Direct life insurance	Yes	Insurance undertakings in Ukraine can only conduct insurance businesses in certain legal forms (JSCs, unlimited companies) registered as companies in Ukraine (residents only!), which have obtained a license from the competent State authority. Life insurance and non-life insurance undertakings are clearly separated and insurers which have obtained a license for life insurance are not eligible to conduct other types of insurance activity. Reinsurance services do not require additional licensing. A license for life insurance services gives the right to perform life reinsurance activity (the same for non-life insurance).	Yes	Only insurers, which are residents of Ukraine, can be licensed to conduct insurance operations on the territory of Ukraine. Therefore, branches of foreign insurers cannot conduct insurance business since they are not legal entities. The offer of cross border insurance services is equally prohibited, while reinsurance with non-resident companies is admissible, within certain limits and subject to a special and controversial tax regime.
Direct non-life insurance	Yes		Yes	
Reinsurance	Yes		Yes	

2. If entry is restricted, what are the reasons provided by the government?

- ☒ To give incumbents time to prepare for competition
- ☐ To increase government revenue from privatization or license fees
- ☐ Exclusive rights to allow the provision of universal service
- ☐ Excessive entry is believed to threaten financial stability
- ☐ Perception of no economic need for new insurance companies
- ☐ Other: Inadequate regulatory and supervisory capacity. Opponents of foreign branch entry
- ☒ argue that it will open the doors to financially unstable foreign insurance companies.

3. Which of the following legal forms of establishment are allowed for foreign insurance companies?

Subsidiaries	Yes
Branches	No
Representative office	Yes
All	

Only subsidiaries of foreign insurance companies can provide insurance services in Ukraine. Branches do not constitute a legal entity and wouldn't be able to obtain a license for insurance undertakings. Representative offices of foreign insurers are also allowed, but they are not eligible for licensing either.

Insurance or reinsurance non-resident brokers can render services only via permanent representative offices in Ukraine, which are registered as tax-payers under Ukraine's legislation and enter the State register of insurance or reinsurance brokers in accordance with the procedure established by the Cabinet of Ministers.

4. Which of the following services are insurance companies permitted to provide domestically?

	Domestic insurance companies	Foreign insurance companies (subsidiaries)
Reinsurance	Yes	Yes
Life insurance	Yes	Yes
Property insurance	Yes	Yes
Cargo insurance	Yes	Yes
Medical insurance	Yes	Yes
Automobile insurance	Yes	Yes
Export credit insurance	Yes	Yes
Pension insurance	Yes	Yes

5. Do the assets of foreign insurance companies established in the domestic country have to be held locally?

Yes

Non-life insurance companies established in Ukraine (both nationally owned and foreign) are obliged to hold locally not less than 90% of total technical reserves⁹⁰. In case the funds for technical reserves are subject to reinsurance by non-residents, whose financial stability rating is classified at the level that is not below the following: "B+" (A.M.Best), "Baa" (Moody's Investors Service), "BBB" (Standard & Poor's) or "BBB" (Fitch Ratings), then the insurance company – resident of Ukraine is obliged to hold locally not less than 50% of total technical reserves.

6. Underwriting associations

a) Do domestic underwriting associations exist? Yes

Ukraine's legislation foresees participation of insurance companies in certain associations for insurers as obligatory for them to be able to provide relevant kinds of insurance. Such associations include the Motor (Transport) Insurance Bureau of Ukraine, the Marine Insurance Bureau of Ukraine, the Aviation Insurance Bureau of Ukraine, the Nuclear Insurance Pool of

⁹⁰ Non-life insurers are obliged to form so called "technical reserves" per insurance type. These are unearned premium reserves, reserves of claimed but unpaid damages, reserves of present but unclaimed damages, accidents reserves, loss fluctuations reserves. Life insurers shall create long-term commitments reserves (mathematical reserves) and insurance benefits payable reserves.

Ukraine. As well, voluntary unions of insurance organizations are active on the insurance market: the Ukrainian Medical Insurance Bureau, the Association of Insurers in the Agrarian Sector of Ukraine's Economy.

- b) If yes, are foreign insurance companies established in the domestic country given memberships in domestic underwriting associations? Yes, if they are licensed to provide relevant types of insurance on the territory of Ukraine.

Cross-border insurance trade

7. Can domestic residents purchase the following kinds of insurance cross-border from a foreign insurance company?

Life insurance	No
Medical insurance	No
Property insurance	No
Cargo insurance	No

Are any of these purchases subject to limits?

Ukrainian legal and natural persons are prohibited from purchasing insurance policies from foreign insurers, which are located outside Ukraine. Only insurance companies registered as legal entities in Ukraine and possessing a license for insurance services, can provide insurances to domestic residents. Only reinsurance by foreign insurers is allowed, provided that foreign re-insurer meets the established requirements.

8. Are cross-border foreign insurance suppliers allowed to solicit business through advertising in the domestic country?

No

Are there any limits on this type of advertisement?

9. Are insurers in the domestic country required to offer re-insurance business to nationally owned reinsurers before re-insuring abroad?

No

B. Ownership

10. Is private ownership in the provision of insurance services allowed?

	Existing providers	Maximum private equity permitted (%)	New entrants	Maximum private equity permitted (%)
Life insurance	Yes	100	Yes	100
Property insurance	Yes	100	Yes	100
Health/medical insurance	Yes	100	Yes	100
Re-insurance	Yes	100	Yes	100

11. Is foreign ownership in the provision of services allowed?

	Existing operators	Maximum foreign equity permitted (%)	New entrants	Maximum foreign equity permitted (%)
Life insurance	Yes	100	Yes	100
Property insurance	Yes	100	Yes	100
Health/medical insurance	Yes	100	Yes	100
Re-insurance	Yes	100	Yes	100

C. Market Structure

12. Please list the characteristics of the 6 largest insurance companies in the market for life insurance:
Data as of 01.10.2004

Name	Year of establishment	Domestically owned equity (%)	Foreign equity (%)	Share in total life insurance premiums (%)
Insurer 1		11.33	88.67	5.59
Insurer 2		100.00	0.00	12.98
Insurer 3		0.00	100.00	20.66
Insurer 4		100.00	0.00	11.74
Insurer 5		100.00	0.00	1.00
Insurer 6		100.00	0.00	9.35

Total number of life insurance providers: 41 (as of 01.10.2004)

State Commission ranked the 6 largest insurance companies and provided information on their ownership structure without disclosing their names.

13. Please list the characteristics of the 6 largest insurance companies in the market for non-life insurance.
Data as of 01.10.2004

Name	Year of establishment	Domestically owned equity (%)	Foreign equity (%)	Share in total non-life insurance premiums (%)
Insurer 1		100.00	0.00	3.05
Insurer 2		0.18	99.82	1.97
Insurer 3		25.32	74.68	1.54
Insurer 4		100.00	0.00	0.39
Insurer 5		100.00	0.00	0.64
Insurer 6		100.00	0.00	2.95

Total number of non-life insurance providers: 337

14. Please list the characteristics of the insurance distribution/intermediary network:

Distributor	WHETHER PRESENT?	Number of distributors
Agents	Yes	Insurance agents are currently not subject to registration, nor supervision in Ukraine. No statistics on the number of agents.
Brokers	YES	76 (as of 01.11.2004)
Banks	No	

15. Please provide the following information on the actual number of insurance companies:

Data is provided as of 01.01.2005

Number of fully state-owned insurance companies: 0

Number of privatized insurance companies: 0

Number of fully domestically owned⁹¹ private insurance companies: 343 companies

Number of foreign minority-owned⁹² insurance companies: 33 companies

Number of foreign majority-owned⁹³ insurance companies: 27 companies

D. Regulation

16. Characteristics of regulator:

Name of Regulator	State Commission of Ukraine for Regulating Financial Services Markets
Year of establishment	2002
% of Regulator's finances from:	100% financing from the State Budget
License and other fees:	
Budgetary allocation:	
Other (specify)	
Is the insurance regulator independent of the concerned ministry or other regulatory body?	Yes
Number of professional regulatory and supervisory staff	238 persons as of 01.01.2005 (including 177 – in the Central office and 69 in local offices)

17. How are insurance licenses allocated?

a) If the number of providers is not limited by policy, specify the main conditions new entrants

⁹¹ Insurance companies that are not state owned where the paid-up share capital is entirely held by domestic residents.

⁹² Insurance companies where foreigners hold under 50% of the paid-up share capital of the company.

⁹³ Insurance companies where 50% or more of the paid-up share capital of the company is held by foreigners.

must fulfill:

Payment of license fee	Yes
Presentation of a detailed business plan	No
Minimum capital EUR 1 m for non-life insurance companies)	Yes (EUR 1,5 m for life insurance companies,
Compatible home country regulation	Yes
Other: presentation of insurance rules, management team.	

b) If the number of providers is limited by policy, through what mechanism are licenses allocated?

c) Once the licenses have been allocated, are there restrictions on the ability of insurance firms to sell or dispose of these licenses?

Yes

Alienation of insurance licenses to the third parties is prohibited by Law

d) Are foreign companies subject to different licensing requirements from domestic insurance companies?

No

e) Are separate licenses required to establish branches in each state/province?

No, only notification to the Regulator is required.

18. Administered allocation of resources

Category	Government controls on insurance prices?	Re-insurance that must be ceded to the state-owned re-insurers (as a % of gross premiums)?	Value of government insurance contracted (\$)
State owned insurance companies	No*		
Private nationally owned insurance companies	No*	No restrictions	
Foreign insurance companies	No*		

* For obligatory kinds of insurance the Regulator adopts ceilings on insurance tariffs or establishes the methodology for actuarial calculations. For obligatory motor third party liability insurance, in particular, the Regulator adopts the base insurance premium on Motor (Transport) Insurance Bureau's advice.

For voluntary insurance insurers independently make actuarial calculations of insurance tariffs and introduce them into their Insurance Rules. Insurance companies are obliged to present Insurance Rules when applying for licensing to the Regulator.

19. Please list the following indicators of prudential regulation based on the latest information available.

Category	Minimum capital requirements	Capital adequacy requirement	Liquidity reserve requirements	Covered by insolvency guarantee scheme?	Required frequency of publication of financial statements
State-owned insurance companies	For life insurers – EUR 1.5 m,	The solvency reserve for <i>non-life insurers</i> must be equal to or more than the greatest of 18% of annual insurance premiums (less maximum 50% of outward reinsurance premiums) or 26% of annual claims payments (less maximum 50% of recoveries made under reinsurance contracts). The standard solvency reserve for	<i>Non-life insurers</i> are obliged to form technical reserves. These are unearned premium reserves, reserves of claimed but unpaid damages, reserves of actual but unclaimed damages, accidents reserves, loss fluctuations reserves. For liquidity purposes the Regulator imposes restrictions on assets that can be used to create technical reserves. Particularly, 1) funds on current accounts are allowed in the amount not more than 5% of total technical reserves (TTR); 2) bank deposits – not more than 70% of TTR, but for all that not more than 10% of TTR in one bank; 3) immovable assets – not more than 20% of TTR, for all that not more than 10% of TTR invested in a separate real estate unit; 4) shares and bonds of Ukrainian issuers – not more than 30% of TTR; 5) government securities – not more than 40% of TTR; 6) foreign securities – not more than 10% of TTR; 7) mortgage securities – not more than 10% of TTR, for all that not more than 2% of TTR in securities of a separate issuer; 8) claims on reinsurers – not more than 50% of TTR; 9) investments in the line of Cabinet of Ministers' programs – not more than 15% of TTR;	No for all companies	On annual basis
Private nationally owned insurance companies	for non-life insurers – EUR 1 m				

⁹⁴ The total value of long-term commitments reserve (mathematical reserve) equals the sum of long-term commitments (mathematical reserve) determined at any date separately with regard to every life insurance contract.

<p>Foreign insurance companies</p>	<p><i>life insurers</i> shall at any time equal a value determined by multiplying the total amount of the long-term commitments reserve (mathematical reserve)⁹⁴ by 0.05. If the sum insured with regard to a separate object of insurance is over 10% of the amount of the paid up statutory fund and free floats and reserves, the insurer shall make a reinsurance contract.</p>	<p>10) bank metals – not more than 10% of TTR. Insurance reserves of <i>life insurers</i> (see footnote 1) are subject to the following restrictions: 1) funds on current accounts can constitute not more than 5% of insurance reserves; 2) bank deposits – not more than 50% of reserves, including 10% allowed in a separate bank; 3) immovable assets – not more than 20% of insurance reserves, including an immovable asset – not more than 10% of reserves; 4) shares of Ukrainian issuers listed and quoted on securities market – not more than 30% of reserves; 5) bonds issued by Ukrainian issuers – not more than 40% of insurance reserves; 6) foreign securities – not more than 20% of reserves; 7) securities of municipalities – not more than 10% of reserves; 8) mortgage securities – not more than 10% of insurance reserves; 9) government bonds – not more than 50% of reserves; 10) claims on reinsurers – not more than 40% of insurance reserves, including claims on reinsurers – non-residents – not more than 25% of total insurance reserves; 11) long-term credits for housing – not more than 10% of total reserves; 12) bank metals – not more than 10% of reserves; 13) credits to insureds – not more than 10% of insurance reserves.</p>
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20. Are the following life-insurance providers subject to restrictions on the type of instruments in which they can invest?	
Domestic life insurance providers	Yes
Foreign life insurance providers	Yes
There are no restrictions on the value of assets that should be held by life insurers on the territory of Ukraine. Such a restriction applies, however, to non-life insurers (see answer to question 5).	
21. Are insurance companies required to disclose critical information?	
Related to performance	Yes
Related to changes in ownership	Yes
Other	
22. Public consultation and transparency	
a) Which of the following are consulted in advance of regulatory decisions?	
Service providers (major insurance companies)	Yes
Consumer groups	No
User industries	No
Other Organizations of Ukraine)	Yes (League of Insurance
b) How are laws and regulatory decisions made public?	
Published on the regulator's website	Yes
Published in an official newspaper	Yes
Other: web-site of the League of Insurance Organizations of Ukraine	

E. Regional Integration Agreements in Insurance Services

23. Please indicate if there are any preferential arrangements affecting insurance services, and list the preferential measures.

There are no such arrangements.

F. Past and Future Changes in Policy

24. Please indicate major changes in market access policies, ownership rules, and regulation since 1990, as well as changes that are anticipated (e.g. privatization of insurance companies, introduction of competition, entry of foreign insurance, creation of an independent regulatory agency, changes in prudential regulation).

