CASE Network Reports

# Economic Feasibility, General Economic Impact and Implications of a Free Trade Agreement Between the European Union and Georgia

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# Abbreviations

ASYCUDA – Automated System of Customs Data
ENP – European Neighbourhood Policy
ENP AP - European Neighbourhood Policy Action Plan
FTA – Free Trade Agreement
GOST – ex-Soviet product standard
GSP -- Generalized System of Preferences
HACCP -- Hazard Analysis and Critical Control Points system
IFRS -- International Financial Reporting Standards
IIT – Intra-Industry Trade
IPR - Intellectual Property Rights
ISO – International Standards Organization
MoA – the Ministry of Agriculture of Georgia
MoE – the Ministry of Economy of Georgia
NTB – Non-Tariff Barriers
PCA – Partnership and Co-operation Agreement
RCA – Revealed Comparative Advantage
Sakpatenti -- the National Intellectual Property Centre of Georgia
SNIPs - ex-Soviet construction norms and rules
SPS – Sanitary and phytosanitary measures
TBT – Technical Barriers to Trade
TRIPS – Trade-Related Aspects of Intellectual Property Rights
WIPO – World Intellectual Property Organization
WTO – World Trade Organization

## The editor and co-author

**Maryla Maliszewska** has been working with the CASE Foundation since 1996. Her research interests cover modeling of international trade flows, implications of regional integration using CGE models, determinants of real exchange rate, location of production and agglomeration externalities in transition. Her CGE study on the impact of Poland's accession to the EU was rewarded with the second prize at the annual GDN's Research Medals Competition for "Outstanding Research in Development" in January 2004. In 1997-98 and in 1999, she worked as a CASE representative in the ProDemocratia advisory mission in Romania. She also worked as a consultant at the World Bank in projects on the CIS countries, Albania and Iraq. Recently she led and co-edited a feasibility study on the Economic Implications of a Free Trade Agreement (FTA) between the EU and Russia and two feasibility studies on the Economic Implications of a FTA between the EU and Georgia and the EU and Armenia. She is also a deputy project co-coordinator of the ENEPO project. Maryla Maliszewska graduated from the University of Sussex (1996) and Warsaw University's Department of Economics (1997). She successfully defended her DPhil thesis at the University of Sussex in 2004.

# Preface

This study of the feasibility, costs and benefits of a free trade agreement between the EU and Georgia was conducted from July 2007 to April 2008 under contract with the European Commission. The first meeting in Brussels in September 2007 with staff members of Directorates-General for Trade, External Relations, Economic and Financial Affairs, Internal Market and Services, Competition, Enterprise and Industry proved indispensable in our work on this report. During mission to Tbilisi in October 2007 the consultations were held with a number of ministries, research institutes and business organizations. We greatly benefited from consultations with the Ministry of Economic Development, Standardization Office, UN Team Leader for Economic Development, State Minister for Reforms Coordination, Ministry of Energy, Office of Deputy State Minister for European and Euro Atlantic Integration, American Chamber of Commerce, Georgian Chamber of Commerce, IMF, World Bank, EBRD, GEPLAC – Georgian European Policy Legal Advice Centre, Wine Producers Association, Federation of Georgian Businessman. The European Commission Delegation to Georgia provided us with extensive information, consultation on key policy issues and organizational support, for which we are very grateful.

Several authors contributed to this study. David Dyker is the author of the introductory section (chapter 2) and the analysis of services sectors (chapter 7). Michael Emerson is the author of section on regional integration scenarios (chapter 3) and he also provided very valuable comments on all chapters in this study. Sveta Taran, Peter Holmes and Michael Gasiorek are the authors of chapter 4 employing the Sussex Framework to study the impact of a free trade agreement. Michael Gasiorek and Peter Holmes also provided valuable comments on the CGE modelling section. Evgeny Polyakov, Andrei Roudoi as well as Nino Chokheli and Giorgi Pertaia contributed to the chapter on the institutional and regulatory harmonization (chapter 5). The team from the Global Insight including Andre Jungmittag, Vicki Korchagin, Evgeny Polyakov and Andrei Roudoi supervised the implementation of the survey and completed the analysis of the survey results (chapter 6). Also the same team from Global Insight contributed chapter 10 on

sensitive sectors. The implementation of the survey of NTBs was conducted by CASE-Transcaucasus under the supervision of Tamaz Asatiani. The analysis of FDI flows and their likely trends following an FTA was prepared by Malgorzata Jakubiak, while the estimation of the potential FDI flows was conducted by Alina Kudina (section 8.4). The CGE analysis (chapter 9) was written by Maryla Maliszewska, who also acted as the project manager and the editor of the study. Finally, conclusions are a collective work of all the authors. Sierz Naurodski and Elena Kozarzewska provided an excellent administrative support. I would like to take this opportunity to thank them all for their cooperation, valuable contributions and comments.

Maryla Maliszewska
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# Executive Summary

Our mandate was to consider the economic feasibility and possible impact of a free trade agreement between the European Union and Georgia. The study has been conducted by a group of researchers from Poland, Ukraine, UK, US and Georgia. All have worked on this project in an independent capacity. The European Commission has also commissioned a similar study for Armenia. Even though the methodology of the two reports is the same, the two studies are independent and the economic feasibility and impact of a free trade agreement with each country is assessed on its own merits.

## Defining the FTA scenarios

Throughout the report we look at different degrees of integration between Georgia and the EU. We start with two variants of a simple free trade agreement (FTA) assuming the elimination of tariffs and quantitative restrictions in the bilateral trade between Georgia and the EU. The first **Simple FTA** scenario assumes full liberalization of trade in industrial products and halving of tariffs and elimination of all quantitative restrictions on agricultural and food products on Georgian exports to the EU and vice versa. The second **Simple FTA BIS** scenario assumes full elimination of tariffs and quantitative restrictions on all products in the bilateral trade between Georgia and the EU. Further, we look at three Deep FTAs. The Deep FTAs assume various degrees of changes in the domestic policy and business environment affecting trade and investment in Georgia. An **FTA+** combines a Simple FTA with a consolidation of the domestic reforms that took place over the recent years in a binding agreement. The FTA+ could consolidate measures such as unilateral recognition of EU and international product standards and facilitation of customs procedures. Furthering the level of integration via a **Deep FTA** would involve a more complete elimination of barriers to trade and investment throughout various sectors of the economy. This would also result in a more extensive commitment to the reform of domestic policies in the direction of EU standards in Georgia. Finally, the comprehensive set of reforms resulting from the Deep FTA along with more wide-ranging flanking measures e.g. on competition and corruption could lead to a re-branding of Georgia as a favourable investment location. This is our scenario **Deep FTA+** where we assume that Georgia would

achieve a notable reduction in the perceived risk premium on investment, reflecting a sustained re-branding of Georgia as a favorable and safe place to invest.

## Economic context

Georgia is currently enjoying very rapid GDP growth, notwithstanding the very serious economic sanctions imposed on it by Russia since 2006. This rapid growth is expected to continue with only a slight deceleration over the next two to three years. FDI has been growing, but the long term prospects for further FDI inflows are not certain. Georgia has pursued a very liberal policy, especially when it comes to trade and has been largely successful in eliminating petty corruption. However, some serious problems remain with the implementation of law.

## Regional FTAs

Georgia has free trade agreements with the CIS countries and has recently signed an FTA with Turkey. The Georgia-Russia FTA is dysfunctional. Since the end of 2006 Russia has closed its land frontier and civil aviation connections with Georgia, and banned the import of wines and agricultural produce[1]. Georgia has already acted radically by introducing zero tariffs unilaterally for almost all industrial products and action to de-corrupt the customs services. In view of its location and economic strategy Georgia also has a major interest in possible regional multilateral free trade initiatives in the wider Black Sea region, whereas a regional FTA limited to only the South Caucasus would be of little interest.

## Impact of the EU-Georgia FTA – Sussex Framework

Georgia has fully liberalized trade on its side for non-agricultural products (with very minor exceptions) and significantly also for agricultural goods as a result of the 2006 tariff reductions. Georgian products benefit from the GSP status in the markets of the EU, the USA, Canada, Switzerland, Japan, and Turkey. Under the EU's GSP, Georgia has qualified for the special arrangement for sustainable development and good governance (GSP+) offering it a particularly advantageous access to the EU market. Given that trade between the EU and Georgia is almost tariff free, there is little scope for significant shallow integration induced welfare effects. Distortions in trade are possibly created by non-tariff barriers (infrastructure, regulatory and institutional) and thus cooperation between Georgia and the EU on their reduction should be welfare increasing. Any significant welfare gains therefore are expected to come from political and economic stability of the region and in particular from deeper integration with the EU.

[1] Very recent information suggests that Russia now intends to relax these sanctions.

## Institutional and regulatory harmonization

Georgia has made a certain progress in regulatory harmonization with the EU over a short time period. In many areas, Georgian legislation is already rather close to that of the EU. The most important issues that arise now are in the implementation of the adopted legislation. Georgia still lags behind in implementing its obligations under the ENP Action Plan, especially in areas of competition policy, IPRs, product standards, and food safety.

In a Deep FTA, flanking measures will probably go along the path outlined in the PCA and ENP Action Plan. As recent experience shows, laws on the books and obligation under the PCA and ENP Action Plan did not stop Georgia from effectively scrapping the enforcement of SPS measures and product standards for domestic producers until the time when the markets demonstrate the need for such institutions and export capacity develop. Therefore, implementation of the flanking measures would be conditional on the position of the Georgian Government as regards desirable degree of approximation to EU *aquis* as well as ability to implement in practice adopted laws and regulations.

## Survey of non-tariff barriers (NTBs)

The survey results indicate that the Georgian firms do not feel much burden resulting from NTBs in European markets. This perception is partially explained by the nature of Georgian exports to the EU which include mostly mineral and raw materials that satisfy EU regulations with little difficulty. There are just two agricultural products exported to the EU – wine and hazelnuts, which have special (and rather easy to comply with) arrangements for SPS conformity certification. In addition manufactured products are often produced under special arrangements similar to the outward processing scheme. Under such arrangements, the Georgian firms provide production services rather than the finished product. The European partners take care of the most of the logistical issues and requirement certifications. Hence, Georgian counterparts are not even familiar with full costs involved in exporting to the EU. The average Georgian company does not export to the EU, mainly because it cannot offer an attractive product meeting quality and safety standards of the European market, but those that do export show signs of entering into production chains.

## Services sectors

**Tourism:** This is an area of great natural advantage for Georgia. The main issue facing the Georgian tourist industry is the development of the related services

needed to exploit the full tourist potential of the country. Foreign direct investment and government financed investment in tourism has been growing rapidly in Georgia over the last few years. Despite these investments Georgia still does not have facilities capable of hosting large conferences, congresses or exhibitions. However a national programme for marketing tourism was adopted in 2008.

### Information and Communication Technology

This is a uniquely important sector, because it provides a whole range of essentially technological services, which can be used to upgrade production and management systems in virtually every sector of the economy. There are significant problems of excessive market power in both fixed and mobile telephony markets in Georgia. Local institutions are not powerless in the face of these problems, but comprehensive liberalization of the telecoms market will require significant strengthening of competition policy and this could form part of a Deep FTA+.

### Construction and Engineering services

Georgia does not export construction services. But she does export aircraft maintenance services. She does so, however, only to Turkmenistan, in payment of an old debt relating to gas supplies. When that debt is paid off, the provision of these services to Turkmenistan will probably cease. The circumstances here are, therefore, very specific, and the impact of any possible FTA is probably negligible.

### Financial Services and Banking

The banking sector is largely liberalized and is now about 50% foreign-owned. Under the WTO agreements the Georgian insurance sector remains subject to some restrictions, mainly in relation to presence of natural persons, but these do not appear to be onerous. EU-owned subsidiaries are already obliged to fulfil EU financial market regulations (including home country regulatory control), so there is an automatic degree of acquis compliance coming with increased FDI in this sector. This would be systematised under a Deep FTA+.

### Energy-related services

Under Georgia's WTO accession agreement energy-related services are largely liberalized, and the electricity industry is mainly privately owned, apart from high-voltage transmission lines. There are possibilities for Georgia to become an energy-exporting country, in addition to its newly enhanced role as a transiting country. But this would require much better regional cooperation at the political level. In principle, a Deep FTA+ between Georgia and the EU would buttress regional

energy cooperation, especially if it were flanked by similar agreements with Armenia, Azerbaijan and Russia.

### Implications of an FTA for FDI flows

Up to 2006 FDI inflows to Georgia had been totalling below USD 0.5 billion a year. At the moment, foreign direct investors into Georgia seem to be primarily resource and market driven. The most plausible new sectors for increased FDI are in the service sectors, both for business services if Georgia becomes a regional transport and commercial hub and for tourism. Already the major unilateral liberalisation of the service sectors as well as for trade in goods is helping here. Potential inward FDI to Georgia following a Deep FTA+ with the EU could be substantially higher than the current flows. Simulations suggest that the FDI stock in Georgia might achieve a five-fold increase by 2020. However, this assumes that Georgia makes further progress in its transition reforms.

## Sectors of importance

### Agro-food sector

A Simple FTA/Simple FTA BIS with the EU would not have a large effect on the agro-food sector, because the EU import tariffs are not the main hampering factor. This is notably true for Georgian wine exports to the EU market, where the building of favourable brand recognition of Georgian wines calls for modern production technologies and marketing skills, by comparison with its traditional markets mainly in the CIS. In most other agri-food branches it would be vital for Georgia to implement EU regulations and quality standards, which would be an objective for a Deep FTA.

### Energy

It cannot be expected that a Simple FTA would stimulate in the short run any further improvement in the functioning of this sector. A Deep FTA+ could have, at least in the medium term, a potential for bringing a more significant change to the sector, assuming it would entail changes in the legal and regulatory framework and particularly in its implementation. In general, the Georgian energy sector depends primarily on strategic pipeline decisions, and not on an FTA. An exception may be the hydropower sector.

### CGE Model and Simulations

A range of scenarios has been simulated, starting with the effects of liberalisation measures adopted by respectively Georgia (unilateral significant tariff liberalisation of trade in goods along with the recognition of foreign product

standards) and the EU (granting Georgia GSP+ under its new GSP scheme) in 2006 (baseline scenario), which could boost the GDP growth in Georgia by 1%. The **Simple FTA** and **Simple FTA BIS** scenarios would not add much to this, since essentially only the remaining agro-food tariffs would be reduced or dismantled. However this simulation ignores possible confidence and synergy effects that could come from the binding in of the multiple liberalization and reform measures that Georgia has made in the recent past. These confidence effects can be modeled as reductions in the perceived risk premium attached to investment in Georgia, which could lead to additional welfare gains of 2.4% of GDP in the scenario **FTA+**. Additional gains of 1.7% of GDP could be reaped from a **Deep FTA** that would lock in further domestic policy changes such as conformity with EU regulatory standards, improvement in customs procedures and further facilitation of FDI in service sectors. If as a result of a Deep FTA and further flanking measures such as on competition and corruption Georgia achieved a notable reduction in the perceived risk premium on investment, reflecting a sustained re-branding of Georgia as a favorable and safe place to invest, the total gains on the top of the ones achieved out of the 2006 liberalisation might reach around 6.5% of GDP – scenario **Deep FTA+.**

## Policy recommendations

Overall we conclude that a free trade agreement between Georgia and the EU is feasible, since Georgia has already taken liberalising measures going considerably beyond a classic Simple FTA and on the other hand Georgia benefits from the EU GSP+. We analyze the range of scenarios for deep integration that show the benefits of the various degrees of integration. The final degree of deep integration would be a result of negotiations between Georgia and the EU and is not up to us to anticipate. The greatest benefits would accrue with a Deep FTA+ involving a significant approximation of law along the priorities of the ENP Action Plan for Georgia along with additional flanking measures on e.g. competition and corruption and their effective implementation, which would mean a re-branding of Georgia as a safe and attractive investment location. At the same time, given the current progress with the implementation of the ENP Action Plan, serious questions remain as to both the willingness and institutional capacity of Georgia to undertake further commitments in the regulatory area. We note that the human resources of the Government bodies are uneven in terms of education, qualifications, and international experience. However, this situation could be eased with technical assistance.

# 1. Introduction

The aim of this study is to evaluate the economic feasibility and implications of a free trade agreement between the EU and Georgia as well as of greater regional integration between Georgia, Armenia and the Black Sea countries. The study uses a mix of qualitative and quantitative analysis along with surveys, sectoral studies and local expert knowledge. This approach will allow the policy maker not to rely on any single methodology while providing an interrelated analysis of various aspects of free trade agreements (FTAs).

The study begins with an account of the status quo reporting on key features of the Georgian economy and most recent trade and economic developments, including a brief overview of EU-Georgia trade and economic relations (chapter 2). Both chapter 3 and chapter 4 include the analysis of trade relations with the EU and the remaining Georgia trade partners in greater detail. In chapter 3 we study the options for future FTAs between Georgia and its neighbours. This is followed by the diagnostic analysis based on various trade and economic indicators (Sussex Framework) used to provide an insight into the trade and welfare implications of greater integration with the EU and within the region (chapter 4).

Throughout the report we look at different degrees of integration between Georgia and the EU. We start with two variants of a simple free trade agreement (FTA) assuming the elimination of tariffs and quantitative restrictions in the bilateral trade between Georgia and the EU. The first **Simple FTA** scenario assumes full liberalization of trade in industrial products and halving of tariffs and elimination of all quantitative restrictions on agricultural and food products on Georgian exports to the EU and vice versa. The second **Simple FTA BIS** scenario assumes full elimination of tariffs and quantitative restrictions on all products in the bilateral trade between Georgia and the EU. Further, we look at three Deep

FTAs. The Deep FTAs assume various degrees of changes in the domestic policy and business environment affecting trade and investment in Georgia. An **FTA+** combines a Simple FTA with a consolidation of the domestic reforms that took place over the recent years in a binding agreement. The FTA+ could consolidate measures such as unilateral recognition of EU and international product standards and facilitation of customs procedures. Furthering the level of integration via a **Deep FTA** would involve a more complete elimination of barriers to trade and investment throughout various sectors of the economy. This would also result in a more extensive commitment to the reform of domestic policies in the direction of EU standards in Georgia. Finally, the comprehensive set of reforms resulting from the Deep FTA along with more wide-ranging flanking measures e.g. on competition and corruption could lead to a re-branding of Georgia as a favourable investment location. This is our scenario **Deep FTA+** where we assume that Georgia would achieve a notable reduction in the perceived risk premium on investment, reflecting a sustained re-branding of Georgia as a favorable and safe place to invest.

As is becoming increasingly recognized there are potentially substantial gains to be realized in regional trading arrangements to the extent that these include elements of deep integration, as opposed to allowing only for shallow integration. The extent to which successful deep integration can be achieved will depend on the nature of existing non-tariff barriers which may be in place, and on the scope for institutional and regulatory harmonization between the partner countries. Chapter 5 provides a detailed discussion of the institutional and regulatory harmonization issues between the EU and Georgia. Changes in laws however do not immediately translate into lowering of NTBs. The next chapter provides some more empirical evidence of the status of the NTBs based on the survey conducted for the purpose of this study in the late 2007.

One of the key factors in further economic expansion of Georgia is the development of competitive economy with strong service sectors. This cannot be achieved without foreign direct investment. It is also expected that harmonization of legislation, improved access to the EU market and reforms leading to improved business environment following a conclusion of an FTA will act as strong incentives for further flows of FDI. Here again, as in the case of NTBs, we apply both qualitative and quantitative analysis. In chapter 7 we discuss the regulatory barriers and practice with respect to establishment and cross-border issues affecting trade and investment in a number of key service sectors. Then we turn our focus to FDI and the likely benefits resulting from further integration with the EU and the neighbouring countries. We employ a gravity model to evaluate the likely

impact of an FTA.

Finally, the CGE analysis brings together the elements discussed in previous sections. We study the economic impact of elimination of tariffs, non-tariff barriers in trade between the EU and Georgia and an improved access to the Georgian market for foreign providers of services. We also study the impact of a potential lowering of the risk to invest in Georgia believing that signing a Deep FTA+ with the EU could serve as a positive signal to investors that Georgia's economic reforms are irreversible and that further improvements in business environment are to follow.

Last chapter is devoted to diagnostic analysis of the implications of FTA for further expansion of trade and investment in sectors key to the Georgian economy. We focus on agro-food sector and energy. Finally, the last section provides some policy recommendations regarding an EU-Georgia FTA.

The translation of the final report into Georgian is foreseen and will be completed within a month after the acceptance of the final text by the Commission.

Along with this report, the Commission ordered a similar report for Armenia. Although the structure of the two reports is very similar and methodology applied in various chapters in the case of both countries is the same, this is where the similarities end. Both reports are independent and the impact of an FTA for each country is being judged at its own merits.