Regulation	YEAR OF CHANGE	Description of change
Ownership of Introduction competition	1990 - 1993	After the collapse of the Soviet Union the relevant branches of two major Russian insurers Gosstrakh and Ingostrakh became Ukrainian insurance companies. The number of insurers in Ukraine was increasing rapidly from 7 in 1991 to 455 in 1993 (Russian insurers created there subsidiaries, the managers of Gosstrakh outlets in Ukraine created their companies, a number of insurers were created by the ministries and government departments)
Regulation	1993	The Decree On Insurance was adopted, based on the regulatory framework of the former state insurance. It introduced state registration and licensing of insurance companies. The Ministry of Finance temporarily became the regulatory body on insurance. Many areas were not covered adequately, like foreign participation, tariff structure, technical and mathematical reserves, solvency, capitalization, accounting standards and utilization rules regarding insurance funds.
Ownership	1993	The Ukrainian branch of Gosstrakh became the state-owned National Oranta, the largest insurer in Ukraine.
Competition	1993	Commercial banks were prohibited from providing insurance and this further facilitated the significant rise in the number of insurance companies (by 1995 there were 798 insurance companies registered in Ukraine)
Regulation	1996	A new Law On Insurance was adopted. The minimum capital requirements were raised, as a result the number of insurers has fallen by over 50%. Foreign participation was restricted to 49% ownership in the authorized statutory fund of the insurance company registered in Ukraine.
Liberalization of the market access	2001	Major amendments to the Law On Insurance were enacted. These opened up the market to foreign competition with the abolition of ownership restrictions. The minimum capital requirements were further increased (EUR 1,5 mln for life-insurers, EUR 1 mln – for non-life insurers), and fifteen new mandatory types of insurance were introduced.
Creation of an independent regulatory agency	2002	The State Commission for Regulating Financial Services Markets was created, one of its departments deals with the insurance market issues.
Regulation	2004	The new Law On Compulsory Motor Third Party Liability Insurance was adopted, and came into force on January 1, 2005.

25. Please indicate declared or anticipated changes in similar or other policy areas.

Regulation	Date of anticipated policy change	Description of policy change ⁹⁵
Regulation		Introduction of the system of compulsory medical insurance.
Regulation		Gradual establishment of non-state pension insurance. Allow insurance companies offering perpetual annuities to participate in this kind of insurance along with the non-state pension funds.
Regulation		The creation of Insurance Guarantee Fund. It is planned that it will protect consumers of annuities bought from insurance companies or non-state pension funds from financial losses, should the insurance company or non-state pension fund become insolvent.
Regulation		Introduction of licensing procedure for reinsurers. Evaluation of financial expediency of single reinsurance contracts signed with the non-residents to prohibit money laundering.
Regulation		Substantial reduction of compulsory kinds of insurance.
Regulation		Introduction of transparent and competitive selection procedure of insurers – providers of compulsory insurance

G. Employment

26. Main employment indicators

How many people (full-time employees) are employed in the insurance sector? 74,643 persons in 2004

What share of the total labor force is employed in the insurance sector? Less than 1%

What share of insurance workers is employed by state-owned insurance providers? There are no fully state-owned insurance companies; share of state ownership in Ukraine's insurance companies amounts to 0.05% overall

What share of insurance workers is employed by foreign insurance providers? 7,151 persons

What is the annual average wage in the insurance sector?

H. Investment

⁹⁵ The presented policy changes have been declared in the Program of the newly established Government of Ukraine (February, 2005). However, no exact terms or steps of their implementation have been provided. Also, there is no any Program or Concept on the Development of Insurance Market in Ukraine for the coming years that should be prepared by the State Commission for Regulating Financial Services Markets, although such practices once existed, and the Program for Developing Insurance Market for 2001 – 2004 was adopted.

27. Investment indicators

What is the total amount of investment in insurance services? UAH 689.972 m as of 01.04.2005

What is the total stock of foreign direct investment in this sector?

I. Prices and Performance Indicators

28. Please list the following price and performance indicators for the latest year available. For comprehensive assessment of insurance sector performance it would be extremely useful to have historical data on these measures. If time series data are available, please attach them separately (preferably electronically).

Category	Average monthly premium on a 10 year life insurance policy	Average monthly health insurance premium		Loss ratio	Retention ratio
		Voluntary	Obligatory		
National private owned insurance providers				0.50-0.55, on average	0.80-0.95
Insurance providers with foreign capital				0.45-0.50, on average	0.85-0.92

J. Quality and Access to Insurance Services

29. Which of the following new services have been introduced by foreign insurance companies in the last 10 years?

- Private health insurance
- Automobile insurance
- Private pension insurance

None of the above services have been introduced by foreign insurance companies over the last ten years

30. Please indicate the following:

- a) Share of adult population or households covered by life insurance contracts: <1%
Share of households savings channeled through life insurance: <1%
Total premiums as a percentage of GDP: <1%
- b) If available, indicate average time (in days) for claims processing in the following segments:
 - Life insurance
 - Property insurance
 - Automobile insurance
 - Health insurance

c) In which of the following segments is insurance mandated by law⁹⁶ (see appendix 1 for complete list of compulsory insurance)?

Life insurance

Property insurance

Automobile insurance – Motor Third Party Liability (MTPL) insurance is mandatory starting from January 1, 2005

Health insurance

d) Do foreign insurance companies participate in insuring poor and rural households? No

If yes, what is the percentage of foreign insurance companies in the value of total rural insurance contracts?

Name: Halyna Herasym

Telephone: (38044) 278-63-58

E-mail address: herasym@ier.kiev.ua

⁹⁶ The Law of Ukraine On Insurance envisages 34 types of compulsory insurance that shall be practiced in Ukraine. Most of them have no foreign analogues (against a clearly defined 21 types of voluntary insurance in Ukraine). According to international norms, obligatory insurance applies to MTPL insurance, insurance against environmental risks (fire, environmental pollution), insurance of liability of operators at potentially hazardous industrial enterprises (like nuclear plants); and protection of human life and health. Almost two-thirds of all kinds of obligatory insurance still have no proper regulatory basis; there are neither enforcement mechanisms, nor sanctions for non-compliance leading to the remainder of the most compulsory insurance on the paper. Under some kinds of obligatory insurance no indemnification at all has ever been paid. The share of obligatory insurance (both state and non-state) in the aggregate insurance premiums is miserable and constituted about 3 % in the first half of 2004.

Financial Services: Securities

Note: Unless specified, please give information for the latest year available and indicate which year. If insufficient space is provided, please attach additional information on separate sheets. Please report all monetary values in their reported currencies.

A. Market Access

Commercial presence

1. Are there policy restrictions on new entry of securities services providers in the following segments?

	Entry by any providers	If yes, total number of providers allowed	Entry by foreign providers	If yes, number of foreign providers allowed
Investment banking		No		No
Stock brokerage		No		No
Mutual funds		No		No

2. If entry is restricted, what are the reasons provided by the government?

- ☐ To give incumbents time to prepare for competition
- ☐ To increase government revenue from privatization or license fees
- ☐ Exclusive rights to allow the provision of universal service
- ☐ Excessive entry is believed to threaten financial stability
- ☐ Perception of no economic need for new insurance companies
- ☐ Other: Informal restrictions relate to concerns over capital outflow

3. Which of the following legal forms of establishment are allowed for foreign securities firms?

Subsidiaries	Yes
Branches	No
Representative offices	Yes
Other	

Formally all forms of registration are allowed in Ukraine. However, a foreign company has to register its subsidiary to participate in activities on securities market. Only a subsidiary is a legal entity separate from the parent company and has a right to obtain a license from the Securities Commission. Representative offices may also be established, although they will not be able to receive license and, therefore, do any business on securities market. Their main scope in emerging economies is to collect data and intelligence in the host country and may be the first step in entering the market.

4. Which of the following services are securities firms permitted to provide?

	Domestic securities firms	Foreign (meaning with foreign capital) securities firms
Underwriting new issues	Yes	Yes
Securities dealing	Yes	Yes
Stock brokerage services	YES	Yes
Risk management (meaning	Yes	Yes

advisory services)		
Mergers and acquisitions advisory services	Yes	Yes
Mutual funds	Yes	Yes
Information services ⁹⁷	Yes	Yes
Other		

Concerning the mutual funds, the new Law On Institutions of Mutual Investments provides similar treatment to domestic and foreign investors. It distinguishes a corporate investment fund (CIF), which is a legal entity in the form of an open joint stock company, and a unit investment fund (UIF) that doesn't constitute a legal entity but represents assets owned by investors and managed by the asset management company (AMC). The following types of investment funds are envisaged:

Open – investment fund, which undertakes to buy back its securities at any time as requested by the investors;

Interval (open-ended fund with restricted redemption) – investment fund, which undertakes to buy back its securities by a certain deadline but at least once a year as requested by the investors;

Closed – investment fund, which only undertakes to buy back its securities upon its reorganization or liquidation.

5. Are foreign commercial or universal banks allowed to deal in domestic securities?		
Foreign commercial banks	Yes	
Foreign universal banks ⁹⁸	Yes	

To provide securities services on Ukraine's market a foreign commercial/universal bank should register its subsidiary on the territory of Ukraine and obtain a license for professional activity on securities market from the Securities Commission, or a license for certain securities services (like trading in securities on client's behalf; activities on securities market (including underwriting) on own behalf; operations with financial futures and options; custody services; keeping the register for securities holders) from the National Bank of Ukraine with the procedure underlined by law. To obtain a license from the Securities Commission, a foreign bank should also become a member of one of the relevant self-regulated organizations, which will apply for a license on a bank's behalf (see answer to question 1 in the attachment on more details in this issue).

6. Are foreign-owned securities firms obliged to use the services of a domestic resident financial intermediary (broker-dealer) in the following segments:		
Inter-bank market	Yes	
Foreign exchange market	Yes	
Stock market	Yes	
Derivatives market	Yes	

Foreign-owned securities firms, registered as legal entities in Ukraine and included into the State Register of Companies, which have a license for professional activity on securities market from the Securities Commission, may participate on their own in stock exchange transactions upon their registration as a member on the relevant stock exchange. Otherwise, foreign-owned securities firms use intermediary services.

⁹⁷ Financial information services include the provision of trading information and credit rating services.

⁹⁸ Universal banks are banks, which provide insurance and securities services in addition to traditional deposit taking and lending.

Cross-border securities services trade

7. Are the following activities permitted?

Purchase by domestic residents of securities issued abroad	Yes
Domestic companies raising capital abroad	Yes

Purchase of securities issued abroad (foreign currency denominated securities) is considered by authorities as capital outflow and is subject to several restrictions. Both natural and legal entities – residents of Ukraine are obliged to obtain an individual license for investment abroad from the National Bank of Ukraine that is valid for only-once transaction.

According to the Securities Commission's resolution On Recording Nonresidents' Ownership Rights for Securities Issued by Ukrainian Companies, nonresidents' rights for Ukrainian securities (corporate debt inclusively) – excluding both external and domestic state debt – shall be recorded exclusively by custodians which have securities accounts opened with a depository. In addition, Ukrainian securities circulating outside Ukraine (such as depository receipts) are to be serviced by foreign depository institutions. This effectively means that local registrars of Ukrainian securities will not be able to affect changes to the registries reflecting the change in ownership rights once nonresidents decide to buy/sell. According to the resolution, ownership rights will be maintained on the basis of a securities account opening agreement (custody agreement) signed between a nonresident and a local custodian. At the same time, circulation of the Ukrainian securities issued outside of Ukraine needs to be approved by the Securities Commission. It means that Ukrainian issuer will have to obtain approvals before launching capital raising programs abroad.

8. Are foreign securities firms permitted to provide the following services cross-border to domestic companies and residents:

Securities dealing in the domestic market	No
Mergers and acquisitions advisory services	Yes
Investment advisory services	Yes
Credit rating services	Yes

If securities dealing services refer here to broker/ dealer activities in the domestic securities market, then cross-border provision of such services by foreign firms is prohibited. Only companies – residents of Ukraine registered in accordance to Ukrainian registration procedure, which have obtained a relevant license from the regulatory body, may engage in intermediary activities on the Ukrainian securities market. In other words, a foreign company will have to register a subsidiary in accordance with Ukrainian law.

9. a) Are settlement and clearance utilities available?

Yes

In contrast to the Western European markets, Ukraine doesn't have a central settlement and clearing depository. Currently, there are three depositories in Ukraine. The MFS depository – the only operation depository for equities and corporate debt; Depository of the National Bank of Ukraine – for domestic government bonds; National Depository of Ukraine – its operations are limited to assigning ISINs and non-resident investor codes.

Custodians in Ukraine are allowed to perform settlement of securities side of a transaction. However, they are not allowed to do either cash and securities clearance or cash settlement. Only Depositories are authorized to perform these operations. However, if a custodian is a commercial bank, it may offer cash clearance services.

Settlement can also take place on the books at registrars. But the latter may service only resident investors. Non-residents' ownership rights are usually registered by local custodians.

b) If yes to the above, are cross-border foreign securities dealers permitted to use

domestic settlement and clearance utilities without using the services of a domestic intermediary?
Yes

B. Ownership

10. Is private ownership in the provision of the following securities services allowed?				
	Existing operations	Maximum private equity permitted (%)	New entrants	Maximum private equity permitted (%)
Investment banking	Yes	100	Yes	100
Stock brokerage	Yes	100	Yes	100
Mutual funds	Yes	100	Yes	100
11. Is foreign ownership in the provision of services allowed?				
	Existing operations	Maximum foreign equity permitted (%)	New entrants	Maximum foreign equity permitted (%)
Investment banking	Yes	100	Yes	100
Stock brokerage	Yes	100	Yes	100
Mutual funds	Yes	100	Yes	100

C. Market structure

12. Please list the characteristics of the 6 largest mutual funds (in terms of value) in the market

Entity	Year of establishment	Domestically owned equity (%)	FOREIGN EQUITY (%)	Value of fund as a % of total stock market capitalization

Total number of mutual or investment funds: 105

13. Please list the characteristics of the 6 largest securities firms in the market for new equity issues.

Entity	Year of establishment	Domestically owned equity (%)	Foreign equity (%)	Share in annual value of new issues underwritten
OJSC "Ukrtelecom" State company	2000	100%		
"Pivdenno-zahidna zaliznytsia" State company				
"Energoatom"				

Ukrtransgaz
LLC "Autosoyuz"
LLC "Bipeco"

Total number of securities firms in the market for new equity issues: in 2003 the Securities Commission registered 2697 equity issues in the amount of about UAH 18 bn. Starting from 1998 by the end of 2003, the total amount of equity issues registered by the regulator constituted UAH 99 bn.

14. Please list the characteristics of the 6 largest securities firms in the derivatives market.

Entity	Year of establishment	Domestically owned equity (%)	Foreign equity (%)	Share in annual value of derivatives traded
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Total number of securities firms in the derivatives market: 4 companies at the market for options, 28 – at the market for futures.