# 2. The most recent trade and economic developments in Georgia

Georgia is a small country with a level of GDP per head that is low by European standards, and comparable to that of Bulgaria. It is currently enjoying very rapid GDP growth, after the collapse in GDP experienced in the early years of transition, and this rapid growth is expected to continue with only a slight deceleration over the next two-three years. Inflation is on the high side, and the IMF warned of the dangers of overheating at the end of 2007. But inflation is forecast to fall slightly over the next few years. This in turn reflects the likely evolution of the fiscal situation. The budget deficit is expected to fall steadily from 2.8% of GDP in 2006 to under 2% of GDP in 2009.

**Table 2.1. Key macro indicators**

| | 2005 | 2006 | 2007 (est.) |
|---|---|---|---|
| GDP (US$bn) | 6.4 | 7.7 | 8.8 |
| Real GDP growth (%) | 9.6 | 9.4 | 12-13 |
| Inflation (ave.; %) | 8.2 | 9.2 | 8.0 |
| Population (m) | 4.5 | 4.5 | 4.4 |
| GDP per head (US$) | 1,422 | 1,711 | 2,000 |
| Consolidated fiscal deficit (% of GDP) | -2.4 | -2.8 | -2.3 |

## The pattern of economic growth in Georgia

As Table 2.2 shows, the Georgian economy has grown rapidly since the early 2000s, with the growth rate of GDP peaking in 2007. It is now expected to ease back to a still impressive rate of around 7% through the period 2008-2010.

In sectoral terms the initial Georgian recovery was bolstered by very high rates of growth of construction in the period 2002-4, possibly related to the building of pipelines. In more recent years, however, industry is the sector that has most visibly driven growth. Agricultural output is extremely volatile, and shows no clear

**Table 2.2 Annual growth rates of GDP and main production sectors, actual and forecast**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008* | 2009* | 2010* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *GDP* | 1.8 | 4.8 | 5.5 | 11.1 | 5.9 | 9.6 | 9.4 | 12-13+ | 7.5 | 7.0 | 6.5 |
| *Industrial output* | 3.2 | -2.5 | 8.4 | 7.7 | 4.1 | 11.5 | 15.9 | 12.6# | - | - | - |
| *Agricultural output* | -12.0 | 8.2 | -1.4 | 10.3 | -7.9 | 12.0 | -9.6 | -0.3# | - | - | - |
| *Construction* | 4.0 | 10.3 | 43.1 | 46.6 | 35.9 | 14.1 | 9.8 | 9.6# | - | - | - |

Source: GEPLAC, Georgian Economic Trends, October 2007; IMF, Georgia: Sixth Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility, August 2007
+Estimate
*Forecast
#First six months

upward trend. In terms of the main elements of GDP, consumption has been an unusually large proportion of GDP throughout the early years of the century, and the proportion has tended to increase, by 2007, indeed, tending to 100% (see Table 2.3). Investment has been steady at around 27-28% of GDP. The circle has been squared through large-scale inflow of foreign funds, inflow which has tended to increase, and which averaged nearly 25% 2006-2007. Over that period foreign inflow represented nearly 90% of investment in Georgia. This is hardly a sustainable pattern, and it suggests that any policy to reduce the current overheating in the economy will have to include measures to cut consumption as a proportion of GDP.

**Table 2.3. Main macroeconomic elements as a %age of GDP**

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* |
|---|---|---|---|---|---|---|---|
| Consumption | 88.2 | 86.8 | 81.4 | 86.8 | 83.7 | 93.8 | 95.6 |
| Investment | 28.3 | 25.5 | 27.7 | 28.3 | 28.6 | 26.7 | 27.6 |
| Net exports | -14.4 | -13.2 | -14.6 | -16.6 | -17.8 | -24.2 | -24.0 |

Source: GEPLAC, Georgian Economic Trends, October 2007
* First six months

## Prospects for domestic macroeconomic balance

As Table 2.4 demonstrates, there is a high degree of consensus about medium-term macroeconomic trends in Georgia. There is a degree of variation between the Georgian government, the IMF and the EIU on likely trends in the budget deficit, with the last standing out as the least optimistic. Interestingly, however, these differences do not translate into corresponding differences in forecasts for inflation, which are strikingly consistent between the different sources. While the short-term issue of overheating is a real one, there is little danger of the Georgian authorities losing control over the macroeconomic balance in the medium-to-long term.

**Table 2.4. Alternative forecasts of key macroeconomic variables**

| | 2008 | | | 2009 | | | 2010 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Official | IMF | EIU | Official | IMF | EIU | Official | IMF | EIU |
| Inflation (ave.;%) | 5.0 | 6.9 | 6.5 | 5.0 | 5.0 | 6.0 | 5.0 | 5.0 | - |
| Consolidated fiscal deficit (% of GDP) | -0.8 | -0.5 | -2.0 | -0.5 | -1.0 | -1.8 | -0.4 | -1.4 | - |

Source: Government of Georgia, Basic Data and Directions for 2007-2010; IMF, Georgia: Sixth Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility, August 2007; EIU Country Reports

## Employment

Unemployment has remained stubbornly high through the early years of the century in Georgia, with a tendency to increase that has become more accentuated in recent years. Detailed sectoral employment figures are not available, but employment in agriculture accounts for around two-thirds of total employment. This clearly reflects underemployment on a massive scale. So the overall scope for increasing aggregate productivity through redeployment of labour is enormous in Georgia. Any shifts of employment between sectors might impose transitional adjustment costs due to lack of skills or inadequate social protection of some individuals. However, in the long run expansion of the economy associated with any FTA could clearly facilitate the processes of redeployment of labour and increasing aggregate productivity.

**Table 2.5. Unemployment rate (%), ILO definition**

| 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* |
|---|---|---|---|---|---|---|---|
| 10.3 | 11.1 | 12.6 | 11.5 | 12.6 | 13.8 | 13.6 | 15.1 |

Source: GEPLAC, Georgian Economic Trends, October 2007
*First six months

## Georgia's external balance

Two of the dominant features of the Georgian economy are the balance of trade deficit, equivalent to around 30% of GDP in the first quarter of 2007, and the current account deficit, which came to around 19% of GDP for the same period. Remittances are an important form of hard-currency inflow, but they have never been sufficient to cover the trade deficit. The services and income balances are both positive, but the numbers are small, and their impact on the overall current account balance is marginal. The biggest single counterweight to the current account deficit in recent years has been FDI. But short-term financial inflows do appear to be becoming more important. At present, Georgia's trade deficit is essentially driven

by remittances and FDI, and this is reflected in trends in exchange rates (Table 2 7). Thus the lari has shown a marked tendency to appreciate against the dollar over the last year or so, while remaining fairly stable against the euro. With Georgia's relatively high rate of inflation, that has meant a strong tendency to appreciation of the lari in real terms. But the tendency to lari appreciation did show definite signs of easing in mid-2007.

**Table 2.6. The balance of payments (US$ m)**

| | Jan-March 2006 | Jan-March 2007 |
|---|---|---|
| Exports | 377 | 390 |
| Imports | -726 | -988 |
| **Trade balance** | **-349** | **-598** |
| Services balance | 36 | 40 |
| Income balance | 22 | 39 |
| Current transfers (remittances) balance | 96 | 134 |
| **Current account balance** | **-194** | **-386** |
| FDI (net) | 146 | 287 |
| **Capital and financial account balance** | **212** | **418** |

Source: EIU

**Table 2 7 Lari:US$ exchange rates (end-period)**

| | Jan 2005 | Jan 2006 | Jan 2007 | Feb 2007 | Mar 2007 | April 2007 | May 2007 | June 2007 | July 2007 | Aug 2007 |
|---|---|---|---|---|---|---|---|---|---|---|
| *Exchange rate* | 1,820 | 1.813 | 1.720 | 1.713 | 1.700 | 1.690 | 1.678 | 1.670 | 1.668 | 1.663 |
| *Year-on-year % change* | 16.7 | 0.8 | 5.1 | 5.9 | 7.2 | 7.5 | 7.3 | 6.5 | 6.1 | 5.4 |

Source: EIU

FDI inflows into Georgia remain buoyant for the time being. But they have historically been very dependent on pipeline projects, which are by their nature lumpy, and therefore volatile. The figures for the first quarter of 2007 suggest that FDI inflow is now diversifying, after the completion of the Baku-Ceyhan pipeline. There may in any case now be a new spurt in pipeline FDI, with the agreement on the Supsa-Odessa pipeline. But if FDI does fall away, we may see a further upward trend in short-term financial inflows, with the trade deficit increasingly driving the capital account. That could in turn trigger an international payments crisis, and a collapse in the value of the lari. More likely, it will simply produce a trend to marginal depreciation (at least in nominal terms) in the lari.

## The pattern of foreign trade

Georgia's main export lines are ferrous and non-ferrous metals, chemicals and, in recent years cement. Car exports have gone up in recent years, but these are in fact re-exports. On the import side, oil, gas and motor cars are predictably prominent, with electronic and computer equipment, pharmaceuticals and wheat also important. But the most striking feature on both export and import sides is the predominance of unspecified 'other' commodity flows. Many of these are probably foodstuffs or simple manufactures. In some cases they may represent a potential for the development of intra-industry trade, such as would be facilitated by a free trade agreement. These issues are analysed in greater detail in chapter 4.

**Table 2.8. Foreign trade by main type of commodity (US$ m)**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* |
|---|---|---|---|---|---|---|---|---|
| ***Total exports*** | 322.7 | 317.6 | 345.9 | 461.4 | 646.5 | 866.2 | 992.6 | 548.6 |
| *Ferrous metals* | 13.6 | 17.6 | 15.5 | 26.1 | 42.5 | 80.2 | 89.8 | 52.0 |
| *Scrap iron* | 39.0 | 33.1 | 36.5 | 60.1 | 95.9 | 84.2 | 72.4 | 51.0 |
| *Copper* | 9.8 | 9.6 | 13.2 | 23.4 | 31.8 | 36.4 | 79.5 | 45.0 |
| *Motor cars* | 0.3 | 0.5 | 0.6 | 1.1 | 3.8 | 17.9 | 50.6 | 33.1 |
| *Cement* | 0.5 | 0.5 | 0.0 | 0.2 | 4.7 | 17.7 | 28.8 | 26.7 |
| *Chemicals* | 16.2 | 4.9 | 12.0 | 18.4 | 28.8 | 35.8 | 46.6 | 28.8 |
| *Gold* | 0.0 | 12.5 | 28.6 | 20.3 | 18.8 | 34.7 | 49.4 | 23.9 |
| *Other* | 243.3 | 238.9 | 239.5 | 311.8 | 420.6 | 559.3 | 575.5 | 288.1 |
| ***Total imports*** | 709.4 | 753.2 | 795.5 | 1141.2 | 1847.9 | 2490.9 | 3681.2 | 2229.4 |
| *Oil and oil products* | 71.8 | 87.7 | 88.8 | 104.8 | 186.2 | 336.3 | 443.1 | 228.2 |
| *Motor cars* | 15.5 | 13.1 | 21.9 | 46.5 | 116.3 | 178.5 | 295.3 | 167.6 |
| *Gas* | 50.3 | 48.8 | 52.4 | 66.0 | 80.1 | 90.8 | 213.1 | 177.3 |
| *Pharmaceuticals* | 45.8 | 53.6 | 62.0 | 62.9 | 78.0 | 92.5 | 114.5 | 68.9 |
| *Electronic equipment* | 17.0 | 9.0 | 17.3 | 14.7 | 16.2 | 27.1 | 58.7 | 43.7 |
| *Wheat* | 29.2 | 14.4 | 20.1 | 28.0 | 75.0 | 45.1 | 99.1 | 53.3 |
| *Computers and computer equipment* | 1.3 | 2.2 | 5.0 | 12.3 | 15.7 | 22.4 | 46.4 | 34.2 |
| *Other* | 478.5 | 524.4 | 528.0 | 806.0 | 1280.4 | 1698.2 | 2411.0 | 1456.2 |