15. Please provide the following information on the actual number of operators:

- Number of government-owned mutual funds:
- Number of domestically-owned private mutual funds:
- Number of foreign owned mutual funds:
- Number of fully domestically owned private investment banks:
- Number of foreign minority-owned investment banks:
- Number of foreign majority-owned investment banks:

D. Regulation

16. Characteristics of regulator

Name of securities regulator: State Commission on Securities and Capital Markets

Year of establishment:

% of regulator's finances from:

license and other fees:

budgetary allocation: 100%

other (specify):

Is the regulator independent of the ministry of finance, or other regulatory bodies? Yes

Number of professional regulatory and supervisory staff: 217 persons in the Central Office and 402 persons in local offices as of 01.01.2004

17. How are licenses to securities firms allocated?

- a) If the number of providers is not limited by policy, specify the main conditions new entrants

must fulfill.	
Payment of license fee	Yes (UAH 340)
Presentation of a detailed business plan	
Minimum capital	Yes
Compatible home country regulation	Yes
Other: presentation of statute and other constituent documents, presentation of the certificate on registration in State registry of companies, presentation of the list of the certified and qualified specialists, including senior managers, according to the procedure adopted. Besides, depending on the type of activities on securities market, the applicant for a license should also comply with some specific requirements on structure of its charter fund.	
b) If the number of providers is limited by policy, through what mechanism are licenses allocated?	
c) Once the licenses have been allocated, are there restrictions on the ability of securities firms to sell or dispose of these licenses?	
Yes	
The alienation of a license to the third parties is prohibited by law	
d) Are foreign securities firms subject to different licensing requirements from domestic securities firms?	
No	
18. Credit rating	
a) Is private credit rating permitted?	
Yes	
b) Is private credit rating subject to regulation or approval by another public or private body?	
No	

19. Please list the following indicators of prudential regulation based on the latest information available.

Category	Minimum capital requirement	Capital adequacy ratio (%)	Required frequency of publication of financial statements
Government owned mutual funds	none		
Domestic privately owned mutual funds	<p>For a corporate investment fund, which by law is a legal entity in the form of a joint-stock company, the minimum capital requirement coincides with the relevant requirement set for open joint-stock companies, namely 1250 minimum wages (as of April 1, 2005, UAH 352,500). This is the initial minimum statutory fund that should be completely paid by the date of fund registration. Cash, state securities, other issuers' securities, which are traded on stock exchange or in trading-informational system (like PFTS in Ukraine), and real estate can be used as financial resources to the charter fund.</p> <p>Since a unit investment fund isn't a legal entity, capital requirement isn't adequate for it. However, the law establishes minimum charter fund amount to be paid for asset management companies (AMC) that manage unit investment funds. Particularly, AMC should have minimum EUR 200000 paid in cash as a charter fund. Besides, the share of state ownership in the AMS's capital shouldn't exceed 10%.</p>	<p>There is no capital adequacy ratio per se imposed on corporate and/or unit investment funds in Ukraine. However, the Law On Institutions of Mutual Investments stipulates several major requirements on asset structure for investment funds. In particular, securities of foreign issuers cannot constitute more than 20% of total assets of a corporate or unit investment fund. Besides, the Law distinguishes between diversified and non-diversified investment funds. Diversified funds are allowed to invest at most 10% of their assets in the securities of a separate issuer, and at least 80% in cash, savings certificates, corporate and municipal bonds, government bonds as well as other securities traded at stock exchanges or over-the counter system. Open-ended and interval investment funds are classified as diversified and are subject to a number of regulations in relation to fund allocation. Diversified funds are obliged to stick to 30% threshold of their total assets to be invested in cash, bank deposits, savings certificates and bonds</p>	<p>An AMC of an open or interval investment fund is obliged to report to the Securities Commission both on securities emissions and financial reports of the last reporting period not later than on April 30th annually. This information is then published in the official Commission's edition.</p> <p>An AMC of a closed investment fund is obliged to report and publish its financial reports on an annual basis also.</p> <p>Diversified investment funds make public their financial statements each half a year.</p>

		issued by commercial banks. They are also prohibited from investments made in securities of a separate issuer above 5% of their total assets; domestic government debt securities – above 25% of total assets; municipal bonds – above 10% of total assets; bonds issued by Ukrainian residents (except commercial banks) – 20% of total assets; shares issued by Ukrainian issuers – 40% of total assets; securities guaranteed by foreign governments – 20% of total assets; securities that are not traded at stock exchanges or OTC system – 20% of total assets.	
Foreign owned mutual funds			
Domestic investment banks			
Foreign investment banks	Both domestic and foreign-owned investment banks should meet the capital requirement set by the National Bank of Ukraine. In particular, for existing investment banks as of January 1, 2005 the minimum regulatory capital (statutory fund plus additional in the form of some kinds of reserves) constituted EUR 6,000,000; for newly created – EUR 5,000,000 by the end of the first year of banking activity, EUR 5,500,000 – by the end of the second year of banking activity, and EUR 6,000,000 – by the end of the third year.	The same as for any commercial bank in Ukraine – 10% of risk-weighted assets.	On a quarterly basis, as well as annual reports.

20. Are securities firms required to disclose critical information?

Related to performance	Yes
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Related to changes in ownership	Yes
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Other: information on chief executive officers and chief accountants, investment information by types of securities and volumes of transactions, number of accounts opened etc.

21. Are the following mutual funds required to invest in shares of publicly held companies?

Government owned mutual funds	No
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Domestic privately owned mutual funds	No
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Foreign owned mutual funds	No
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22. Are mutual funds subject to other restrictions on their investments abroad?

Yes

Securities issued by foreign issuers can constitute at most 20% of total assets of investment funds.

Besides, it is prohibited to invest in foreign corporate and government securities that are not traded at least at two leading stock exchanges or OTC systems, the list of which is adopted by the Securities Commission.

23. Public consultation and transparency

a) Which of the following are consulted in advance of regulatory decisions?

b) How are laws and regulatory decisions made public?

Published on the regulator's website	Yes
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Published in an official gazette	Yes
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Other	No
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E. Regional Integration Agreements in Financial Services

24. Please indicate if there are any preferential arrangements and/or cooperative arrangements affecting securities services, and list the preferential measures.

F. Past and Future Changes in Policy

25. Please indicate major changes in market access policies, ownership rules, and regulation since 1990.

Area of policy change	Year of policy change	Description of policy change
	1991	The Law On Securities and Stock Exchange was adopted. The Law lists all domestically legally recognized types of securities and peculiarities of their circulation. Much attention is paid to the rules regulating functioning of stock exchange mechanisms. Although it was one of the first laws this kind in the former Soviet Union republics, the actual development of Ukrainian capital market has lagged the relatively sophisticated legislative framework, mainly due to the slow pace of privatization, much slower than that of Russia.
	1991	The Law On Companies was adopted. Most provisions of this law are outdated and do not correspond to the real developments at Ukraine's capital market. It needs to be overviewed and adapted to international norms and standards. The adoption of the Law On Joint-Stock Companies that has been already drafted would be certainly a progress in this direction.
	1991	Ukrainian Stock Exchange established. Mostly used for minor privatization sales, no active trading by 1997, when attractive enterprises went up for sale
	1993-1994	Domestic financial institutions, many of them bogus investment schemes, dominated the financial sector during the hyperinflation period. Numerous pyramid schemes thrived on the investments of a populace not experienced with the workings of capital markets. The subsequent bust of many pyramid schemes, combined with the debilitating effects of hyperinflation, led to a strong reluctance on the part of the public to become involved with any types of financial instruments or institutions.
	1995-1996	Banks, insurance, and trust companies offered depositary certificates, shares and other instruments in a bid to attract funds from small investors. By 1996 only a small number of privatized companies traded on Ukrainian exchanges and the OTC market.
	1995	Kiev International Stock Exchange established.
	1995	T-bills were introduced as short-term non-inflationary instrument for financing the budget deficit and have become the main instrument of money supply regulation.
	1996	The long-awaited, large-scale privatization of electric utilities begun. This fostered somewhat the creation of investment funds and investment activity in the country.
	1996	The Law On State Regulation of the Securities Market was adopted. The Law defines types of activities allowed in the domestic stock market, sets power and responsibilities of the State Commission for Securities and Stock Market, as well as ways of exercising state control over activities in the capital markets.
	1996	State Commission on Securities and Capital Markets was created (Securities Commission – hereafter).
	1997	The Law On the National Depositary System and the Peculiarities of Electronic Circulation of Securities in Ukraine was introduced. It establishes a two-tier depositary system:

		custodians and depositaries. If the shares are issued in paper form, the issuer should arrange for maintenance of ownership rights through a registrar. If the shares are issued in electronic form, the issuer should arrange for a global certificate to be placed it with a depositary. Currently, a lion share of stocks issued in Ukraine is in paper form i.e. serviced by registrars.
1998		Resolution of the Securities Commission On Registrars. Established procedures for registrars on maintaining registries of shareholders, requirements for documentation, access to the registries, etc.
1998		Resolution of the Securities Commission On the Depositary Activity. These provisions establish the categories of securities, which can be serviced by the National Depositary System, functions and operations of custodians and depositaries, peculiarities of dematerialization, etc.
2001		The Law On Banks and Banking Activity in a new version. Allowed banks to be engaged in non-banking activities listed in the law: co-found other business entities, function as depositaries/custodians, transport cash.
2001		Law On Institutions of Mutual Investments. It introduced new types of investment companies/funds operating in Ukraine. The law defines internationally accepted terms as mutual fund, asset manager and corporate investment fund, and sets the general guidelines for their creation and operations. The law provides similar treatment to domestic and foreign investors.
2001		The Cabinet's decree On Approval of the Procedure on Tax Exemption (reduction) on Income Received in Ukraine According to the International Treaties of Ukraine On Avoidance of Double Taxation. Allows for obtaining prior tax exemption (reduction) and tax reclaim on all incomes received in Ukraine by non-residents, if such exemption (reduction) of taxes is envisaged by the Double Taxation Treaty signed between Ukraine and non-resident's country of registration.
2001		Securities Commission Resolution On Recording Nonresidents' ownership rights for securities issued by Ukrainian companies.

26. Please indicate declared or anticipated changes in similar or other policy areas.

Area of policy change	Date of anticipated change	Description of anticipated change
	2010	Creation of a single clearing agency - National Depositary of Ukraine by the merger of the two existing depositories.
	2006	The law On Joint-Stock Companies to be adopted

G. Employment

27. Main employment indicators

- How many people are employed in the securities sector?
- What share of the total labor force is employed in this sector?
- What share of securities workers is employed by foreign securities firms?
- What is the annual average wage in this sector?

If time series data on these employment indicators are available, please attach them separately.

H. Investment

28. Investment indicators (for the years 1990-2004)

What is the total amount of investment in securities services?

What is the total amount of foreign direct investment in this sector?

I. Prices and Performance Indicators

29. Please list the following price and performance indicators for the latest year available. For a comprehensive assessment of securities services performance, it would be extremely useful to have historical data on these measures. If time series data are available, please attach them separately (preferable electronically).

Category	Average brokerage commissions (%)	Average underwriting commissions (%)	Securities dealing fees	Average initial charge ⁹⁹ on a mutual fund	Subject to price fixing by regulator?
Domestic operators					
Foreign operators					

J. Quality and Access to Securities Services

30. Which of the following services have been introduced in the last 10 years?

- Over the counter (OTC) markets
- Computerized stock exchange trading

⁹⁹ Refers to the percentage charge imposed on buyers of the fund by the manager to cover the costs of administration and marketing plus commissions paid to intermediaries. The initial charge is usually factored into the buying price of the mutual fund units. If the initial charge is 5%, then out of every \$100 invested, \$5 is retained by the management of the mutual fund to cover the costs listed above.

Online investing
Electronic settlement and clearance systems
Derivatives trading
Other

31. Indicate the following:

Number of stock exchanges in the country: valid licenses issued for the set-up of securities market trading (stock exchange licenses): 7 stock exchanges and PFTS (Over-the-Counter Stock Trading System)

One peculiar feature of the Ukrainian market is that the stock exchanges are not active on the secondary market. Stock exchanges are mostly used for primary auctions of the State Property Fund to privatize state owned enterprises and commodity trading. Most secondary market trades are done through the PFTS (First Trading Securities System – OTC-based trading system) and OTC over the phone. PFTS is the major organized trading platform in Ukraine that accounts for about 90% of all trades on the organized market. However, significant trading of equities takes place outside the regulated markets (an estimated 90-95 percent according to the Securities Commission).

Total stock market capitalization: according to PFTS estimates, stock market capitalization as of the end of 2003 constituted UAH 25,615 m (about 10% of GDP).

Number of listed companies in the stock exchange: only 673 of an estimated 11,794 open joint-stock companies were listed at end-2003 at the organized trade floors.

With a valid license to engage in brokerage activities: see below

With a valid license to engage in dealership activities: 871 entities have a license for brokerage/dealership activities as of 01.01.2004 (128 of them – banks)

With a valid license to engage in trust management activities:

With a valid license to engage in depositary activities: 143 entities

With a valid license to engage in clearing activities:

With a valid license to engage in activities involving the maintenance of a register of holders of registered securities (registrar activities): 364 registrars

With a valid management company license: 93 companies

With a valid specialized depositary license: 2 depositories

Number of foreign listed companies in the stock exchange:

Share of foreign listed companies in total stock market capitalization:

Number of domestic companies whose assets are rated:

Growth in the value of stocks traded in OTC markets:

Number of penalized insider-trading cases in the last 5 years:

Q-n 1.

It should be separately stressed upon the interpretation of the “professional activity on securities market” term, as provided by the Law On State Regulation of Securities Market in Ukraine. According to it, the following kinds of activities relate to the professional activity on securities market:

- 1) trading in securities; 2) depositary activity; 3) clearing and settlement activity; 4) administration in securities; 5) asset management activity; 6) keeping a register of securities holders; 7) organization of securities trading.

Overall, the number of securities services providers isn’t regulated or otherwise restricted by the Ukrainian legislation. As stated in the Law On State Regulation of Securities Market, professional activity on securities market, as well as intermediation in securities issuance and turnover is allowed to natural persons and legal entities, registered as companies, upon relevant licensing by the State Commission on Securities and Capital Markets (Securities Commission – hereafter). The Law of Ukraine “On Companies”, in turn, envisages that foreign citizens, persons without citizenship, foreign legal entities and international organizations may be founders of and participants in a company on a par with Ukrainian citizens and legal entities, except in situations excluded by Ukrainian legislative acts. However, the application for “a license to carry out professional activity on the capital market” may not be done on company’s own, but on behalf of the relevant self-regulated organization, of which such a company is a member. In Ukraine, such self-regulatory organizations are the following: Ukrainian Association of Investment Business (unites asset management companies), Professional Association of Registrars and Depositaries, Ukrainian Association of Stock Exchange Dealers, 4 stock exchanges (Ukrainian Stock Exchange, Kyiv International Stock Exchange, Donetsk Stock Exchange, Pridneprovsk Stock Exchange), Ukrainian Inter-bank Currency Exchange, PFTS (an over-the-counter trading system similar to NASDAQ). Self-regulating organizations are entitled to monitor the activities of its participants, ensure that the participants abide by the relevant rules and requirements, represent participant interests at the Securities Commission, provide analytical and informational services, and educate and certify market specialists.

Besides licensing, the professional participants on the securities market are obliged to hold the prudential requirements imposed by the regulator – Securities Commission on their equity or their capital equity/net asset ratios, as well as other indicators restricting risks in securities business.

Telecommunications – Fixed Line Services

Note: Unless specified, please give information for the latest year available and indicate which year. If insufficient space is provided, please attach additional information on separate sheets.