Source: GEPLAC, Georgian Economic Trends, October 2007
*First six months

## Georgia's trade and economic relations with the EU

Georgia has been a WTO member since 2000. The EU-Georgia bilateral trade and economic relations are provided for by the EU-Georgia Partnership and Cooperation Agreement (PCA) in force since July 1999. The PCA confirms most-favoured nation (MFN) treatment with respect to tariffs and quantitative

restrictions are prohibited in the bilateral trade. The PCA envisages progressive regulatory approximation of Georgia's legislation and practises to the most important EU trade related regulatory acquis, which should lead to a better access of Georgian products to the EU markets. The above regulatory aspect is further emphasized and developed in the European Neighbourhood Policy (ENP) Action Plan for Georgia adopted in November 2006 (together with similar Action Plans for the two other South Caucasus countries Armenia and Azerbaijan). In accordance with a specific ENP Action Plan's provision, the EU and Georgia are currently negotiating a bilateral agreement on the protection of geographical indications for wines, spirits and other agricultural products and foodstuff. Under the current EU Generalised System of Preferences (GSP) scheme in force from January 2006 until December 2008, Georgia has qualified for the enhanced preferences for sustainable development and good governance (so-called GSP+) offering it a very advantageous access to the EU market (only 14 other countries have qualified for these enhanced preferences), and wishes to continue benefiting from the GSP+ also under the new GSP Regulation in force as from 2009. Georgia makes an overall good use of GSP (utilisation rate of 77% in 2006), but there is still room for improvement, notably in the textiles sector where Georgia seems not to use the GSP preferences at all (zero utilisation rate).

As Table 2.9. below shows, the EU share in total Georgian exports has generally been in the range of one-fourth to one-fifth, with a weak upward trend. Copper accounts for around 40% of Georgian exports to the EU and mineral waters for about 15%.

**Table 2.9. EU-Georgia economic relations: key indicators (%)**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* |
|---|---|---|---|---|---|---|---|---|
| EU share in total exports | 23.7 | 19.4 | 18.3 | 17.7 | 19.8 | 25.0 | 25.9 | 23.1 |
| EU share in total Imports | 26.5 | 32.0 | 29.2 | 37.8 | 35.6 | 29.7 | 30.1 | 30.3 |
| EU share in total FDI inflow | 30.0 | 63.4 | 34.9 | 28.2 | 39.2 | 54.2 | 34.2 | 47.6 |

Source: GEPLAC, Georgian Economic Trends, October 2007
*First six months

The EU generally accounts for about 30% of total Georgian imports, though the figure was higher in the period 2003-4. Oil and oil products and motor cars between them account for some 25% of total Georgian imports. But, as for Georgian imports as a whole, a very large proportion of Georgian imports from the EU are in the miscellaneous category. In most recent years the EU has accounted for around one-third of total FDI inflow. In a few individual years, however, the

figure has gone up to 50% and above. The next two chapters analyse Georgian trade relations and trade patterns with the EU and its neighbours in greater detail.

## Key features of the political economy of Georgia

Under President Saakashvili Georgia has undoubtedly pursued a genuinely liberal policy in the economic sphere, in particular in relation to foreign trade, where import duties have been reduced to zero for all non-agricultural products with a very few exceptions. Partly as a result of this, genuine progress has been made to reduce corruption. *Oligopoly* is a problem, which the weak competition authority is hardly up to addressing. With all this economic and political liberalism, however, there is an element of political arbitrariness in the Georgian political economy. Stories of high-profile evictions abounded in 2007. In July, a number of families were evicted from a building in the centre of Tbilisi, allegedly on the grounds that it had been erected illegally in the Shevardnadze period. Soon after that, the Georgian Union of Writers was evicted from a building which, it claimed, it had owned for over a hundred years. Several newspapers which were tenants of the Union in the same building were evicted at the same time. And Sony was evicted from its main retail outlet in Tbilisi, although the Japanese company claimed that it had a lease on the premises for the period up to 2010.

The legal details of the individual eviction cases hardly matter for the purposes of the present study. What matters is the principle of level playing fields. It is hardly necessary to underline the damage that can be done to investment flows by treating leading multinationals like Sony in this way, and to the business environment as it affects foreign and local companies alike. If FTAs mean level playing fields, and if level playing fields mean due and transparent legal process, then Georgia still has some work to do in terms of Priorities 1 and 2 of the EU/Georgia Action Plan (rule of law and business environment).

## The proposed Poti free economic zone

The Ministry of Economic Development has offered a 49-year lease on the port of Poti to anyone who is prepared to develop it as a free economic zone. Rakeen Development and Dubai World, both from the UAE, are reported to be interested. The proposal goes against the EU Code of Conduct for Business Taxation, which posits that 'tax measures which provide for a significantly lower effective level of taxation, including zero taxation, than those levels which generally apply in the

Member State in question are to be regarded as potentially harmful and therefore covered by this code.[1] The IMF has publicly criticised the move on the grounds that any special tax breaks for companies operating in the zone will disrupt the level playing field. Indeed, given the strength of the liberal tenor of Georgian economic policy in general, one may wonder what the rationale in creating a FEZ is. It would certainly create problems for an FTA, even a Simple one.

## The problem of agriculture

As many as 60-70% of the population of Georgia depend on agriculture for their livelihood. But agriculture generated only 11.3% of Georgian GDP in 2006. These bald figures reflect an economic and social reality which was very evident to the members of the study group as they drove over from Yerevan to Tbilisi. And that reality in turn helps to explain the problem of increasing regional disparities within Georgia. Over the first quarter of 2007 gross output of goods and services per capita in Tbilisi was 2.7 times the national average, compared to 2.4 times in 2003. Guria, Georgia's poorest region has gross output of goods and services per capita of just 16% of the national average. A free trade agreement with the EU would have little to offer Georgian agriculture, except in speciality areas like wine. Its liberating impact on industry and services might actually make the regional problem worse.

## Conclusions

In terms of both unemployment and underemployment in agriculture, Georgia has a huge potential for generating further growth in GDP through the redeployment of labour into productive activities. Figures for growth in industrial output for recent years suggest that there is substantial scope for industry to drive GDP growth in future years on the basis of such redeployment. But full exploitation of this potential will require significant flanking measures relating primarily to the rule of law and the principle of the level playing field, as laid out in the ENP EU/Georgia Action plan. In terms of trade policy, that would mean a Deep FTA+.

[1] Council of the European Union, SN 4901/99, Brussels, 23 November 1999

# 3. Georgia and regional integration scenarios

The EU, as a matter of general policy, encourages its free trade partners to think also in terms of their own regional economic integration, favouring in principle 'south-south' arrangements. This is advocated on both economic and political grounds. The Commission has in fact been encouraging the three South Caucasus states to work together with a view to better regional cooperation. This does at least see the three foreign ministers meeting together with the EU periodically at times, but given the present blockage between Armenia and Azerbaijan it falls to Georgia to be the most practical pivot of South Caucasus regional trade flows.

In addition Georgia is by far the most liberal state in the region in its trade policies, having made substantial unilateral tariff cuts (90% of tariff lines are already bound at 0% MFN rates with the WTO), and it is willing in principle to go further (like Estonia did in the earlier 1990s).

Georgia now aims at becoming a regional commercial hub. The most impressive investments in this category are the Baku-Tbilisi-Ceyhan oil pipeline, with the parallel Baku-Tbilisi-Ezurum gas pipeline now also being completed. Further, a new railway connection from Kars in Turkey into the Akhalkalaki region of Georgia is currently being constructed, and this will connect with Tbilisi and on to Baku in Azerbaijan. Georgia also seeks to make itself a regional hub for general commercial purposes, with a new Tbilisi airport and substantial new hotel construction of international calibre. Beyond these major infrastructures, Georgia now brands itself with some justification as an extremely business-friendly location, with minimal regulatory bureaucracy and a customs service which the business community considers is no longer notorious for corruption.

*Georgia-Armenia FTA*. This dates back to 1995 as part of the initial set of CIS bilateral FTAs. However the trade flows between Armenia and Georgia, in spite of

their functioning FTA, are extremely limited. The shares of their bilateral trade average for imports and exports represent only 4% of Georgia's total trade, and 3% of Armenia's total trade on 2006. These shares have moreover even been decreasing over the last ten years (see Table 31 below).

*Georgia-Azerbaijan FTA*. This dates back to 1996. In the subsequent decade Georgia's trade with Azerbaijan has greatly increased, with Azerbaijan rising to 4th place after the EU, Russia and Turkey as source of its imports, and 3rd place after the EU and Turkey for its exports.

*Georgia–Turkey FTA*. A bilateral FTA between Georgia and Turkey was negotiated in the course of 2007 and concluded on 21 November. This could be a step of considerable importance for Georgia, since trade with Turkey alone amounts to about 50% of Georgia's trade volumes with the EU. It could be expected, given the proximity of Georgia and its very low wage levels, that a free trade agreement with Turkey could trigger a substantial growth of out-sourcing to Georgia and associated investment by Turkish industry. At the same time, it has to be noted that the agreement reduces but does not eliminate tariffs for agricultural products, with the Turkish side sticking to significant exceptions from liberalisation, including for products of legitimate concern to Georgia (e.g. for wine, nuts, some fruits and juices, anchovies and cheese). Furthermore, it is a very shallow FTA which does not cover services and investment and in general does not go beyond WTO requirements as regards regulatory issues.

The EU-Turkish customs union should in principle mean that a Georgia-Turkish FTA should wait until an EU-Georgia FTA is introduced. However the EU has waived this formal requirement, on condition that the Georgia-Turkey FTA would be compatible with WTO rules for free trade areas, namely to cover substantially all trade.