A. Market Access

1. Are there policy restrictions on new entry?

	Entry by any firm	If yes, total number of firms allowed	Entry by foreign firms	If yes, number of foreign firms allowed
Local services	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A LICENSE IS REQUIRED TO OPERATE ON THE MARKET. NO LIMITATION ON THE NUMBER OF FIRMS	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A license is required to operate on the market. No limitation on the number of firms
Long distance	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A LICENSE IS REQUIRED TO OPERATE ON THE MARKET. NO LIMITATION ON THE NUMBER OF FIRMS	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A license is required to operate on the market. No limitation on the number of firms
International	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A license is required to operate on the market. No limitation on the number of firms	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A license is required to operate on the market. No limitation on the number of firms
Leased line	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A license is required to operate on the market. No limitation on the number of firms	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	A license is required to operate on the market. No limitation on the number of firms

2. If entry is restricted, what are the reasons provided by the government?

- ☐ To give incumbents time to prepare for competition
- ☐ To increase government revenue from privatization or license fees
- ☒ Exclusive rights believed necessary to attract (strategic) investment
- ☒ Exclusive rights to allow the provision of universal service
- ☒ Other: _____ to maintain quality of services_____

3. Is interconnection to the public switched network allowed in principle?

- ☐ No ☒ Yes

4. Are there any restrictions on the provision of basic telecommunication services through networks other than the public switched network?

Cable television network	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Internet	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Satellite	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Other:	<input type="checkbox"/> No <input type="checkbox"/> Yes

If yes, please explain the nature of the restrictions:

5. Do market entrants have to use the incumbent carrier's gateway(s) for international connections?

☒ No ☐ Yes

Most operators use Ukrtelecom's network (like UMC) have built their own. for international connections, though some

6. Is third party resale of leased line capacity permitted?

Domestic ☐ No ☒ Yes

International ☐ No ☒ Yes

If yes, please specify the designated countries: _____any_____

B. Ownership

7. Is **private ownership** in the provision of services allowed?

	Existing operators		Maximum private equity permitted (%)	New entrants		Maximum private equity permitted (%)
Local services	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%
Long distance	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%
International	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%
Leased line	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%

8. Is **foreign ownership** in the provision of services allowed?

	Existing operators		Maximum private equity permitted (%)	New entrants		Maximum private equity permitted (%)
Local services	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%
Long distance	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%
International	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%
Leased line	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	Up to 100%

9. Are there any restrictions on companies offering services in more than one market segment (local, long distance, international, leased line)? ☐ No ☒ Yes

If yes, please explain the nature of these restrictions: _____separate license for each kind of service_____

C. Market Structure

10. Please list the characteristics of all facilities-based operators providing **local services** (starting with the incumbent PTO).

Name of firm	Year the firm first offered services	Annual sales revenue	Owners of capital and their respective shares (domestic/foreign)
VAT "Ukrtelekom"	1993	6,000,000,000 hrn (\$1.1 bln)	92.86% - in state ownership, 7.14% - in employees'.
OOO "Golden Telecom"	1996	-----	100% - Golden Telecom Inc. (Russia)
"Velton.Telecom" TG	1994	-----	100% - Ukrainian
Optima Telecom	1997	-----	-----

11. Please list the characteristics of all facilities-based operators providing **long distance services** (starting with the incumbent PTO).

Name of firm	Year the firm first offered services	Annual sales revenue	Owners of capital and their respective shares (domestic/foreign)
DP "Utel"	1992	2.58 bln hrn (\$487 mln)	100% - "Ukrtelekom" ownership
VAT "Ukrtelekom"	1993	6,000,000,000 hrn (\$1.1 bln)	92.86% - in state ownership, 7.14% - in employees'.
OOO "Golden Telecom"	1996	-----	100% - Golden Telecom Inc. (Russia)

12. Please list the characteristics of all facilities-based operators providing **international services** (starting with the incumbent PTO).

Name of firm	Year the firm first offered services	Annual sales revenue	Owners of capital and their respective shares (domestic/foreign)
DP "Utel"	1992	2.58 bln hrn (\$487 mln)	100% - "Ukrtelekom" ownership
VAT "Ukrtelekom"	1993	6,000,000,000 hrn (\$1.1 bln)	92.86% - in state ownership, 7.14% - in employees'.
OOO "Golden Telecom"	1996	-----	100% - Golden Telecom Inc. (Russia)

13. Please list the characteristics of all facilities-based operators providing **leased line services** (starting with the incumbent PTO).

Name of firm	Year the firm first offered services	Annual sales revenue	Owners of capital and their respective shares (domestic/foreign)
VAT "Ukrtelekom"	1993	6,000,000,000 hrn (\$1.1 bln)	92.86% - in state ownership, 7.14% - in employees'.

14. If third party resale of leased-line capacity is permitted, how many resellers are in the market?

Domestic: ___no limitations___ International: _____no limitations_____

D. Regulation

15. Institutional status of sector regulator¹⁰⁰

- a) When _____ was the regulator established?
_____ 2005 _____
- b) Is the sector regulator independent from the incumbent PTO? ☐ No ☒ Yes
- c) If yes to b), is the regulator independent from the sector ministry? ☐ No ☒ Yes
- d) How is the sector regulator financed? ____still unclear ____
License and other fees ____% State budget ____ % Other (____):
- e) How many technical and economic professionals are employed? ____8 people____

16. What are the responsibilities of subjects for the following functions¹⁰¹?

	Licensing	Setting of interconnection prices	Regulation of retail tariffs ¹⁰²	Dispute settlement and arbitration	Regulation of cable television ¹⁰³
Operator	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ministry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regulator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. How are licenses for fixed line services allocated?

- a) If the number of providers is not limited by policy, specify the main conditions new entrants must fulfill.
- ☒ Payment of license fee (indicate amount in local currency: ____ from UAH 20 (local calls service provision in rural regions) to UAH 529,000 (international calls service) ____)
- ☒ Other: ____professionalism of technical stuff (30% with relevant work experience), certain equipment availability____
- b) If the number of providers is limited by policy, through what mechanism are licenses allocated?
- ☐ Competitive tender
- ☐ Discretionary decision by the licensing authority
- ☐ Other: _____
- c) Do licenses foresee specific network roll-out plans?

¹⁰⁰ According to the Law on Telecommunications (1280-15, Nov.18/2003), starting from January 2005, the telecommunications sector's regulation power have to be transferred from State Department on Communications and Informatisation (body within the Ministry of Transport and Communications) to the National Committee on Telecommunication Regulation. But the situation is still unclear, as the court suspended the list of the Committee's members.

¹⁰¹ According to the Laws on Telecommunications (1280-15, Nov.18/2003) and the Law on Television and Radio (3760-12, Dec 21/1993).

¹⁰² Under the supervision of Antimonopoly Committee of Ukraine.

¹⁰³ Regulated by National Council of Ukraine on Television and Radio.

☒ No ☐ Yes

d) Are foreign firms subject to different licensing requirements from domestic firms?

☐ No ☒ Yes

If yes, please specify what additional requirements have to be met by foreign operators:
_____ to obtain a license,

_____ one have to be a resident of Ukraine; other qualification requirements are identical

e) Do licenses grant exclusivity periods? ☒ No ☐ Yes

If yes, please indicate for the relevant market segments (local, long distance, international, leased line) when the exclusivity period will expire?

18. Regulation of network interconnection

a) How are interconnection agreements among carriers determined?

☐ Private negotiations between parties

☒ Private negotiations, but general terms determined by regulatory agency

☐ Detailed terms of interconnection determined by the regulatory agency

☐ Other: _____

b) Which of the following aspects of interconnection are set by the regulatory agency?

☐ Technical standards

☐ Procedures for interconnection

☐ Time frames for interconnection

☐ Points of interconnection

☐ Price of interconnection

☒ Other: _____ all the above, if one of the operators is a monopolist _____

c) Are interconnection agreements required to be made public?

☐ No ☒ Yes

d) Which of the following interconnection pricing rules are applied in your country?

☒ Reciprocal pricing

☐ Unbundling

☐ Imputation

☐ Other: _____

19. End-user tariffs

a) How are end-user tariffs determined in your country?

☐ By market forces (i.e., not regulated)

☒ Price caps established by the regulator

☐ Rate of return regulation

☐ Other: _____

b) Is there a plan to rebalance tariffs in your country?

☒ No ☐ Yes

If yes, please indicate when this plan is scheduled to be completed: _____

20. Public consultation and transparency

a) Which of the following are consulted in advance of regulatory decisions?

<input checked="" type="checkbox"/>	Service providers
<input checked="" type="checkbox"/>	Consumer groups
<input checked="" type="checkbox"/>	User industries
<input type="checkbox"/>	Other: _____

b) How are laws and regulatory decisions made public?

<input type="checkbox"/>	Published on the regulator's website
<input checked="" type="checkbox"/>	Published in an official gazette
<input type="checkbox"/>	Other: _____

E. Regional Integration Agreements in Fixed Line Services

21. Please indicate if there are any preferential arrangements affecting **fixed line services**, and list the preferential measures:

-NO such agreements-

Name of agreement	Partner country(s) in agreement	Date of entry into force	Preferential measures

F. Past and Future Changes in Policy

22. Please indicate major changes in market access policies, ownership rules, and regulation since 1990 (e.g., privatization of incumbent operator, introduction of competition, creation of an independent regulatory agency).

Area of policy change (market access, ownership or regulation)	Year of policy change	Description of policy change (synopsis of applicable laws and governmental decrees)
Market access	1995	Market access liberalization. Law on Communications (May 16/1995) allowed free competition and introduced licensing.
Ownership	1992	Creation of Utel Corp. on international call service segment of fixed line market
	1999	State-owned largest fixed-line operator "Ukrtelecom" had

		been corporatized
	2000	Start of the process of Ukrtelecom's privatization
Regulation	1999	The State Committee on Communications and Information was introduced by Presidential Decree, to grant licenses and frequency bands, and to carry on overall sector's regulation.
	2003	Law on Telecommunications (Nov18/2003, due 2005): <ul style="list-style-type: none"> • Introduction of independent regulator. • Creation of universal services fund. • Methods and rules on regulation of tariffs, interconnections, licensing.

23. Please indicate declared or anticipated changes in similar or other policy areas.

___ Nothing, just implementation of the norms of Law on Telecommunications___

Area of policy change (market access, ownership or regulation)	Date of anticipated policy change	Description of policy change

G. Universal Service

24. How does the government define universal service (or universal access)? What is the wording of universal service?

Universal services – the minimal package of services of normalized quality, defined by the Law on Telecommunications, and accessible by all users across Ukraine. These are: fixed lines phone service, including emergency calls, pay phone service, fax and telegraph services, information departments services.

25. What are the policy instruments used to pursue the universal service objective?

- ☐ Roll-out obligations in services licenses
- ☒ Subsidies to operator(s), e.g., from universal service funds
- ☐ Vouchers for target consumers
- ☒ Other: ___currently - cross-subsidization of local call tariffs on the expense of high long-distance and international call tariffs___

26. On which service suppliers are universal service obligations imposed?

- ☒ All incumbent operators
- ☐ Private operators offering local services
- ☐ Private operators offering long distance and international services
- ☐ Other:

H. Employment

27. Main employment indicators (for the years 1991-2000) ___NO INFORMATION AVAILABLE___

How many people are employed in the provision of fixed line services?

1991: ____ ; 1995: __ ; 2000: _; 2001:

What share of the total labor force is employed in this sector?

1991: ____ ; 1995: __ ; 2000: _; 2001:

What share of workers in this sector is employed by state-owned operators?

1991: ; 1995: ; 2000: 2001:

What share of workers in this sector is employed by foreign-owned operators?

1991: ; 1995: __ ; 2000: 2001:

What is the annual average wage in this sector?

1991: ____ ; 1995: __ ; 2000: __ 2001:

If time-series data from 1991 to 2000 is not available, please collect indicators for the years 1991, 1995 and 2000.

I. Investment

28. Investment indicators (for the years 1991-2000)

- What is the total amount of investment in fixed line services? ____ for FIBER OPTIC LINES only ____

(In millions of Ukrainian hryvnas, USD 1/UAH 1.6-2 in 1996-1998 USD 1/UAH 4-5.4 in 1998-2002)

YEAR	TOTAL	UKRTELECOM	PRIVATE OPERATORS
1996	322	256	66
1997	338	289	49
1998	364	310	53
1999	268	220	48
2000	279	225	54
2001	369	297	73
2002		350	

- What is the total amount of foreign direct investment in this sector?
____ modeling (in \$ mln, USD/UAH 5.4-5.3 in 2000-2003) based on total FDI in the "post and communications" sector and shares of fixed lines in sector's revenues _____

Year	Local fixed lines	Long-distance and international fixed lines
2000	23.6	38.2
2001	24.8	45.4
2002	23.6	43.7
2003	25.3	43.7

- What is the total stock of foreign direct investment in this sector?

1991:___; 1995: ___; 2000: ___; 2001:___

If time-series data from 1991 to 2000 is not available, please collect indicators for the years 1991, 1995 and 2000.

J. Prices

29. Please indicate the prices of the following services. Where relevant, distinguish between peak and off-peak charges. For a comprehensive assessment of telecommunications performance, it would be extremely useful to have historical data on prices for the various services. If time series data are available, please attach them separately (preferably electronically).

Service	Price (in local currency)	Date	Comments
Installation charges	666.67(bus) / 166.67(hous)	2005	
Monthly subscription for business	11.55 (urb)/9.63(rural)	2005	Differentiated by business' ownership and by urban/rural region
Monthly subscription for households	7.35(urb)/6.12(rur)	2005	Differentiated by urban/rural region
3-minute local call	0.135 (bus)/ 0.09 (hous) - urb 0.077 (bus)/ 0.49 (hous) -rural	2005	Subscription included 175 free local minutes Differentiated by business and urban/rural region
3-minute domestic long distance call	8:00- 1.08 1.80 18:00- 0.66 1.20 23:00- 0.54 0.90 8.00	2005	Differentiated by within/across regions
3-minute call to Moscow	4.48 (day)/ 3.53 (night)	2005	Differentiated by time of a day
3-minute call to Tokyo	25.47 (day)/ 21.47 (night)	2005	
3-minute call to London	15.93 (day)/ 13.55 (night)	2005	
3-minute call to New York	8.78 (day)/ 7.35 (night)	2005	
Average interconnection charge with main operator of local services	0.996 (0,188 \$ per min)		As set by Law on Telecommunications, revenues are divided 50/50 between both operators
Monthly leased line charges			Charges are settled in contracts

K. Quality and Access to Services

30. Please fill in the following indicators of quality and access to services. If time series data are available, please attach them separately (preferably electronically).

Indicator	Value	Date	Comments	
Total number of telephone lines in the country	10,333,000	2003		
Number of main telephone lines in rural areas	1,304,000	2003		
Number of main telephone lines in urban areas	9,029,000	2003		
Number of payphones and/or call centers	71,200	2003		
Waiting time for installation of basic telephone services	Average 3-5 years	2002		
Waiting list for installation of basic telephone services	2,155,400	2003		
Percentage of network that is digitized	60-80%	2003	Varies across regions	
Percentage of unsuccessful calls				
Are callback services available?	Yes			
Percentage of households with access to cable television	15-20%	2003		

Telecommunications – Mobile Services

Note: Unless specified, please give information for the latest year available and indicate which year. If insufficient space is provided, please attach additional information on separate sheets.