*Georgia -Russia*. The Georgia-Russia FTA is dysfunctional. Since October 2006 Russia has closed its land frontier and civil aviation connections with Georgia, and bans the import of wines and agricultural produce[2]. However the Georgian economy has more than survived these intended punitive measures, and is growing dynamically. The wine sector for its part is now considered to have received a healthy shock, in order to get improved quality and so be able to export to other world markets.

[2] The recent statements by Russia indicate that these sanctions might be lifted soon.

However, Russia has not closed its frontiers with the two secessionist entities, Abkhazia and South Ossetia. In particular the Roki tunnel through the Caucasus mountains, joining North and South Ossetia, sees a considerable flow of trade on which information is hardly transparent, and reportedly includes both military materials supplies by Russia as well as goods such as petrol and tobacco which in the past has been smuggled free of duties from South Ossetia into the rest of Georgia. A notorious wholesale market for such goods on the frontier between South Ossetia and the rest of Georgia was closed in recent years, but the frontier is said to remain porous for smuggled goods. Georgia has raised the issue of Russia's frontiers with the secessionist entities in the context of Russia' WTO accession. Georgia would like to see these frontiers subject to international monitoring along the lines of the EUBAM mission on the frontiers of Transnistria.

*Other CIS free trade.* In principle the CIS has a comprehensive matrix of bilateral free trade agreements, as shown in Table 3.3, which with the exception of Russia are understood to be functioning. But the scales of these trade flows are very small. Georgia has been verging on quitting the CIS, but has not actually done so.

*GUAM free trade.* FTAs exist between all GUAM partner states – Georgia, Ukraine, Azerbaijan and Moldova. In addition the GUAM Summit of 20 July 2002 agreed to the establishment of a GUAM free trade area, although it is not evident whether this adds anything to these countries' bilateral FTAs, beyond being a political statement. There has been an institutional strengthening of GUAM, with a permanent secretariat now established in Kiev.

*Black Sea free trade area.* This idea has long been on the agenda of the BSEC, but never really advanced, first of all because both Greece and Turkey were part of the EU's customs union, thus requiring free trade between the EU and all the Black Sea states. However the Commission has recently launched its 'Black Sea Synergy' concept and free trade for this region becomes now a more serious candidate for consideration. Indeed with Bulgaria, Romania and Turkey half of the Black Sea coast is already in the EU customs union. Of course a Black Sea FTA would still require first of all agreements on EU-Russia, EU-Ukraine, EU-Moldova and EU-Azerbaijan free trade, as well as with Armenia and Georgia. The Russian and Ukrainian cases have both been subject to detailed feasibility studies made for the European Commission (Ukraine in 2006, Russia in 2007), and so these have become at least more than purely academic hypotheses. Negotiations of a deep and comprehensive FTA between the EU and Ukraine have been launched on 18 February 2008 following the conclusions of Ukraine's WTO accession process on 5 February 2008. But for Russia there is no presumption that an FTA with the EU will be negotiated following Russian WTO

accession. Until and unless Russia was seriously interested in free trade this scenario cannot materialise.

*EU-ENP East free trade area.* In the case that Russia was the only country of the Black Sea region which did not want to pursue free trade with the EU, there would remain the option of the EU+Turkey customs union making a multilateral free trade area with Georgia, Armenia, Azerbaijan, Moldova and Ukraine, i.e. with all the ENP-East countries that have Action Plans. This could also be extended with the 'deep free trade' agenda, since the EU intends to generalise this concept with all its ENP partner states.

*South Caucasus free trade*. A trilateral Armenia-Azerbaijan-Georgia, or 'South Caucasus' free trade area may come to mind as a hypothetical scenario, with Europeans naturally thinking of the Benelux model as an example of three small economies which integrated faster than its wider region. While this would of course require resolution of the Armenia-Azeri conflict, a formal trilateral agreement would not add much for Georgia, given its existing bilateral FTAs with both Armenia and Azerbaijan, which have not generated substantial trade volumes.

*Other free trade initiatives*. Georgia in addition pursues its radical liberalising agenda with negotiations underway for a FTA with the Gulf Cooperation Council, and discussions initiated with India.

*Conclusion.* Georgia's wider regional trade policies are an essential feature of its current economic strategy, which has as a matter of the highest urgency and priority to find new sources for economic expansion to compensate the serious adverse effects

**Table 3.1. Trade flows between Georgia and major partners, 2006**

| | Georgia imports | | Georgia exports | |
|---|---|---|---|---|
| | **million $** | **%** | **million $** | **%** |
| EU-27 | 1060.9 | 28.9% | 255.3 | 25.7% |
| Russia | 558.8 | 15.2% | 75.7 | 7.6% |
| Turkey | 522.6 | 14.2% | 124.9 | 12.6% |
| Azerbaijan | 318.5 | 8.7% | 92.2 | 9.3% |
| Ukraine | 320.1 | 8.7% | 57 | 5.7% |
| United States | 129.7 | 3.5% | 58.9 | 5.9% |
| Turkmenistan | 101.1 | 2.8% | 71.8 | 7.2% |
| Un. Arab Emirates | 109.1 | 3.0% | 22.9 | 2.3% |
| Armenia | 40.2 | 1.1% | 73.6 | 7.4% |
| Iran | 40.3 | 1.1% | 2.7 | 0.3% |
| Canada | 14.3 | 0.4% | 48.9 | 4.9% |
| Moldova | 3.5 | 0.1% | 0.2 | 0.0% |
| Rest of world | 455.4 | 12.4% | 107.4 | 10.8% |
| **Total** | **3 674.5** | **100.0%** | **991.5** | **100.0%** |

Source: WITS

**Table 3.2. Trade flows between Georgia and major partners, 1996**

| | Georgia imports | | Georgia exports | |
|---|---|---|---|---|
| | **million $** | **%** | **million $** | **%** |
| EU-27 | 263.1 | 38.3% | 32.2 | 16.2% |
| Russia | 127.1 | 18.5% | 56.7 | 28.5% |
| Turkey | 76.6 | 11.2% | 25.9 | 13.0% |
| Azerbaijan | 78.7 | 11.5% | 24.3 | 12.2% |
| Ukraine | 38.8 | 5.7% | 5.4 | 2.7% |
| United States | 29.8 | 4.3% | 1.3 | 0.7% |
| Turkmenistan | 4.1 | 0.6% | 13.4 | 6.7% |
| Un. Arab Emirates | 0.6 | 0.1% | 0.0 | 0.0% |
| Armenia | 17.2 | 2.5% | 21.0 | 10.6% |
| Iran | 2.7 | 0.4% | 2.2 | 1.1% |
| Canada | 0.08 | 0.0% | 0.0 | 0.0% |
| Moldova | 0.1 | 0.0% | 0.1 | 0.1% |
| Rest of world | 47.92 | 7.0% | 16.3 | 8.2% |
| **Total** | **686.8** | **100.0%** | **198.8** | **100.0%** |

Source: WITS

**Table 3.3. Georgia's Free Trade Agreements with CIS countries**

| Partner country | Date of agreement |
|---|---|
| Armenia | 1995 |
| Azerbaijan | 1996 |
| Kyrgyzstan | 1995 |
| Kazakhstan | 1995 |
| Moldova | 1997 |
| Russia | 1994* |
| Tajikistan | No |
| Turkmenistan | 1996 |
| Ukraine | 1995 |
| Uzbekistan | 1995 |

Source: Kort and Dragneva * Theoretical FTA, impeded in practice by Russia's banning Georgian wines and agricultural produce since the end of 2006, the closing of land frontier crossing points with Georgia, and the suspension of direct civil aviation connections.

of Russia's punitive sanctions. The EU and Turkey, which are already now Georgia's first and second trade partners, are key partners for these purposes. In addition Georgia's ambition to become a regional commercial hub and transit centre logically requires that it establish a comprehensive set of free trade agreements with its partners. Georgia has already acted radically in support of these ambitions, with zero tariffs introduced unilaterally for almost all industrial products *erga omnes* with the whole of the world, and action to de-corrupt the customs services. It has retained moderate tariffs just for agricultural products, mainly as instrument of leverage in bargaining with Turkey, whose agricultural tariffs (excluded from its customs union with the EU) remain extremely high. In view of its location and economic strategy Georgia also has a major interest in possible regional multilateral free trade initiatives in the wider Black Sea region, whereas a regional FTA limited to only the South Caucasus would be of little interest.

# 4. Assessing the potential welfare effects of an EU-Georgia FTA using the Sussex Framework

In this chapter the potential effects of an EU-Georgia FTA have been examined in terms of welfare gains and losses from simple (shallow) integration. In addition, some insights have been made in regard to potential gains from deep integration. The analysis has been made on the basis of the Sussex Framework methodology and resulted in the following conclusions:

- Georgia has almost done free trade on its side already for non-agricultural products (with very minor exceptions) and significantly also for agricultural goods as a result of the 2006 tariff reduction. About 90% of tariff lines are set to zero;
- the reduction of import tariffs by Georgia in 2006 is expected to increase Georgia's trade with its main partners, as well as to induce some welfare increasing trade re-orientation from CIS supply sources towards non-CIS partners;
- distortions in trade are possibly created by non-tariff barriers (infrastructure, regulatory and institutional) and thus cooperation between Georgia and the EU on their reduction should be welfare increasing. Georgia and the EU already cooperate on the reduction of non-tariff barriers in the framework of the PCA and ENP Action Plan's implementation;
- since the EU's major imports to Georgia (vehicles, machinery and electrical equipment, mineral fuels, pharmaceuticals, instruments and chemicals) are exempted from tariffs in Georgia, hence there is little direct shallow integration welfare effects are likely to occur from the EU-Georgia FTA in regard to these products;
- substantial share (over 70%) of Georgia's imports from non-EU countries, the low similarity between the production and trade structures of Georgia and the

EU along with the low correlation between the countries RCAs – all suggest that trade diversion is on balance more likely than trade creation from a future EU-Georgia FTA. At the same time, pre-FTA free trade regime for industrial trade in Georgia suggests a low-scale trade diversion effect.