A. Market Access

1. Are there policy restrictions on new entry?¹⁰⁴

	Entry by any firm	If yes, total number of firms allowed	Entry by foreign firms	If yes, number of foreign firms allowed
Analogue mobile	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Digital mobile	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	

2. If entry is restricted, what are the reasons provided by the government?

- ☐ To give incumbents time to prepare for competition
- ☐ To increase government revenue from privatization or license fees
- ☐ Exclusive rights believed necessary to attract (strategic) investment
- ☐ Exclusive rights to allow the provision of universal service
- ☐ Other:

B. Ownership

3. Is private ownership in the provision of services allowed?						
	Existing operators		Maximum private equity permitted (%)	New entrants		Maximum private equity permitted (%)
Analogue mobile	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%
Digital mobile	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%
4. Is foreign ownership in the provision of services allowed?						
	Existing operators		Maximum foreign equity permitted (%)	New entrants		Maximum foreign equity permitted (%)
Analogue mobile	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%
Digital mobile	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	100%

¹⁰⁴ If policy restrictions on new entry in analogue or digital mobile differ across regions within the country, please explain on a separate sheet.

C. Market Structure

5. Please list the characteristics of all operators providing analogue mobile services.

Name of firm	Year the firm first offered services	Technology	Market share	Owners of capital and their respective shares (domestic/foreign)				
UMC	1993	NMT-450	100%	100%	ZAO MTS, since August 2003 (Russia)*	Mobile TeleSystems		

*From 1993 till 2003: 51% OJSC "Ukrtelecom", Ukraine; 16.3% TDC Tele Danmark, Denmark; 16.3% Royal KPN N.V., Netherlands; 16.3% Deutsche Telekom, Germany.

6. Please list the characteristics of all operators providing digital mobile services.

Name of firm	Year the firm first offered services	Technology (e.g., GSM, CDMA)	Market share	Owners of capital and their respective shares (domestic/foreign)				
SP Ukrainian Mobile Communications	1997/2001	GSM 900/1800	51.61%	100%	ZAO MTS, since August 2003 (Russia)	Mobile TeleSystems		
ZAO Kyivstar GSM	1997	GSM 900/1800	47.29%	56.51%	- Telenor, Norway, 43.49% - Storm Ltd, Ukraine (100% owned by Alfa Group, Russia)			
ZAO DCC	1996	D/AMPS	0.54%	85%	- ZAO SCM, Ukraine			
Golden Telecom Ltd	1996	GSM-1800	0.34%	43,6%	- Alfa Group, Russia 20,5% - Telenor, Norway 15% - OAO "Rostelecom" (PTC: RTKM, RTKMP) 7,6% - Investment Fund managed by Baring Vostok Capital 8,8% - Capital International Global Emerging Markets Private Equity Fund			
ZAO Ukrainian RadioSystems (Wellcom)	1996	GSM 900	0.27%	31%	- Ukrfondinvest, Ukraine 20% - Interinvest, Ukraine 24.5% - Occidental Management Co. Limited, Cyprus 24.5% - OptimaTelecom, USA			
OOO Astelit, (Life :))	2005	GSM-1800		51%	Turkcell the rest DCC			

D. Regulation

According to the law On telecommunications since January 1, 2005 almost all regulatory responsibilities are transferred to a regulator, but currently the regulator (National Commission for Regulation of Telecommunications) is still inactive.

7. Please indicate regulatory responsibilities for the following functions:

	Licensing	Setting of interconnection rates	Regulation of retail tariffs	Dispute settlement and arbitration	Spectrum allocation
Operator	<input type="checkbox"/>	V	V	<input type="checkbox"/>	<input type="checkbox"/>
Ministry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regulator** Other (specify)	V	V**	<input type="checkbox"/>	V***	V

* According to the law On telecommunications since January 1, 2005 almost all regulatory responsibilities are transferred to a regulator, but in fact the regulator (NCRT) is inactive

** Regulator sets the rate in case of interconnection with fixed lines

***According to the law On telecommunications a regulator reviews disputes before court

8. How are licenses for mobile services allocated?

a) If the number of providers is not limited by policy, specify the main conditions new entrants must fulfill.

- ☐ Payment of service license fee (indicate amount in local currency) UAH 340 th
- ☐ Other: entrant must fulfill several technical and organizational conditions

b) If the number of operators is limited by policy*, through what mechanism are service licenses allocated?

- ☒ Competitive tender
- ☐ Discretionary decision by the licensing authority
- ☐ Other:

*A regulatory body (NCRT) can decide to limit number of licenses to allocate

c) Are foreign firms subject to different licensing requirements from domestic firms?

☒ No ☐ Yes If yes, please specify what additional requirements have to be met by foreign operators:

d) Do licenses foresee specific network roll-out plans?

☒ No ☐ Yes

e) Do licenses grant exclusivity periods?

☒ No ☐ Yes

If yes, please indicate for the relevant market segments (local, long distance, international, leased line) when the exclusivity period will expire?

9. Allocation of radio spectrum

a) If radio frequencies are not awarded with the service license, through what mechanism are licenses for radio frequencies allocated?

- ☐ Auction
- ☐ Discretionary decision by the licensing authority
- ☐ First come, first served

☒ Other: if a spectrum is technically available and unlimited then spectrum is allocated

through the mechanism "First come, first served" with a fee. In case of two or more identical applications are received simultaneously than spectrum is allocated through a competitive tender with a fee.

b) Is there a separate fee for radio frequency licenses?

☐ No ☒ Yes If yes, please indicate the average fee paid by operators:

UAH 158 th per 1 Mhz (in the range 300-470 Mhz)

UAH 496 th per 1 Mhz (in the range 800-890 Mhz)

UAH 952 th per 1 Mhz (in the range 890-960 Mhz)

UAH 190 th per 1 Mhz (in the range 1.7-2.2 Hhz)

A fee depends on a region

10. Regulation of network interconnection

a) How are interconnection agreements between mobile and fixed-line carriers determined?

☐ Private negotiations between parties

☒ Private negotiations, but general terms determined by regulatory agency*

☐ Detailed terms of interconnection determined by the regulatory agency

☐ Other:

*Interconnection between non-monopolists operators are negotiated by parties, in case on of the party is monopolist conditions of interconnections are determined by a regulator.

b) How are interconnection agreements among mobile carriers determined?

☐ Private negotiations between parties

☒ Private negotiations, but general terms determined by regulatory agency*

☐ Detailed terms of interconnection determined by the regulatory agency

☐ Other: _____

*see answer of qn 10a)

c) Which of the following aspects of interconnection are set by the regulatory agency?

☒ Technical standards

☐ Procedures for interconnection

☐ Time frames for interconnection

☐ Points of interconnection

☐ Price of interconnection

☐ Other: see answer to q-n 10a)

d) Are interconnection agreements required to be made public?

☐ No* ☐ Yes

Once a year a regulator has to publish information on existing points of interconnections, their conditions and new offers of operator concerning interconnections

<p>e) Which of the following interconnection pricing rules are applied in your country? N/A</p> <p><input type="checkbox"/> Reciprocal pricing¹⁰⁵</p> <p><input type="checkbox"/> Unbundling¹⁰⁶</p> <p><input type="checkbox"/> Imputation¹⁰⁷</p> <p><input type="checkbox"/> Other:</p> <p>f) Are mobile carriers allowed to charge for incoming mobile calls?</p> <p><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes</p> <p>If yes, do mobile carriers actually charge for incoming calls?</p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>11. How are end-user tariffs for mobile services determined in your country?</p> <p><input checked="" type="checkbox"/> By market forces (i.e., not regulated)</p> <p><input type="checkbox"/> Price caps established by the regulator</p> <p><input type="checkbox"/> Rate of return regulation</p> <p><input type="checkbox"/> Other:</p>
<p>12. Public consultation and transparency</p> <p>a) Which of the following are consulted in advance of regulatory decisions?</p> <p><input checked="" type="checkbox"/> Service providers</p> <p><input checked="" type="checkbox"/> Consumer groups</p> <p><input checked="" type="checkbox"/> User industries</p> <p><input type="checkbox"/> Other: _____</p> <p>b) How are laws and regulatory decisions made public?</p> <p><input type="checkbox"/> Published on the regulator's website</p> <p><input checked="" type="checkbox"/> Published in an official gazette</p> <p><input type="checkbox"/> Other:</p>

E. Regional Integration Agreements in Mobile Services

13. Please indicate if there are any preferential arrangements and/or cooperative arrangements affecting mobile services, and list the preferential measures.¹⁰⁸ **THERE ARE NO PREFERENTIAL SERVICE INTEGRATION ARRANGEMENTS AVAILABLE**

¹⁰⁵ Reciprocal pricing requires that all networks charge the same amount to terminate calls coming from other networks.

¹⁰⁶ An 'unbundling' policy requires the dominant network operator to sell network components independently of each other, so that rival networks are not forced to buy services they do not need.

¹⁰⁷ Imputation rules are designed to eliminate any markup on services components sold to competing firms over and above the implicit charges for internal use - and should tend to equalize prices charged by direct competitors.

¹⁰⁸ Please, specify how the treatment of mobile service suppliers of member countries of the agreement differs from the treatment of mobile service suppliers of non-member countries.

Name of agreement	Partner country(s) in agreement	Date of entry into force	Preferential measures

F. Past and Future Changes in Policy

14. Please indicate major changes in market access policies, ownership rules, and regulation since 1990 (e.g., grant of additional mobile licenses, relaxation of ownership rules). **THE STATE DOES NOT SUPERVISE THE INVESTMENT AND MARKETING POLICIES OF MOBILE OPERATORS.**

Area of policy change (market access, ownership or regulation)	Year of policy change	Description of policy change (synopsis of applicable laws and governmental decrees)
Market access	1995	Law on Communications: opened market for competition, established licensing, The was canceled according to the Law On Telecommunications
Regulation	2005	Law On Telecommunications (No 1280-15, Nov-18, 2003), Set up of independent regulation

15. Please indicate declared or anticipated changes in similar or other policy areas. In particular, describe governmental plans to implement third-generation mobile services.

Area of policy change (market access, ownership or regulation)	Date of anticipated policy change	Description of policy change

G. Employment

16. Main employment indicators (for the years 1991-2004) *

How many people are employed in the provision of mobile services?

1991: _____ ; 1995: _____ ; 2000: _____ 2004 _____

What share of the total labor force is employed in this sector?

1991: _____ ; 1995: _____ ; 2000: less than 2% 2004 less than 2%

What share of workers in this sector is employed by state-owned operators?

1991: none ; 1995: none

2000: none 2004 none

What share of workers in this sector is employed by foreign-owned service providers?

1991: _____ ; 1995: _____ ; 2000: less than 100%

2004 100%

What is the annual average wage in this sector?

1991: _____ ; 1995: _____ ; 2000: _____ 2004 _____

If time-series data from 1991 to 2000 is not available, please collect indicators for the years 1991, 1995 and 2000

*No statistical monitoring data is available, the above represent expert estimates.

H. Investment

17. Investment indicators (for the years 1991-2004)

What is the total amount of investment in mobile services?

1991 r.: _____ ; 1995 r.: _____ ; 2000 r.: _____
2004 _____

What is the total amount of foreign direct investment in this sector?

1991 r.: _____ ; 1995 r.: _____ ; 2000 r.: USD 16.7 m 2003 USD 49.6 m

What is the total stock of foreign direct investment in this sector?

1991 r.: _____ ; 1995 r.: _____ ; 2000 r.: _____
2004 _____

If time-series data from 1991 to 2000 is not available, please collect indicators for the years 1991, 1995 and 2000.

*No statistical data available, the above are estimates (0.285(revenue share)*FDI in total telecommunications in 2004).

I. Prices

18. Please indicate the prices of the following services. Where relevant, distinguish between peak and off-peak charges. For a comprehensive assessment of mobile performance, it would be extremely useful to have historical data on prices for the various services. If time series data are available, please attach them separately (preferably electronically). *

Service	Price (in local currency)	Date	Comments
Acquisition of handset	UAH 300 – 6,000	Mar 2005	Depending on model
Monthly rental charges			
Monthly subscription for households	UAH 30 - 600	Mar 2005	The payment includes payment for volume of service within a Package of 30-4000 free minutes.
3-minute domestic call	UAH 0.3 - 6.0	Mar 2005	Tariffs for within one network calls are significantly lower than tariffs for calls to other networks
3-minute call to Moscow	UAH 8.46* – 21.42	Mar 2005	*UMC offers UMC –International - an new possibility of high-quality international communication through a special access code by tariffs which are much lower than usual international tariffs.
3-minute call to Tokyo	UAH 21.42 - 53.91	Mar 2005	Same
3-minute call to London	UAH 10.62 - 32.25	Mar 2005	Same
3-minute call to New York	UAH 21.42 - 39.45	Mar 2005	Same

Average roaming charges	n/a	
Average interconnection charge with fixed network	n/a	Interconnection charge is prescribed in each case
Average interconnection charge between mobile networks	n/a	Interconnection charge is prescribed in each case

*Each operator offers a wide range of tariff plans.

J. Quality and Access to Services

19. Please fill in the following indicators of quality and access to services. If time series data are available, please attach them separately (preferably electronically).

Indicator	Value	Date	Comments
Total number of mobile subscribers in the country	15.5 million	2005	
Number of mobile subscribers in rural areas		n/a	
Waiting period for acquisition of handset and initiation of service	0		
Percentage of unsuccessful calls		n/a.	No records are maintained.

Telecommunications – Internet Services

Note: Unless specified, please give information for the latest year available and indicate which year. If insufficient space is provided, please attach additional information on separate sheets.

A. Market Access

1. Are there policy restrictions on new entry of Internet service providers?

Entry by any firm	If yes, total number of firms allowed	Entry by foreign firms	If yes, number of foreign firms allowed
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Note: No license is required if a provider just rents some telecommunication channels. If, however, a provider owns or plans to build its own network, then it is required to obtain a license in order to operate a telecommunication network. Besides, network owners must be residents of Ukraine.

2. If entry is restricted, what are the reasons provided by the government?

- ☐ To give incumbents time to prepare for competition
- ☐ To increase government revenue from privatization or license fees
- ☐ Other: _____

B. Ownership

3. Is **private** ownership in the provision of services allowed?

Existing operators	Maximum private equity permitted (%)	New entrants	Maximum private equity permitted (%)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	100%	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	100%

4. Is **foreign** ownership in the provision of services allowed?

Existing operators	Maximum foreign equity permitted (%)	New entrants	Maximum foreign equity permitted (%)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	100%	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	100%

C. Market Structure

5. a) What is the total number of Internet service providers? ____ more than 400 ____

b) How many Internet service providers are related to telecom operators? ____ 70-90% ____

6. Please list the characteristics of the six largest Internet services providers.

Name of firm	Year the firm first offered services	Market share, %	Owners of capital and their respective shares (domestic/foreign) (%)
VAT Ukrtelecom	1997	15-30%	92.86% - in state ownership, 7.14% - in employees'.
Infocom	1991	5-10%	VAT Ukrtelecom (Ukraine), Controlware (Germany)
Lucky.net	1994		
Global Ukraine	1992		
Relcom	1992		
ElVisti	1993		

D. Regulations

7. Licensing regime

- a) Is there a licensing regime for Internet service providers? ☒ No ☐ Yes

Note: no licensing, unless providers build their own network

- b) If yes to a), which governmental agency issues licenses? _____ National Committee on Regulation of Communications _____

- c) If yes to a), please specify the main conditions new entrants have to fulfill: ____to prove financial and technical ability to maintain networks, including conditions on relevantly educated and experienced technical stuff____

- d) Are foreign firms subject to different licensing requirements from domestic firms?