- the EU is an important market for Georgia's exports and its importance has been growing over time, though owing to the low levels of pre-FTA EU tariffs, and non-tariff protection measures (such as quantitative restrictions), the direct shallow integration-induced impact of the FTA on Georgia's exports to the EU is likely to be comparatively small. In the longer perspective, Georgia's future comparative advantages still remain to be created by investment in new economic structures (for example outsourcing) to take advantage of low Georgian labour costs.
- there is little evidence of current significant deep integration between the EU and Georgia as expressed by the intra-industry trade between them. The development of new industrial structures under the future EU-Georgia FTA may lead to strengthening of intra-industry trade linkages between countries;
- Turkey is also a relatively important partner for Georgia – the second largest trade partner in 2006. In November 2007, the countries have concluded the FTA, which fully liberalizes trade in non-agricultural goods, but provides for significant exceptions to liberalization of the agricultural trade. The dangers of trade diversion from Turkey to the EU are likely to be low under the future EU-Georgia FTA due to the pre-FTA free trade regime in non-agricultural trade. Any deep integration benefits that promote trade with the EU will also facilitate trade with Turkey which has undergone regulatory harmonisation with the EU.
- to conclude, the risks of welfare-decreasing trade diversion from the future EU-Georgia FTA as a result of shallow integration are low for both Georgia and the EU due to the current low level of tariffs in both parties. From Georgia's perspective, potentially significant welfare gains could come from a continuing process of deepening integration, which has already been set in motion due to its substantial liberalisation of all four freedoms (goods, services, capital and labour). A greater level of Georgia's regulatory and institutional approximation with the EU resulting from a Deep FTA+ could boost further the welfare gains for Georgia. Therefore, the continuation of the profound economic reforms in accordance with the European standards and best practice is of primary importance for Georgia.

## 4.1. Introduction

In order to evaluate the trade and welfare implications of a potential EU-Georgia FTA we apply a set of diagnostic indicators developed by the University of Sussex (referred to as the "Sussex Framework"). The Sussex Framework helps to identify possible gains and losses from a bilateral preferential trade agreement between countries, as outlined conceptually in Gasiorek et. al. (2006) – see also **Box 1**.

**Box 1 Welfare gains from shallow and deep integration: the main concepts**

Shallow integration is defined as the removal of border barriers to trade, such as tariffs and quotas; which normally comprises the first policies to be implemented under any preferential trade agreement (PTA). Shallow integration is typically accompanied by both trade creation and trade diversion which have opposing welfare effects. Trade creation is welfare increasing since countries shift from consumption of less efficiently produced (higher cost) domestic goods in favour to more efficiently produced (lower cost) goods of the partner country. This results in cost savings and more efficient resource allocation within the participating countries. Trade creation could occur either on the production side when trade displays domestic production of goods, which are similar with those produced by partner country; and on the consumption side when demand and consumption of imports increases due to lower partner country prices.

Trade diversion is welfare decreasing since it is characterised by the sourcing of imports switching away from more efficient non-partner countries to less efficient partner countries. Partner countries enjoy preferences within the trade agreement and thus are able to undercut their more efficient and lower cost non-partner competitors. The net welfare impact of a preferential trade agreement depends on the relative size of these two trade effects. At the same time, welfare increasing trade reorientation from less efficient to more efficient sources of imports may take place should partner countries participate in other trade preferential agreements with third countries.

Deep integration implies reductions in, or elimination of regulatory and behind-the-border impediments to trade, which may relate to customs procedures, product standards and certifications procedures, competition policy, government procurement, market access for foreign providers of services, FDI regulations, etc. As such, partner countries develop closer and more stable trade relations allowing for more specialization in niche goods, participation in a fine division of labour, creation of stable value chains. Deep integration has welfare increasing impacts for partner countries due to greater exploitation of economies of scale in production, technology transfer and diffusion both through trade and FDI, positive externalities from institutional and policy approximation leading to wide productivity increases. The welfare gains from deep integration, though being not immediate, and if appropriately implemented, are generally likely to exceed substantially the possible losses from shallow integration.

The majority of the Sussex Framework indicators concentrate on the welfare consequences from shallow integration. Indicators for deep integration are much harder to identify, though looking at patterns of intra-industry trade is useful in this regard. The evaluation of the relative importance of trade creation and trade diversion effects from shallow integration is carried out in accordance with theoretically grounded rules of thumb:

1. The higher are the initial tariffs, the greater is the likelihood of both trade creation and trade diversion.
2. The greater the number of PTA partners the more likely it is that there will be overlaps with cost differences, and therefore the greater the likelihood of trade creation.
3. The wider the difference in comparative advantage between countries and the higher the initial share of trade between them, the more likely the trade agreement will be welfare improving.
4. The more similar is the product mix in the partner countries, the more likely it is that there will be trade creation because there is more scope for specialization.
5. The higher the percentage of trade with potential partners, the greater the possibility that the PTA will be welfare increasing.

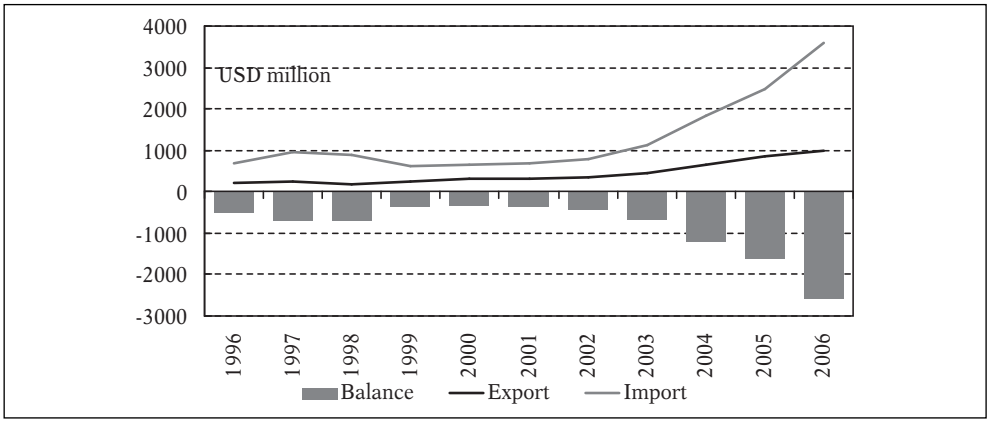
## 4.2. Georgia's foreign trade dynamics

Over the last decade, Georgia has advanced substantially in terms of its integration into the world economy. According to the officially reported trade statistics, Georgia's merchandise trade turnover expanded by more than 5 times during the period, from USD 886 million in 1996 (28.6% of GDP) up to USD 4.7 billion (about 60% of GDP) in 2006. Imports of goods accounted for the major part of total merchandise trade in Georgia (77.5% in 1996 and about 79% in 2006). Merchandise imports constituted about 47.5% of GDP in 2006, while exports – 12.8% of GDP (22.2% and 6.4% respectively in 1996). As a result, Georgia suffered a huge merchandise trade deficit, which deteriorated considerably from USD 488 million or about 16% of GDP in 1996 to USD 2.6 billion or about 33% of GDP in 2006.

The growth of both exports and imports started fast accelerating in 2003, with import growth rates exceeding those of exports (see Figure 4.1). High growth rates of imports in 2004 (61.9% yoy and 40.3% yoy respectively) may be attributed to the appreciation of national currency during 2004 of about 10.7% (IBM report, 2004). Anticorruption measures of the government and improvements in national trade data reporting in 2004 also added to both imports and exports figures. In 2006,

export growth decelerated again to 14.6% yoy (from 33.9% in 2005)[3] partly due to Russia's trade embargo on main Georgia's exports[4]. On the contrary, imports surged by 47.6% yoy (from 34.8% yoy in 2005) driven by the tariff reform and higher energy prices (mineral fuels (HS 27) account for about 20% of total imports). Consequently, the merchandise trade, deficit widened by more than 65% yoy in 2006 as compared to the previous year[5]. It is worth noting that there are considerable differences in Georgia's official trade statistics vs. its balance of payment data, especially regarding exports of goods. For example, according to the official trade statistics exports of goods reached USD 993 million in 2006 while balance of payment data reported USD 1.7 billion exports of goods in 2006[6]). This suggests that there are substantial unregistered trade flows, which do not appear to be reflected in the trade statistics.

**Figure 4.1. Georgia's merchandise trade dynamics**




Source: Key indicators of Developing Asia and Pacific Countries, 2007; IBM study (based on trade data).

Trade in services, and in particular transport services, plays a significant role in the foreign trade of Georgia as a transit country[7]. Exports of service increased by 25% yoy in 2006 and accounted for about 35% of total exports of goods and services from Georgia (imports of services constituted 16.5% of total imports). Georgia's

[3] See *Key indicators of Developing Asia and Pacific Countries, 2007.*
[4] In early 2006 the Russian Federation prohibited imports of Georgian wines and mineral water "Borjomi" to the territory of Russia accusing Georgian goods of incompliance with SPS requirements (regarding pesticide residues). Also, the check-point "Verkhny Lars" was closed by Russia. Besides, in October 2006, Russia cut air, land and sea traffic between the two countries.
[5] About 60% of trade balance deterioration was explained by the expansion of imports of mineral fuels followed by transport equipments, metals and machinery (ADB, 2007).
[6] See *Key indicators of Developing Asia and Pacific Countries, 2007.*
[7] Currently the services sector accounts for about 62% of Georgia's GDP.

exports of services reached 11.4% of GDP in 2006, imports – 9.4%. The two major items of exports of services include transportation and travel services.

## 4.3. Georgia's trade policies and market access

### Tariffs

According to the first rule of thumb, the higher are the initial trade barriers, the greater is the likelihood of both trade creation and trade diversion after those barriers are removed under the preferential regime.

Georgia has made a considerable progress in liberalising its trade and foreign exchange regimes, implemented the harmonization of its trade regime with the WTO rules and became a member of the WTO in June 2000[8]. Except for tariff-free regimes within FTAs, Georgia applies MFN tariffs to imports from its trade partners. Current import tariffs in Georgia have been in effect since September 1st, 2006 (according to the Law of Georgia #3509 "On Customs Tariffs"[9]). As a result, Georgia's tariff system has been substantially changed first of all through the reduction of the number of tariffs to three (0, 5 and 12) with a maximum tariff of 12%. All but a very few non-agricultural products are 0 rated. Overall, about 85% of all tariff lines[10] are currently set to zero, while in regard to agricultural products about 42% of tariff lines within 1-24 HS commodity groups are free from tariff protection[11]. It is worth noting that, according to the WTO, before the tariff reduction in 2006 the simple average MFN tariff equalled 7.0%, including for agricultural products – 11.5%, for non-agricultural products – 6.4%[12].