☒ Yes ☐ No

If yes, please specify what additional requirements have to be met by foreign operators: ____to become a resident of Ukraine; everything other is identical____

8. Infrastructure and interconnection

- a) Are Internet service providers allowed to build their own networks? ☐ No ☒ Yes

- b) Are Internet service providers (other than the incumbents or affiliates) allowed to own or lease their own international data gateways? ☐ No ☒ Yes

- c) How are interconnection agreements among Internet service providers regulated?

☐ Private negotiations between parties

☒ Private negotiations, but general terms determined by regulatory agency

☐ Detailed terms of interconnection determined by the regulatory agency

☐ Other:

- d) How many peering points (locations where national and regional Internet traffic can be exchanged) are available?

Private: 1 Public: 1

9. Are there any policy initiatives to bolster Internet use? ☒ No ☐ Yes

_____ There were some words (President's Decree #928/2000 about necessity of national program on Internet development in Ukraine, and Law on National Informatisation Program #74/98) and even some attempts in 2000-2001 to work it out, but with no visible success so far – as it was explained, due to inadequate budget financing _____

If yes,

a) when were they introduced?

b) what do they cover?

- ☐ Plan to introduce flat-rate access
- ☐ Discount local access charges for Internet use
- ☐ Other:

10. Public consultation and transparency

a) Which of the following are consulted in advance of regulatory decisions?

- ☒ Service providers
- ☐ Consumer groups
- ☒ User industries
- ☐ Other:

b) How are laws and regulatory decisions made public?

- ☐ Published on the regulator's website
- ☒ Published in an official gazette
- ☐ Other: _____

E. Regional Integration Agreements in Internet Services

11. Please indicate if there are any preferential arrangements and/or cooperative arrangements affecting internet services, and list the preferential measures. ____ NONE ____

Name of agreement	Partner country(s) in agreement	DATE OF ENTRY INTO FORCE	Preferential measures

F. Past and Future Changes in Policy

12. Please indicate major changes in market access policies, ownership rules, and regulation since 1990 (e.g., grant of additional licenses for Internet services, relaxation of ownership rules).

AREA OF POLICY CHANGE (MARKET ACCESS, OWNERSHIP OR REGULATION)	YEAR OF POLICY CHANGE	Description of policy change (synopsis of applicable laws and governmental decrees)
Market access	1997	Abolishment of licensing of Internet service providers

	2001	President's Decree #891/2001 on state information safety in global information networks – allows free access of any operator to international data gateways (since 1998 only 3 Ukrainian operators were granted with this right)
	2001	President's Decree #1193/2001 recommended to re-introduce licensing of Internet service providers (still, no licensing up to now)
Regulation	2003	Attempt on introduction of state control over Ukrainian sector of Internet, in particular, creation of the Ukrainian net information center under the supervision of the Cabinet of Ministers and Security Service of Ukraine and Decree #447/1993 of CMU about transference of ua-domain administrative rights to UANIC (from current administrator, private company Hostmaster)

13. Please indicate declared or anticipated changes in similar or other policy areas in the near future.

Area of policy change (market access, ownership or regulation)	Date of anticipated policy change	Description of anticipated policy change (synopsis of applicable laws and governmental decrees)
MARKET ACCESS	Near future	Probable re-introduction of long-attempted licensing of internet service provision
Regulation		Transference of .ua-domain administrative rights from private company to state-controlled agency

G. Employment

14. Main employment indicators (for the years 1991-2002) __NO INFORMATION AVAILABLE__

How many people are employed in the provision of Internet services?

1990 _____ 1995 _____ 2000 _____ 2002 _____

What share of the total labor force is employed in this sector?

1990 _____ 1995 _____ 2000 _____ 2002 _____

What share of workers in this sector is employed by state-owned service providers?

1990 _____ 1995 _____ 2000 _____ 2002 _____

What share of workers in this sector is employed by foreign-owned service providers?

1990 _____ 1995 _____ 2000 _____ 2002 _____

What is the average annual wage in this industry?

1990 _____ 1995 _____ 2000 _____ 2002 _____

H. Investment

15. Investment indicators (for the years 1991-2002)

What is the total amount of investment in Internet services?

1990 _____ 1995 _____ 2000 _____ 2002 _____

What is the total amount of foreign direct investment in this sector?

_____ modeling based on total FDI in the "post and communications" sector and shares of Internet services in sector's revenues (USD/UAH 4-5.3 in 1998-2003) _____

Year	Internet Services, \$ mln
2000	2.0
2001	2.8
2002	3.8
2003	6.1

What is the total stock of foreign direct investment in this sector?

1990 _____ 1995 _____ 2000 _____ 2002 _____

I. Prices

16. Please indicate the prices of the following services. Where relevant, distinguish between peak and off-peak charges. For a comprehensive assessment of Internet performance, it would be extremely useful to have historical data on prices for the various services. If time series data are available, please attach them separately (preferably electronically). (USD/UAH = 5.3)

Service	Price (in local currency)	Date	Comments
Average monthly charges for low bandwidth residential Internet access (Capacity: 64 Kbit/sec)	10 hrn (unlimited – 150 hrn w/o connection charge)	2005	For rural regions and/or state-owned enterprises and organizations, multiply by coefficient 0.8
Additional (per minute) local telephone charges (if relevant)	0.06 hrn + 0.06-0.10 hrn traffic charges		
Average monthly charges for high bandwidth business Internet access (Capacity: 115,2 Kbit/sec)	90-120 hrn	2005	
Cable lines (256 Kbit/sec)	20 – 36 hrn		
Additional connection charges (if relevant)	0.20-0.32 hrn/mb		

J. Quality and Access to Services

17. Please fill in the following indicators of quality and access to services.

Indicator	Value	Date	Comments
Number of Internet hosts	> 14,500	2001	
Number of household subscribers			Data not available
Total number of Internet users	5,650,000	2005	
Number of users that access the Internet via	60-70%		Own guess

the fixed telephone network		
Number of users that access the Internet via leased lines	20-30%	Own guess
Number of users that access the Internet via the cable network	~10%	Own guess
Annual value of e-commerce transactions	\$9-13 mln	2002

Freight Transportation

I. Restrictions on commercial presence

1. Licensing of transportation services, differentiate between residents and non-residents of Ukraine

	Transportation within a regional railway unit		Domestic transportation		International transportation		Transit transportation	
	R	NR	R	NR	N	NR	R	NR
No new licenses is allowed	V 1.	V 1.	V 1.	V 1.	V 1.	V 1.	V 1.	V 1.
Licenses are issued through complicated (discriminately) and costly procedure	□ 2.	□ 2.	□ 2.	□ 2.	□ 2.	□ 2.	□ 2.	□ 2.
Licenses are generally issued with application fee and several requirements	□ 3.	□ 3.	□ 3.	□ 3.	□ 3.	□ 3.	□ 3.	□ 3.
Licenses are generally issued with application fee	□ 4.	□ 4.	□ 4.	□ 4.	□ 4.	□ 4.	□ 4.	□ 4.
Licenses are automatically issued upon application without any cost	□ 5.	□ 5.	□ 5.	□ 5.	□ 5.	□ 5.	□ 5.	□ 5.

Management of railways and railway transportation is an exclusive right of the State administration of railway transportation (Ukrzaliznytsia)

2. Please describe the structure of the sector of railway transportations

	Transportation and the network (tracks)	Transportation and rolling stock	Transportation and ancillary enterprises
Managed by a SINGLE legal entity	□ 1. Yes V 2. No	□ 1. Yes V 2. No	□ 1. Yes V 2. No
Managed by different entities, which are governed by one organization (Ukrzaliznytsia)	V 1. Yes □ 2. No	V 1. Yes □ 2. No	V 1. Yes □ 2. No
Managed by separate entities. These entities are not part of one holding (here Ukrzaliznytsia)	□ 1. Yes V 2. No	V 1. Yes □ 2. No	V 1. Yes □ 2. No

Comment: There exist ancillary enterprises and firms that have their own rolling stock, which are separate, independent entities, not part of Ukrzaliznytsia (UZ). At the same time the UZ includes several ancillary enterprises and rolling stock.

The Law of Ukraine On Railway transportation (№ 273/96-vr, July 4, 1996) defines the basics of railway transportation, including its management. Article 4 says that management of railway network and railways enterprises is performed by the State department of railway transportation (Ukrzaliznytsia) and the right to manage the process of transportation **exclusively** belongs to Ukrzaliznytsia

3. Is private ownership in the different sub-sectors of railway transportation is allowed?

	Transportation within a regional railway unit	Domestic transportation	International transportation	Transit transportation
Railway network*	V 1. Yes <input type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No
Rolling stock**	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No
Ancillary enterprises***	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No
Transporters	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No

*Spur tracks (railway tracks that serve for one or several enterprises for interconnection with railway tracks of general network) in contrast to tracks of general network may be in the private.

Article 8 of the Statute of Ukrainian railways (approved by an order of Cabinet of Ministers of Ukraine No 457 on June 6, 1998) defines that freights can be transported in the rolling stock owned by firms of different ownership, including the firms that located on the territory of **other countries.

***Article 4 of the Regulations of the State administration of railway transport (approved by the order of Cabinet of Ministers № 262, February 29, 1996) defines its major tasks. Among them it is mentioned that the State administration of railway transport repair and maintenance of rolling stock on different enterprises, including the ones located on the territory of **other than Ukraine countries**.

4. If private ownership is allowed, are NON-RESIDENTS allowed to own different sub-sectors of railway transportation?

	Transportation within a regional railway unit	Domestic transportation	International transportation	Transit transportation
Railway network*	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No
Rolling stock**	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No
Ancillary enterprises***	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No
Transporters	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No

* see note for qn 4.

** see note for qn 4.

*** see note for qn 4.

5. Answer the following questions:

1.	Enterprises that are not parts of the Ukrzaliznytsia cannot own railway stations	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No
2.	Enterprises that are not parts of the Ukrzaliznytsia cannot supply fuel/power for railway transportation	<input type="checkbox"/> 1. Yes	<input checked="" type="checkbox"/> 2. No
3.	Enterprises that are not parts of the Ukrzaliznytsia cannot provide repair and maintenance services of cars	<input type="checkbox"/> 1. Yes	<input checked="" type="checkbox"/> 2. No
4.	Enterprises that are not parts of the Ukrzaliznytsia cannot provide railways services trade and marketing	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No
5.	Enterprises that are not parts of the Ukrzaliznytsia cannot provide forwarding services	<input type="checkbox"/> 1. Yes	<input checked="" type="checkbox"/> 2. No
6.	NON-RESIDENTS generally cannot own railway stations	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No
7.	NON-RESIDENTS generally cannot supply fuel/power for railway transportation	<input type="checkbox"/> 1. Yes	<input checked="" type="checkbox"/> 2. No
8.	NON-RESIDENTS generally cannot provide repair and maintenance services of cars*	<input type="checkbox"/> 1. Yes	<input checked="" type="checkbox"/> 2. No
9.	NON-RESIDENTS generally cannot provide railways services trade and marketing	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No
10.	NON-RESIDENTS generally cannot provide forwarding services**	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No

* Article 4 of the Regulations of the State administration of railway transport (approved by the order of Cabinet of Ministers № 262, February 29, 1996) defines its major tasks. Among them it is mentioned that the State administration of railway transport repair and maintenance of rolling stock on different enterprises, including the ones located on the territory of other than Ukraine countries

** Foreigners can provide forwarding services if they are registered in Ukraine as a resident.

6. Is there any restrictions on direct investment: equity participation permitted

☐ 1. Yes, there are such restrictions ☐ 2. No restrictions

The question is not applicable since the only enterprise that provide railways transportation service is state enterprise, which is not corporatized

7. In case there are the restrictions what is maximum equity participation permitted in an existing domestic company

0	%
---	---

8. Permanent movement of people

- ☐ 1. no entry of executives, senior managers and/or specialists
- ☐ 2. Executives, specialists and/or senior managers can stay up to 1 year
- ☐ 3. Executives, specialists and/or senior managers can stay up to 2 years.
- ☐ 4. Executives, specialists and/or senior managers can stay up to 3 years.
- ☐ 5. Executives, specialists and/or senior managers can stay up to 4 years or more.
- ☒ 6. Executives, specialists and/or senior managers can stay a period of 5 years or more.

9. End user tariffs

- ☐ 1. end user tariff is determined by rate of return regulation
- ☒ 2. end user tariff is determined by price cap rule established by the authority*

☐ 3. end user tariff is determined by market force (no regulation)

*The tariffs are approved by Cabinet of Ministers of Ukraine

10. Discretionary impositions of restrictions

☒ 1. Government imposes selective restrictions*

☐ 2. Government does not impose selective restrictions

* Government can provide discounts for transportation tariffs for some enterprises. Tariffs generally set in non-transparent manner, they generally do not reflect costs

11. Is there any restriction on the composition of the board of directors

☐ 1. Yes, there are such restrictions ☒ 2. No restrictions

There is no legally defined restriction on the composition on the boards of directors

12. In case there are such restrictions what is percentage of the board that can comprise foreigners?

%

13. Temporary movement of people

☐ 1. no entry of executives, senior managers and/or specialists

☐ 2. Executives, specialists and/or senior managers can stay up to 30 days

☐ 3. Executives, specialists and/or senior managers can stay up to 60 days.

☐ 4. Executives, specialists and/or senior managers can stay up to 90 days.

☒ 6. Executives, specialists and/or senior managers can stay a period of 90 days or more.

Comments

Passenger Transportation

Restrictions on commercial presence

1. Licensing of transportation services, differentiate between residents and non-residents of Ukraine

	Suburban transportation		Domestic transportation		International transportation		Transit transportation	
	R	NR	R	NR	N	NR	R	NR
No new licenses is allowed	V 1.	V 1.	V 1.	V 1.	V 1.	V 1.	V 1.	V 1.
Licenses are issued through complicated (discriminately) and costly procedure	<input type="checkbox"/> 2.	<input type="checkbox"/> 2.	<input type="checkbox"/> 2.	<input type="checkbox"/> 2.	<input type="checkbox"/> 2.	<input type="checkbox"/> 2.	<input type="checkbox"/> 2.	<input type="checkbox"/> 2.
Licenses are generally issued with application fee and several requirements	<input type="checkbox"/> 3.	<input type="checkbox"/> 3.	<input type="checkbox"/> 3.	<input type="checkbox"/> 3.	<input type="checkbox"/> 3.	<input type="checkbox"/> 3.	<input type="checkbox"/> 3.	<input type="checkbox"/> 3.
Licenses are generally issued with application fee	<input type="checkbox"/> 4.	<input type="checkbox"/> 4.	<input type="checkbox"/> 4.	<input type="checkbox"/> 4.	<input type="checkbox"/> 4.	<input type="checkbox"/> 4.	<input type="checkbox"/> 4.	<input type="checkbox"/> 4.
Licenses are automatically issued upon application without any cost	<input type="checkbox"/> 5.	<input type="checkbox"/> 5.	<input type="checkbox"/> 5.	<input type="checkbox"/> 5.	<input type="checkbox"/> 5.	<input type="checkbox"/> 5.	<input type="checkbox"/> 5.	<input type="checkbox"/> 5.