September 2006 changes to Georgia's tariff regime have lowered tariff barriers to trade with Georgia substantially, especially for non-agricultural products. The simple average MFN tariff (excluding specific duties) is now estimated at about 1.0%, including 5.6% – for agricultural products, and 0.3% – for non-agricultural products[13]. If weighed by 2006 imports from:

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[8] Georgia's WTO tariff commitments envisaged binding its simple average MFN tariff at 7.4% level for the entire HS nomenclature, including 13.4% – for agricultural products and 6.5% – for non-agricultural products (see t*he WTO (http://www.wto.org/english/thewto_e/countries_e/georgia_e.htm).*

[9] http://www.deloitte.com/dtt/cda/doc/content/GEO_September%202006_Tax%20&%20%20Legal%20news(2).pdf

[10] The total number of tariff lines is 10 890, including 2444 tariff lines of 1-24 HS groups for agricultural products (*http://www.wto.org/english/thewto_e/countries_e/georgia_e.htm*).

[11] I bit.

[12] I bit.

[13] Based on the latest data on MFN applied tariffs in the WTO country profile for Georgia (see http://www.wto.org/english/thewto_e/countries_e/georgia_e.htm)

- all partners: weighted average MFN applied tariff equals 1.1% for all goods, 5.5% for agricultural products, and 0.2% for non-agricultural products.
- the EU27: weighted average MFN applied tariff equals 0.6% for all goods, 6.7% – for agricultural products, and 0.1% – for non-agricultural products. The magnitude of applied average tariffs reflects the fact that the EU imports are mainly comprised of non-agricultural products subject to duty-free treatment in Georgia.

In accordance with the new Customs Code, maximum MFN rates of 12% are applied mainly to agricultural products, which are sensitive for Georgian economy and hence traditionally has been protected, namely: live birds, meat and meat products, dairy products, natural honey and eggs, fresh and prepared vegetables and fruits, tea, maize and maize seed, cereal flours and preparations of cereals, sugar and sugar products, non-alcoholic beverages and beer, tobacco products. Imports of wines, ethyl spirits and alcoholic beverages (as well a few other products) are taxed by specific tariffs. Concerning non-agricultural products, MFN rates (12%) are applied to only two HS groups: HS 25 (salts, sulphur, plastering materials, lime and cement) and HS 68 (articles of stones, plaster, cement, asbestos).

Georgia has done free trade on its side already for non-agricultural products (with a few exceptions) as a result of the 2006 tariff reduction; tariffs for agricultural products have been also cut. According to the first rule of thumb, low tariff protection in Georgia indicates the low level of existing tariff-driven trade distortions. The liberalization of tariff barriers in 2006 has also resulted in a reduction of preference margins previously received by CIS trade partners (see Table 4.1) thus facilitating Georgia's shift from the CIS to non-CIS sources of imports (trade reorientation effect).

Since pre-FTA tariff protection in Georgia is low, if not-existent for non-agricultural goods, the future reduction of tariff barriers under the EU-Georgia FTA is expected to have limited scope for either trade creation or trade diversion into Georgia's economy, especially in regard to non-agricultural trade. Therefore, other factors will be more important in determining welfare effects of the EU-Georgia FTA.

At the same time agricultural products remain the most protected. Thus, there is some scope for both trade creation and trade diversion with regard to these products under a future FTA. The overall net welfare effect needs to be considered in the light of other rules of thumb. Further government policy on tariff

**Table 4.1. Applied tariffs and tariff preference margins* in Georgia, by country, 2004[14]**

| Partner | Imports, million US$ | Effectively applied simple average of traded TL** | Effectively applied weighted average of traded TL | MFN simple average of traded TL | MFN weighted average of traded TL | Preference margin weighted |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7)=(6)-(4) |
| **Armenia** | 25.4 | 0.0 | 0.0 | 9.1 | 13.3 | 13.3 |
| **Azerbaijan** | 157.7 | 0.0 | 0.0 | 8.3 | 11.5 | 11.5 |
| **Ukraine** | 142.0 | 0.0 | 0.0 | 8.8 | 17.0 | 17.0 |
| **Russia** | 257.1 | 0.0 | 0.0 | 7.4 | 11.1 | 11.1 |
| **Turkey** | 202.2 | 7.9 | 9.7 | 7.9 | 9.7 | - |
| **Iran** | 15.1 | 9.6 | 10.6 | 9.6 | 10.6 | - |
| **EU27** | 667.9 | 7.8 | 7.5 | 7.8 | 7.5 | - |

Source: UNCTAD - TRAINS (Trade Analysis and Information System).
Note:* Excluding specific tariffs on alcoholic beverages (HS 2208).
** TL – tariff lines.

liberalization, announced to be on the agenda of the Government of Georgia in 2007 and 2008 (ADB, 2007), will also influence the outcomes of possible EU-Georgia FTA.

Concerning market access for exporters, Georgia enjoys MFN treatment from the other WTO members, as well as free trade regimes with CIS countries. In addition, Georgian products benefit from GSP status in the markets of the EU, the USA, Canada, Switzerland, Japan, and Turkey[15]. Thanks to these market access preferences Georgia has been able to diversify and increase its total preferential exports to these countries (see Table 4-5 on Georgia's major destination markets below). Under the current EU GSP Regulation, Georgia has qualified for the enhanced preferences granted to countries applying the internationally agreed standards for good governance and sustainable development (so-called GSP+) offering particularly advantageous access to the EU market, i.e. unlimited, duty free

[14] Table 3 presents calculations of simple and import-weighted average tariffs applied to Georgia's major trade partners in 2004 (based on *UNCTAD - TRAINS (Trade Analysis and Information System)* database). Particularly, effectively applied tariffs for imports from EU27, Turkey and Iran equalled MFN tariffs since no tariff preference existed. Import-weighed average MFN tariff ranged from 7.5% for the EU27 to 10.6% for Iran (7.8 % to 9.7% in case of simple average of traded tariff lines). Under the preferential duty-free trade regime with Georgia, CIS partners received preference margins measured as the difference between effectively applied tariffs and MFN tariffs, which would have been imposed if no preference had existed. Effectively applied tariffs to preferential trade with CIS countries were zero, and the weighted preference margins in 2004 were in the range between 11.1% for Russia to 17% for Ukraine (reflecting the fact that Ukraine's major imports to Georgia were food products, subject to highest tariff protection in Georgia).

[15] The GSP arrangement between Georgia and Turkey will be replaced by the Georgia-Turkey FTA concluded in November 2007 once this FTA has entered into force (following its ratification and signature by the parties).

access to the EU markets for the majority of goods originated in Georgia, with only a few exceptions, mainly in the agricultural sector. Neither the EU nor other WTO partners maintain any trade defence measures against imports from Georgia.

The level of Georgia's utilisation of the EU GSP/GSP+ has been gradually increasing in the recent years and reached 77% in 2006 (75% in 2005, 80% in 2004, 78% in 2003, 31% in 2002 and 54% in 2001). This is rather good, but there is still room for improvement, in particular as the scheme is hardly used by Georgia for several sectors, e.g. textiles. Less than full utilisation of the opportunities offered by GSP/GSP+ can be generally explained by low awareness of the GSP system by Georgian exporters and foreign importers; administrative difficulties in obtaining the special certificate of origin; desire of exporters to conceal their foreign trade activities in order to minimize taxes (IBM report, 2004). Georgia's penetration into the EU market is still limited due to low product quality, underdeveloped marketing networks, and high transport costs – all having detrimental impact on the competitiveness of Georgian products on the European and world markets.

Since the EU tariffs are already low, if not non-existent, for Georgian goods, trade creation and trade diversion effects from the future EU-Georgia FTA are not expected to be significant for the EU as well.

**Other barriers to trade in Georgia**

Georgia's regime of formal non-tariff barriers is similarly liberal: Georgia does not maintain non-tariff barriers except for health, security, and environmental reasons. At present, Georgia does not apply any quantitative restrictions on trade. Licenses are required for imports/exports of only 8 items. No safeguards or antidumping measures have been used for contingent temporary protection against imports. In line with its WTO commitments, Georgia offers a very liberal investment regime in almost all sectors (except ownership of agricultural land), as well as non-discriminatory market access in the service sector (in banking, insurance, security trade, auditing, legal services, and tourism). Georgia already recognises technical regulations of the EU, the OECD and its trading partners (which is a considerable reduction of technical barriers to trade in Georgia). The export regime is similarly liberal: no export restrictions, no foreign currency-surrender requirements, no discriminatory subsidies (ADB, 2007).

Over the last two years, Georgia has also made large efforts to the reduce other trade-restrictive barriers, which are widely prevalent in all CIS countries, such as high transportation and border costs, large scale of smuggling, bureaucracy and

corruption, an outdated transport infrastructure. In particular, the adoption of new Customs Code in 2006 (effective from 1 January 2007) aims at reforming customs administration and border police, simplification and speeding up of customs clearance procedures to bring them in line with international and European standards. Most significant changes include: the reduction of the number of documents needed for export and import registration, facilitation of importers and exporters to conduct customs transactions on credit or obtaining a refund within a month, elimination of license fees for the inland transit transportation, adoption of the rules for resolution of customs disputes[16]. As a result, the quality of customs services has been notably improved: e.g., according to the World Bank's *Doing Business* report (2008) the time needed to meet administrative requirements for importing and exporting has been reduced to 14 and 12 days respectively in 2007, down from 52 and 54 days in 2004 (see also chapters 5.2 and **6.2.2.**). Further efforts should be devoted for the effective implementation and enforcement of the adopted legislation, as well as the institutional capacity building in customs administration area. The regulatory convergence with the European standards in other areas such as product standards and SPS measures, competition policy, protection of property rights, etc. is also of a great importance for the reduction of non-tariff barriers in Georgia (see appropriate chapters below).

## 4.4. Existing FTAs

The CIS bloc countries have traditionally been Georgia's largest trade partners, though their cumulative role has been gradually declining (trade with CIS countries made up 38.8% of Georgia's trade turnover in 2006 vs. 45% in 1996). Georgia has concluded bilateral free trade agreements (FTAs) with its major CIS partners: Armenia, Azerbaijan, Kazakhstan, Moldova, the Russian Federation, Turkmenistan, Ukraine and Uzbekistan[17]. All the agreements are almost identical and provide for duty-free trade in goods (both industrial and agricultural), though with potential exemptions[18]. Exemptions from free trade are introduced in the protocols to the FTAs and can be changed annually[19]. The FTAs also contain provisions on

[16] http://www.deloitte.com/dtt/cda/doc/content/GEO_September%202006_Tax%20&%20%20Legal%20news(2).pdf

[17] Among them, the following FTAs have been ratified: with Armenia, Azerbaijan, Kazakhstan, Russian Federation, Turkmenistan, and Ukraine.

[18] Exemptions can be applied in the form of import (common tariffs) or export (export taxes) restrictions.