Management of railways and railway transportation is an exclusive right of the State administration of railway transportation (Ukrzaliznytsia)

2. Please describe the structure of the sector of railway transportations

	Transportation and the network (tracks)	Transportation and rolling stock	Transportation and ancillary enterprises
Managed by a SINGLE legal entity	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No	<input type="checkbox"/> 1. Yes V 2. No
Managed by different entities, which are governed by one organization (Ukrzaliznytsia)	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No
Managed by separate entities. These entities are not part of one holding (here Ukrzaliznytsia)	<input type="checkbox"/> 1. Yes V 2. No	V 1. Yes <input type="checkbox"/> 2. No	V 1. Yes <input type="checkbox"/> 2. No

Comment: There exist ancillary enterprises are separate, independent entities, not part of Ukrzaliznytsia (UZ). At the same time the UZ includes several ancillary enterprises.

The Law of Ukraine On Railway transportation (№ 273/96-vr, July 4, 1996) defines the basics of railway transportation, including its management. Article 4 says that management of railway network and railways enterprises is performed by the State department of railway transportation (Ukrzaliznytsia) and the right to manage the process of transportation **exclusively** belongs to Ukrzaliznytsia.

3. Is private ownership in the different sub-sectors of railway transportation is allowed?

	Suburban transportation	Domestic transportation	International transportation	Transit transportation
Railway network	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No
Rolling stock*	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
Ancillary enterprises**	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
Transporters	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No

*Article 8 of the Statute of Ukrainian railways (approved by an order of Cabinet of Ministers of Ukraine No 457 on June 6, 1998) defines that passengers can be transported in the rolling stock owned by firms of different ownership, including the firms that located on the territory of other countries.

**Article 4 of the Regulations of the State administration of railway transport (approved by the order of Cabinet of Ministers № 262, February 29, 1996) defines its major tasks. Among them it is mentioned that the State administration of railway transport overhaul and modernizes rolling stock on different enterprises, including the ones located on the territory of other than Ukraine countries.

4. If private ownership is allowed, are NON-RESIDENTS allowed to own different sub-sectors of railway transportation?

	Suburban transportation	Domestic transportation	International transportation	Transit transportation
Railway network	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No
Rolling stock*	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
Ancillary enterprises**	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
Transporters	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No

* see note for qn 4.

** see note for qn 4.

5. Answer the following questions:

1.	Enterprises that are not parts of the Ukrzaliznytsia cannot own railway stations	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
2.	Enterprises that are not parts of the Ukrzaliznytsia cannot supply fuel/power for railway transportation	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No
3.	Enterprises that are not parts of the Ukrzaliznytsia cannot provide repair and maintenance services of cars	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No
4.	Enterprises that are not parts of the Ukrzaliznytsia cannot provide railways services trade and marketing	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
5.	Enterprises that are not parts of the Ukrzaliznytsia cannot sell tickets	<input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No
6.	Enterprises that are not parts of the Ukrzaliznytsia cannot provide computer reservation systems	<input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No

7.	NON-RESIDENTS generally cannot own railway stations	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No
8.	NON-RESIDENTS generally cannot supply fuel/power for railway transportation	<input type="checkbox"/> 1. Yes	<input checked="" type="checkbox"/> 2. No
9.	NON-RESIDENTS generally cannot provide repair and maintenance services of cars	<input type="checkbox"/> 1. Yes	<input checked="" type="checkbox"/> 2. No
10.	NON-RESIDENTS generally cannot provide railways services trade and marketing	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No
11.	NON-RESIDENTS generally cannot sell tickets	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No
12.	NON-RESIDENTS generally cannot provide computer reservation systems	<input checked="" type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No

* Foreigners can sell tickets services is they are registered in Ukraine as a resident.

6. Is there any restrictions on direct investment: equity participation permitted*

☐ 1. Yes, there are such restrictions ☐ 2. No restrictions

* The question is not applicable since the only enterprise that provides railways transportation service is state enterprise, which is not corporatised.

7. In case there are the restrictions what is maximum equity participation permitted in an existing domestic company

0	%
---	---

8. Permanent movement of people

- ☐ 1. no entry of executives, senior managers and/or specialists
- ☐ 2. Executives, specialists and/or senior managers can stay up to 1 year
- ☐ 3. Executives, specialists and/or senior managers can stay up to 2 years.
- ☐ 4. Executives, specialists and/or senior managers can stay up to 3 years.
- ☐ 5. Executives, specialists and/or senior managers can stay up to 4 years b.
- ☒ 6. Executives, specialists and/or senior managers can stay a period of 5 years or more.

9. End user tariffs

- ☐ 1. end user tariff is determined by rate of return regulation
- ☒ 2. end user tariff is determined by price cap rule established by the authority*
- ☐ 3. end user tariff is determined by market force (no regulation)

* The tariffs are approved by Cabinet of Ministers of Ukraine

10. Discretionary impositions of restrictions

- ☒ 1. Government imposes selective restrictions*
 - ☐ 2. Government does not impose selective restrictions
- *government performs generally in non-transparent manner

11. Is there any restrictions on the composition of the board of directors

- ☐ 1. Yes, there are such restrictions
- ☒ 2. No restrictions

There is no legally defined restriction on the composition on the boards of directors

12. In case there are such restrictions what is percentage of the board that can comprise foreigners?

%

13. Temporary movement of people

- ☐ 1. no entry of executives, senior managers and/or specialists
- ☐ 2. Executives, specialists and/or senior managers can stay up to 30 days
- ☐ 3. Executives, specialists and/or senior managers can stay up to 60 days.
- ☐ 4. Executives, specialists and/or senior managers can stay up to 90 days.
- ☒ 6. Executives, specialists and/or senior managers can stay a period of 90 days or more.

ANNEX C
TRADE RESTRICTIVENESS INDEX TABLES

Table C1

The trade restrictiveness index (TRI) on banking in Ukraine

Weight	Scoring	Score chosen			Category
		NRES	RES	RES	
		foreign	foreign	domestic	
Restrictions on commercial presence					
0.10					Licensing of banks
	1.00				no new license is allowed
	0.75				licenses are issued through complicated (discriminately) and costly procedure
	0.20	0.20	0.20	0.20	licenses are generally issued with application fee and several requirements
	0.10				licenses are generally issued with application fee
	0.00				licenses are automatically issued upon application without any cost
0.10					Form of commercial presence
	1.00	1.00			measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
0.20					Direct investment: equity participation permitted
		0.00	0.00	0.00	the score is inversely proportional to the maximum equity participation permitted in an existing domestic bank
0.10					Direct investment: restrictions on certain types of services
	1.00				restrictions on providing some types of banking services
	0.00	0.00	0.00	0.00	no restrictions on providing any type of banking services
0.10					Joint venture arrangements
	1.00				issues no new banking licenses and no entry is allowed through a joint venture with a domestic bank
	0.50				bank entry is only through a joint venture with a domestic bank
	0.00	0.00	0.00	0.00	no requirement for a bank to enter through a joint venture with a domestic bank
0.02					Permanent movement of people
	1.00				no entry of executives, senior managers and/or specialists
	0.80				executives, specialists and/or senior managers can stay up to 1 year
	0.60				executives, specialists and/or senior managers can stay up to 2 years
	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
Cross-border trade					
0.10					Raising funds by foreign banks
	1.00				foreign banks are not permitted to have cross-border deposits of Ukrainian banks. corporations. and households
	0.75				foreign banks are permitted to have cross-border deposits of only some types of Ukrainian residents or any type of Ukrainian residents with specific ceiling amount
	0.50	0.50		0.00	foreign banks are permitted to have cross-border deposits of Ukrainian banks. corporations. households with licenses

Table C1 (cont.)

The trade restrictiveness index (TRI) on banking in Ukraine

0.00				foreign banks are permitted to have cross-border deposits of any type of Ukrainian residents without restrictions
0.10				Lending funds by foreign banks
1.00				foreign banks are not permitted to have cross-border lending to Ukrainian banks, corporations, and households
0.75				foreign banks are permitted to have cross-border lending to only some types of Ukrainian residents or any type of Ukrainian residents with specific ceiling amount
0.50	0.50		0.00	foreign banks are permitted to have cross-border lending to Ukrainian banks, corporations, and households with licenses
0.00				foreign banks are permitted to have cross-border lending to any type of Ukrainian residents without restrictions
Other restrictions				
0.10				Other business of banks - insurance and securities
1.00				banks can only provide banking services
0.50		0.50	0.50	banks can provide banking services plus one other line of business - insurance or security services
0.00				banks have no restrictions on conducting other lines of business
0.05				Expanding the number of banking outlets
1.00				one banking outlet with no new banking outlet permitted
0.75				number of banking outlets is limited in number and location
0.25				expansion of banking outlets is subject to non-prudential regulatory approval
0.00		0.00	0.00	no restrictions on banks expanding operations
0.02				Composition of the board of directors
		0.00	0.00	The score is inversely proportional to the percentage of the board that can comprise foreigners
0.01				Temporary movement of people
1.00				no temporary entry of executives, senior managers and/or specialists
0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
0.25				temporary entry of executives, senior managers and/or specialists up to 90 days
0.00	0.00	0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.27			
TRI_d	0.20			

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2003

Table C2

The trade restrictiveness index (TRI) on insurance in Ukraine

Weight	Scoring	Score chosen			Category
		NRES foreign	RES foreign	RES domestic	
0.10					Restrictions on commercial presence
	1.00				Licensing of insurance companies
	0.75				no new license is allowed
	0.20	0.20	0.20	0.20	licenses are issued through complicated (discriminately) and costly procedure
	0.10				licenses are generally issued with application fee and several requirements
	0.00				licenses are generally issued with application fee
					licenses are automatically issued upon application without any cost
0.10					Form of commercial presence
	1.00	1.00			measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
0.20					Direct investment: equity participation permitted
		0.00	0.00	0.00	the score is inversely proportional to the maximum equity participation permitted in an existing domestic insurance company
0.10					Direct investment: restrictions on certain types of services
	1.00				restrictions on providing some types of insurance services
	0.00	0.00	0.00	0.00	no restrictions on providing any type of insurance services
0.10					Joint venture arrangements
	1.00				issues no new insurance license and no entry is allowed through a joint venture with a domestic insurance company
	0.50				foreign company entry is only through a joint venture with a domestic insurance company
	0.00	0.00	0.00	0.00	no requirement for a insurer to enter through a joint venture with a domestic insurance company
0.02					Permanent movement of people
	1.00				no entry of executives, senior managers and/or specialists
	0.80				executives, specialists and/or senior managers can stay up to 1 year
	0.60				executives, specialists and/or senior managers can stay up to 2 years
	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
Cross-border trade					
0.20					Cross-border insurance supply by foreign insurance companies
	1.00	1.00			foreign insurance companies are not permitted to provide Ukrainian residents with any type of cross-border insurance services in Ukraine
	0.75				foreign insurance companies are permitted to provide Ukrainian residents with certain type of cross-border insurance services in Ukraine
	0.50				foreign insurance companies are permitted to provide Ukrainian residents with any type of cross-border insurance services with licenses in Ukraine

Table C2 (cont.)

The trade restrictiveness index (TRI) on insurance in Ukraine

	0.00		0.00	0.00	foreign insurance companies are permitted to provide Ukrainian residents with any type of cross-border insurance services without restrictions in Ukraine
					Other restrictions
0.10					Other business of insurance companies - banking and securities
	1.00		1.00	1.00	insurance companies can only provide insurance services
	0.50				insurance companies can provide insurance services plus one other line of business - banking or security services
	0.00				banks have no restrictions on conducting other lines of business
0.05					Expanding the number of insurance outlets
	1.00				one insurance outlet with no new insurance outlet permitted
	0.75				number of insurance outlets is limited in number and location
	0.25				expansion of insurance outlets is subject to non-prudential regulatory approval
	0.00		0.00	0.00	no restrictions on insurance companies expanding operations
0.02					Composition of the board of directors
			0.00	0.00	The score is inversely proportional to the percentage of the board that can comprise foreigners
0.01					Temporary movement of people
	1.00				no temporary entry of executives, senior managers and/or specialists
	0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
	0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
	0.25				temporary entry of executives, senior managers and/or specialists up to 90 days
	0.00	0.00	0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.42				
TRId	0.30				

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2003

Table C3

The trade restrictiveness index (TRI) on securities in Ukraine

Weight	Scoring	Score chosen			Category
		NRES foreign	RES foreign	RES domestic	
Restrictions on commercial presence					
0.10					Licensing of securities services
	1.00				no new license is allowed
	0.75				licenses are issued through complicated (discriminately) and costly procedure
	0.20	0.20	0.20	0.20	licenses are generally issued with application fee and several requirements
	0.10				licenses are generally issued with application fee
	0.00				licenses are automatically issued upon application without any cost
0.10					Form of commercial presence
	1.00	1.00			measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
0.20					Direct investment: equity participation permitted
		0.00	0.00	0.00	the score is inversely proportional to the maximum equity participation permitted in an existing domestic securities company
0.10					Direct investment: restrictions on certain types of services
	1.00				restrictions on providing some types of securities services
	0.00	0.00	0.00	0.00	no restrictions on providing any type of securities services
0.10					Joint venture arrangements
	1.00				issues no new securities license and no entry is allowed through a joint venture with a domestic securities company
	0.50				foreign securities company entry is only through a joint venture with a domestic securities company
	0.00	0.00	0.00	0.00	no requirement for a securities company to enter through a joint venture with a domestic securities company
0.02					Permanent movement of people
	1.00				no entry of executives, senior managers and/or specialists
	0.80				executives, specialists and/or senior managers can stay up to 1 year
	0.60				executives, specialists and/or senior managers can stay up to 2 years
	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
Cross-border trade					
0.10					Cross-border securities supply by foreign securities companies
	1.00				foreign securities companies are not permitted to provide Ukrainian residents with any type of cross-border securities services in Ukraine
	0.75	0.75			foreign securities companies are permitted to provide Ukrainian residents with certain types of cross-border securities services in Ukraine

Table C3 (cont.)

The trade restrictiveness index (TRI) on securities in Ukraine

0.50				foreign securities companies are permitted to provide Ukrainian residents with any type of cross-border securities services with licenses in Ukraine
0.00				foreign securities companies are permitted to provide Ukrainian residents with any type of cross-border securities services without restrictions in Ukraine
0.10				Cross-border securities purchase by Ukrainian residents
1.00				Ukrainian residents are not permitted to purchase any cross-border securities services abroad
0.75				Ukrainian residents are permitted to purchase certain type of cross-border securities services abroad with some restrictions
0.50	0.50			Ukrainian residents are permitted to purchase any type of cross-border securities services abroad with licenses
0.00		0.00	0.00	Ukrainian residents are permitted to purchase any type of cross-border securities services without restrictions abroad
Other restrictions				
0.10				Other business of securities companies - banking and insurance
1.00		1.00	1.00	securities companies can only provide securities services
0.50				securities companies can provide securities services plus one other line of business - banking or insurance services
0.00				securities companies have no restrictions on conducting other lines of business
0.05				Expanding the number of securities outlets
1.00				one securities outlet with no new securities outlet permitted
0.75				number of securities outlets is limited in number and location
0.25				expansion of securities outlets is subject to non-prudential regulatory approval
0.00		0.00	0.00	no restrictions on securities companies expanding operations
0.02				Composition of the board of directors
		0.00	0.00	the score is inversely proportional to the percentage of the board that can comprise foreigners
0.01				Temporary movement of people
1.00				no temporary entry of executives, senior managers and/or specialists
0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
0.25				temporary entry of executives, senior managers and/or specialists up to 90 days
0.00		0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.35			
TRId	0.23			

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2003

Table C4

The trade restrictiveness index (TRI) on fixed telecommunications in Ukraine

Weight	Scoring	Score chosen			Category
		NRES foreign	RES foreign	RES domestic	
0.20					Restrictions on commercial presence
					Licensing of fixed line services
	1.00				(a) Regional line service no new license is allowed
	0.75				licenses are issued through complicated (discriminately) and costly procedure
	0.20	0.20	0.20	0.20	licenses are generally issued with application fee and several requirements
	0.10				licenses are generally issued with application fee
	0.00				licenses are automatically issued upon application without any cost
	1.00				(b) Domestic long distance line service no new license is allowed
	0.75				licenses are issued through complicated (discriminately) and costly procedure
	0.20	0.20	0.20	0.20	licenses are generally issued with application fee and several requirements
	0.10				licenses are generally issued with application fee
	0.00				licenses are automatically issued upon application without any cost
	1.00				(c) International line service no new license is allowed
	0.75				licenses are issued through complicated (discriminately) and costly procedure
	0.20	0.20	0.20	0.20	licenses are generally issued with application fee and several requirements
	0.10				licenses are generally issued with application fee
	0.00				licenses are automatically issued upon application without any cost
0.10					Form of commercial presence
	1.00	1.00			(a) Regional line service measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
	1.00	1.00			(b) Domestic long distance line service measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
	1.00	1.00			(c) International line service measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
0.20			N/A	N/A	Direct investment: equity participation permitted
		0.00		0.00	the score is inversely proportional to the maximum equity participation permitted in an existing domestic company
0.10			N/A	N/A	Direct investment: restrictions on certain types of services
	1.00				restrictions on providing some types of telephone services
	0.00	0.00		0.00	no restrictions on providing any type of telephone services
0.10				N/A	Joint venture arrangements
	1.00				issues no new licenses and no entry is allowed through a joint venture with a domestic company
	0.50				foreign company can enter only through a joint venture with a domestic company

Table C4 (cont.)

The trade restrictiveness index (TRI) on fixed telecommunications in Ukraine

	0.00	0.00	0.00	0.00	no requirements for foreign companies to enter through a joint ventures with a domestic company
0.02				N/A	Permanent movement of people
	1.00				no entry of executives, senior managers and/or specialists
	0.80				executives, specialists and/or senior managers can stay up to 1 year
	0.60				executives, specialists and/or senior managers can stay up to 2 years
	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
					Other restrictions
0.10		N/A			Third party resale of leased lines
	1.00				resale is not permitted
	0.00		0.00	0.00	resale is permitted in any market
0.05		N/A			End user tariff
	1.00				end user tariff is determined by rate of return regulation
	0.50		0.50	0.50	end user tariff is determined by price cap rule established by the authority
	0.00				end user tariff is determined by market force (no regulation)
0.05		N/A			Regulation of network interconnection
	1.00				interconnection is completely regulated by the authority
	0.50		0.50	0.50	interconnection is determined by private negotiation in general, but general terms are determined by the authority
	0.00				interconnection is completely regulated by private negotiations (no regulation)
0.05		N/A			Market structure
	1.00				(a) Regional line service
	0.00		0.00	0.00	monopoly
					competition among plural providers
	1.00		1.00	1.00	(b) Domestic long distance line service
	0.00				monopoly
					competition among plural providers
	1.00		1.00	1.00	(c) International line service
	0.00				monopoly
					competition among plural providers
0.02				N/A	Composition of the board of directors
		0.00	0.00	0.00	the score is inversely proportional to the percentage of the board that can comprise foreigners
0.01				N/A	Temporary movement of people
	1.00				no temporary entry of executives, senior managers and/or specialists
	0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
	0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
	0.25				temporary entry of executives, senior managers and/or specialists up to 90 days
	0.00	0.00	0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.22				
TRId	0.10				

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2004

Table C5

The trade restrictiveness index (TRI) on mobile telecommunications in Ukraine

Weight	Scoring	Score chosen			Category
		NRES foreign	RES foreign	RES domestic	
Restrictions on commercial presence					
0.20					Licensing of mobile phone services
	1.00				no new license is allowed
	0.75				licenses are issued through complicated (discriminately) and costly procedure
	0.20	0.20	0.20	0.20	licenses are generally issued with application fee and several requirements
	0.10				licenses are generally issued with application fee
	0.00				licenses are automatically issued upon application without any cost
0.10					Form of commercial presence
	1.00	1.00			measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
0.20					Direct investment: equity participation permitted
		0.00	0.00	0.00	the score is inversely proportional to the maximum equity participation permitted in an existing domestic company
0.10					Direct investment: restrictions on certain types of services
	1.00				restrictions on providing some types of telephone services
	0.00	0.00	0.00	0.00	no restrictions on providing any type of telephone services
0.10					Joint venture arrangements
	1.00				issues no new licenses and no entry is allowed through a joint venture with a domestic company
	0.50	0.50			foreign company can enter only through a joint venture with a domestic company
	0.00		0.00	0.00	no requirements for foreign companies to enter through a joint ventures with a domestic company
0.02					Permanent movement of people
	1.00				no entry of executives, senior managers and/or specialists
	0.80				executives, specialists and/or senior managers can stay up to 1 year
	0.60				executives, specialists and/or senior managers can stay up to 2 years
	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
					Other restrictions
0.05					Regulation of interconnection between fixed line and mobile or between mobiles
	1.00				interconnection is completely regulated by the authority
	0.50		0.50	0.50	interconnection is determined by private negotiationa in general but general terms is determined by the authority
	0.00				interconnectiona is completely determined by private negotiations (no regulation)
0.10					End user tariff
	1.00				end user tariff is determined by rate of return regulation

Table C5 (cont.)

The trade restrictiveness index (TRI) on mobile telecommunications in Ukraine

	0.50				end user tariff is determined by price cap rule established by the authority
	0.00	0.00	0.00		end user tariff is determined by market force (no regulation)
0.05					Allocation of radio spectrum
	1.00				allocation is discriminatory decided by the authority
	0.20	0.20	0.20		allocated by auction with application fee
	0.10				allocated by auction without application fee
	0.00				radio frequencies are obtained with mobile services
0.05					Market structure
	1.00				monopoly
	0.00	0.00	0.00		competition among plural providers
0.02					Composition of the board of directors
		0.00	0.00	0.00	the score is inversely proportional to the percentage of the board that can comprise foreigners
0.01					Temporary movement of people
	1.00				no temporary entry of executives, senior managers and/or specialists
	0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
	0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
	0.25				temporary entry of executives, senior managers and/or specialists up to 90 days
	0.00	0.00	0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.18				
TRId	0.10				

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2004

Table C6

The trade restrictiveness index (TRI) on internet services in Ukraine

The trade restrictiveness index (TRI) on internet services in Ukraine					
Weight	Scoring	Score chosen			Category
		NRES foreign	RES foreign	RES domestic	
Restrictions on commercial presence					
0.20					Licensing of internet services
	1.00				no new license is allowed
	0.75				licenses are issued through complicated (discriminately) and costly procedure
	0.20				licenses are generally issued with application fee and several requirements
	0.10				licenses are generally issued with application fee
	0.00	0.00	0.00	0.00	licenses are automatically issued upon application without any cost
0.10					Form of commercial presence
	1.00	1.00			measures which restrict or require a specific type of establishments
	0.00		0.00	0.00	no restrictions on establishment
0.20				N/A	Direct investment: equity participation permitted
		0.00	0.00		the score is inversely proportional to the maximum equity participation permitted in an existing domestic company
0.10				N/A	Direct investment: restrictions on certain types of services
	1.00				restrictions on providing some types of internet services
	0.00	0.00	0.00	0.00	no restrictions on providing any type of internet services
0.10				N/A	Joint venture arrangements
	1.00				issues no new licenses and no entry is allowed through a joint venture with a domestic company
	0.50	0.50			foreign company can enter only through a joint venture with a domestic company
	0.00		0.00	0.00	no requirements for foreign companies to enter through a joint ventures with a domestic company
0.02				N/A	Permanent movement of people
	1.00				no entry of executives, senior managers and/or specialists
	0.80				executives, specialists and/or senior managers can stay up to 1 year
	0.60				executives, specialists and/or senior managers can stay up to 2 years
	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
Other restrictions					
0.10		N/A			Regulation of network interconnection
	1.00				interconnection is completely regulated by the authority
	0.50		0.50	0.50	interconnection is determined by private negotiation in general. but general terms are determined by the authority
	0.00				interconnection is completely regulated by private negotiations (no regulation)
0.10		N/A			Infrastructure
	1.00				providers are not allowed either to build their own network or to own/lease their international data gateways

Table C6 (cont.)

The trade restrictiveness index (TRI) on internet services in Ukraine

	0.50				providers are allowed either to build their own network or to own/lease their international data gateways
	0.00		0.00	0.00	providers are allowed to build their own network as well as to own/lease their international data gateways
0.05		N/A			Market structure
	1.00				monopoly
	0.00		0.00	0.00	competition among plural providers
0.02				N/A	Composition of the board of directors
		0.00	0.00	0.00	the score is inversely proportional to the percentage of the board that can comprise foreigners
0.01				N/A	Temporary movement of people
	1.00				no temporary entry of executives, senior managers and/or specialists
	0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
	0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
	0.25				temporary entry of executives, senior managers and/or specialists up to 90 days
	0.00	0.00	0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.15				
TRId	0.10				

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2004

Table C7

The trade restrictiveness index (TRI) on railway transportation of freight in Ukraine

Weight	Sub-weight	Scoring	Score chosen			Category
			NRES	RES	RES	
			foreign	foreign	domestic	
0.20						Restrictions on Commercial Presence
	0.05					1. Extent of commercial presence
		1.00	1.00	1.00	1.00	(a) Within a regional railway unit transportation no access
		0.66				access is allowed through complicated and costly procedures
		0.33				access is allowed with several restrictions
		0.00				full access, without restrictions
	0.05					(b) Between regional railway units transportation
		1.00	1.00	1.00	1.00	no access
		0.66				access is allowed through complicated and costly procedures
		0.33				access is allowed with several restrictions
		0.00				full access, without restrictions
	0.05					(c) International transportation
		1.00	1.00	1.00	1.00	no access
		0.66				access is allowed through complicated and costly procedures
		0.33				access is allowed with several restrictions
		0.00				full access, without restrictions
	0.05					(d) Transit transportation
		1.00	1.00	1.00	1.00	no access
		0.66				access is allowed through complicated and costly procedures
		0.33				access is allowed with several restrictions
		0.00				full access, without restrictions
0.20						2. Separation of infrastructure
		1.00				no separation
		0.50	0.50	0.50	0.50	organisational separation
		0.00				full separation
0.10						3. Separation of rolling stock
	0.025					(a) Within a regional railway unit transportation
		1.00				integrated/ not allowed
		0.00	0.00	0.00	0.00	separated/allowed
	0.025					(b) Between regional railway units transportation
		1.00				integrated
		0.00	0.00	0.00	0.00	separated
	0.025					(c) International transportation
		1.00				integrated
		0.00	0.00	0.00	0.00	separated
	0.025					(d) Transit transportation
		1.00				integrated
		0.00	0.00	0.00	0.00	separated
0.20						4. Direct Investment: Foreign equity participation permitted
			1.00	1.00	1.00	the score is inversely proportional to the maximum equity participation permitted in an existing domestic company
0.02						5. Permanent movement of foreigners
		1.00				no entry of executives, senior managers and/or specialists

Table C7 (cont.)

The trade restrictiveness index (TRI) on railway transportation of freight in Ukraine

	0.80				executives, specialists and/or senior managers can stay up to 1 year
	0.60				executives, specialists and/or senior managers can stay up to 2 years
	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
0.10					Other restrictions
					6. Destination services
	0.20	0.20	0.20	0.20	foreigners generally cannot own train stations
	0.20	0.00	0.00	0.00	foreigners generally cannot provide fuel supply services
	0.20	0.00	0.00	0.00	foreigners generally cannot provide repair and maintenance services of cars
	0.20	0.20	0.00	0.00	foreigners generally cannot provide railway services trade and marketing
	0.20	0.20	0.20	0.20	foreigners generally cannot provide computer reservation system
0.10					7. End user tariff
	1.00				end user tariff is determined by rate of return regulation
	0.50	0.50	0.50	0.50	end user tariff is determined by price cap rule established by the authority
	0.00				end user tariff is determined by market force (no regulation)
0.05					8. Discretionary imposition of restrictions
	1.00	1.00	1.00	1.00	government is able to impose selective restrictions
	0.00				government is unable to impose selective restrictions
0.02					9. Composition of the board of directors
		0.00	0.00	0.00	the score is inversely proportionately to the percentage of the board that can comprise foreigners
0.01					10. Temporary movement of foreigners
	1.00				no temporary entry of executives, senior managers and/or specialists
	0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
	0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
	0.25				temporary entry of executives, senior managers and/or specialists up to 90 days
	0.00	0.00	0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.64				
TRId	0.00				

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2003

The trade restrictiveness index (TRI) on railway transportation of passengers in Ukraine

173

Table C8 (cont.)

The trade restrictiveness index (TRI) on railway transportation of passengers in Ukraine

	0.40				executives, specialists and/or senior managers can stay up to 3 years
	0.20				executives, specialists and/or senior managers can stay up to 4 years
	0.00	0.00	0.00	0.00	executives, specialists and/or senior managers can stay a period of 5 years or more
0.10					Other restrictions
					6. Destination services
	0.20	0.20	0.20	0.20	foreigners generally cannot own train stations
	0.20	0.00	0.00	0.00	foreigners generally cannot provide fuel supply services
	0.20	0.00	0.00	0.00	foreigners generally cannot provide repair and maintenance services of cars
	0.20	0.20	0.00	0.00	foreigners generally cannot provide railway services trade and marketing
	0.20	0.20	0.20	0.20	foreigners generally cannot provide computer reservation system
0.10					7. End user tariff
	1.00				end user tariff is determined by rate of return regulation
	0.50		0.50	0.50	end user tariff is determined by price cap rule established by the authority
	0.00				end user tariff is determined by market force (no regulation)
0.05					8. Discretionary imposition of restrictions
	1.00		1.00	1.00	government is able to impose selective restrictions
	0.00				government is unable to impose selective restrictions
0.02					9. Composition of the board of directors
		0.00	0.00	0.00	the score is inversely proportionately to the percentage of the board that can comprise foreigners
0.01					10. Temporary movement of foreigners
	1.00				no temporary entry of executives, senior managers and/or specialists
	0.75				temporary entry of executives, senior managers and/or specialists up to 30 days
	0.50				temporary entry of executives, senior managers and/or specialists up to 60 days
	0.25				temporary entry of executives, senior managers and/or specialists up to 90 days.
	0.00	0.00	0.00	0.00	temporary entry of executives, senior managers and/or specialists over 90 days
TRI	0.64				
TRI_d	0.00				

Source: Osteuropa-Institut München. Copenhagen Economics. Institut for Economic Research and Policy Consulting based on Kimura et al. 2003