[19] Exemptions from free trade regimes with Georgia were applied by Russia (sugar, alcohols, beer, and tobacco products), Kazakhstan (sugar, alcohol and non-alcohol beverages, and tobacco) and Ukraine (sugar). Also, Azerbaijan unilaterally applied a 15 percent tariff on steel products. Georgia applied tariffs restrictions only to imports from Russia (alcohols).

contingent protection measures, including quotas, export taxes, safeguards and anti-dumping measures, which countries can apply unilaterally. The CIS FTAs can be described as minimal and quite basic; they do not cover trade in services, investment or government procurement.

CIS countries have also signed the multi-lateral Agreement on Mutual Policies in the Area of Standards, Metrology and Certifications (1992), amended in 2000, which provides for the creation of the Interstate Council on Standards, the system of harmonised standards and mutual recognition of certificates of conformity[20]. Products standards are mainly former Soviet Union standards; however countries are carrying out harmonization of their national standards with the international ones. The mutual recognition applies only to standards approved at the interstate level, rather than national standards, which are not often notified to trade partners (Freinkman, Polyakov and Revenco, 2004), thus undermining the integrity and efficiency of the whole system. Rules of origin within bilateral CIS FTAs are governed by the Rules adopted on 30 November 2000 by all CIS countries, except Uzbekistan and Turkmenistan. The Rules stipulate that exports subject to the free trade treatment must be conducted by tax residents in the free trade area[21]. Although CIS FTAs and multi-lateral agreements provide for the national treatment in transit, these provisions have mainly been dysfunctional (e.g., transit countries usually maintain transit permits and quotas system for road transport[22]).

Georgia has also signed the multi-lateral Agreement on the Creation of an Economic Union (1993) and the Agreement on Creation of Free Trade Area within the CIS (1994), but has not ratified them and does not intend to do so (as stated in the Working Party Report on Georgia accession to the WTO, see www.wto.org). The agreement on the Economic Union is a framework document envisaging that

[20] Still, in practice certificates issued by the partner country can be questioned (Freinkman, Polyakov and Revenco, 2004).

[21] According to the general rule of origin (tariff heading criterion), a product is considered to be of CIS origin if it is fully produced in the CIS country or, when imports are used in its production, if the designation of the product is different from the designation of the inputs according the 4-digit CIS trade nomenclature. However, there is a list of goods, which are exempted from the general rule of origin and are subject to two other rules – ad valorem rule (specified shares (normally 50 percent) of imported materials or value added in the price of final production should be met) and technological requirements (specified technological operations should be performed in the free trade area). The products traditionally considered sensitive, such as footwear, textiles, and clothing, are subject to the tariff heading criterion rather than more restraining technological requirements (Freinkman, Polyakov and Revenco, 2004).

[22] Transit countries often use their geographical advantage to restrict movement of goods of the transiting countries. Transit countries tend to create extra hurdles in customs clearance, often in violation of such agreements. These hurdles include mandatory high-cost customs convoying, insurance, and other high fees (IBM report, 2004).

parties move towards the establishment of a customs union and common market among CIS countries, however, each party may exercise its own discretion on the pace and timing of integration into economic structures of the CIS. The CIS FTA Agreement aims at creating a free trade area, coordinating economic policy, promoting inter- and intra-sectoral cooperation and harmonizing legislation and regulations. It has been ratified by only Azerbaijan, Kazakhstan, the Kyrgyz Republic, Moldova, Uzbekistan, and Tajikistan, and remains ineffective so far. As a result, preferential trading relations among CIS countries have been established and determined on the bilateral level. However, if all the countries have bilateral FTAs with identical rules of origin than *de facto* there is a CIS FTA.

Overall, the CIS free trade bloc is characterised by weak administration, lack of strict procedures for the application of non-tariff measures and temporary protection measures under FTAs and underdeveloped multi-lateral and bilateral institutions that do not have enough power to influence policies of the national trade bodies. There is also a lack of transparency and efficiency due to parallel existence of bilateral and multilateral agreements that overlap and sometimes contradict each other, as well as a lack of permanency due to frequent changes in the list of exemptions[23] and of applied contingent measures (Freinkman, Polyakov and Revenco, 2004).

For the CIS countries, exporting to other CIS countries has certain advantages compared to other destinations including historical ties and geographical proximity, the proximity of product standards and the mutual recognition of the mandatory trade and standardization documentation. On the other hand, being competitors in many sectors CIS countries have little interest to grant preferential access to imports from other CIS countries leading to trade wars and arbitrary unilateral application of trade protection measures (especially pronounced in trade with large CIS countries). Consequently, the possibility for welfare increasing resource allocation and trade creation effect within the CIS FTA has been undermined, especially in the sensitive sectors. Political and ethnic tensions between CIS countries have also influenced negatively the efficiency of the CIS FTAs. For Georgia, the advantages of the CIS FTA have been overtaken and reversed by Russia's blockage of the Georgian-Russian frontier since 2006, with no direct road or air transport connections. The CIS trade agreements have been inefficient in reducing excessively high border and transport costs within the CIS (including customs delays, problems with mutual recognition of customs

[23] Countries have agreed schedules for mutual abolishing of exemptions.

documentation and application of rules of origin) negatively impacting on bilateral trade and preventing countries from fully benefiting from scale and competition effects on CIS huge markets. The CIS FTA countries are actively engaged in economic integration with non-CIS partners, which is considered potentially more welfare increasing by them, fist of all, due to the effects of deep integration (e.g., technology transfer, institutional and policy harmonization, productivity convergence, etc.) and lock-in mechanisms for political and economic reforms. Taking into account the lack of strong economic incentives and political will of CIS countries to integrate, the prospects of the full implementation of the multi-lateral CIS FTA seem rather weak. At the same time, to become fully functional and more efficient bilateral CIS FTAs will require strengthening of their administration, and bringing their legal and institutional framework in line with the WTO rules concerning substantial coverage of the agreement, transit rules, application of SPS and TBT measures, application of safeguards and antidumping measures, as well as dispute settlement mechanisms.

Georgia is a signatory to the GUAM free trade agreement, which Georgia ratified at the end of 2002. The GUAM was created by Georgia, Ukraine, Azerbaijan and Moldova in 1997 (in 1999-2005, Uzbekistan was also a member of the group). The GUAM leaders declare their mutual interest in developing bilateral and regional cooperation to strengthen relations with the European Union, to enhance regional security and develop political and economic contacts. In 2006, the GUAM has been transformed into the international "Organization for Democracy and Economic Development – GUAM". The most important goals of this organization include the energy security and transport initiatives such as establishment of the Trans-Caucasus corridor throughout the countries' territories to the Europe, utilization of the oil and gas resources of the Caspian Sea region, creation of the multiple pipeline system to the world markets, etc. The benefits of establishing such a transport corridor can not be overestimated in terms of the improved access of these countries to the European markets, but no progress has been made so far. The ratified FTA agreement (2002) still remains ineffective, though, in 2006, the GUAM members signed a protocol on its entry into force (rules of origin and common customs formalities and procedures have not been yet adopted). The countries continue to cooperate on bilateral rather than multi-lateral level and the GUAM agreement has not been notified to the WTO.

Georgia is also a member of the Black Sea Economic Cooperation (BSEC) Organization, along with ten other countries (Albania, Azerbaijan, Bulgaria, Armenia, Greece, Moldova, Romania, Russia, Turkey and Ukraine). This agreement

does not stipulate for preferential trade among parties although it envisages the possibility of free trade zones in the future. It covers a number of fields, including economic cooperation and trade, investment, scientific and technical cooperation, the establishment of a BSEC Bank, and cooperation on transport and communications. Still, the BSEC have not advanced much in achieving the declared goals due to lack of political support, unresolved border and territorial disputes and ethnic conflicts among the member countries (Maliszewska, 2005). Moreover, the creation of the BSEC FTA would require all members to have FTAs with the EU (since some counties, Greece, Turkey, Bulgaria and Romania, are already members of the EU customs union), which is not a short-run perspective for some of them (e.g. Russia).

Turkey is Georgia's second largest trade partner after the EU, and accounts for more than 14% of its trade turnover (2006 figures). Georgia and Turkey concluded a FTA in November 2007. This FTA provides for a full liberalization of trade in non-agricultural products, but includes significant exemptions from free trade treatment for agricultural trade[24]. In addition, it does not provide for liberalisation of services and investment and for regulatory convergence between the parties. Also, bilateral trade between countries has been quite restricted by inefficient border crossings, old and obsolete highways connecting the two countries, and absence of railroads. In this regard, Georgia, Turkey and Azerbaijan signed an agreement on construction of a railway line Baku-Tbilisi-Akhalkalaki-Kars that will link the three countries and strengthen cooperation in the region. Apart from the facilitation of the bilateral trade across countries, this railroad line will transform Georgia into Turkey's window to the greater market of Eurasia. It is also worth noting that Turkey has been actively participated in supporting transport projects in Georgia including the construction of oil and gas pipelines (Baku-Tbilisi-Ceyhan and Baku-Tbilisi-Erzurum pipelines) and modernization of airports)[25].

## 4.5. Trade Openness

The openness indicator is measured as the share of exports and imports in GDP. A higher openness index tends to indicate a more outwardly-oriented economy.

[24] Most of the exemptions from free trade treatment (both in terms of complete exemptions from liberalisation and tariff quotas (very limited)) are on the side of imports into Turkey. Exemptions concern mainly such agricultural products as milk and cream, tomatoes, citrus, natural honey, nuts, grape, tea, preservations nuts and fruits, cigarettes and other tobacco products, wine, fruits and fruit juices.

[25] There have been also attempts to launch FTA negotiations with the US.

Trade liberalization reforms in Georgia have induced the increased openness of Georgia's economy. Particularly, the share of total trade of goods and services in Georgia's GDP has increased considerably (by +41.9%) over 2001-2006 and reached about 90% of GDP in 2006 (see Table 4.2.). Imports of goods and services have been playing more significant role than exports (e.g., 56.9% vs. 32.9% of GDP respectively in 2006). Furthermore, the share of total imports has been expanding faster than that of exports (by +46.3% vs. +34.3% respectively over 2001-2006). Overall, Georgia's trade openness has increased considerably over recent years, with the higher degree of openness on the import side of trade.

**Table 4.2. Georgia openness (GDP decomposition, current prices)**

| | 2001 | 2003 | 2006 | % change 2001-2006 |
|---|---|---|---|---|
| Exports of goods and services as % of GDP | 24.5 | 31.8 | 32.9 | +34.3 |
| Imports of goods and services as % of GDP | 38.9 | 46.4 | 56.9 | +46.3 |
| Total Trade as % of GDP | 63.3 | 78.3 | 89.8 | +41.9 |

Source: ADB, 2007.

## 4.6. The geographical composition of trade

The fifth rule of thumb focuses on the extent to which countries trade with each other prior to the FTA. Where there is initially little trade with potential trade partner, this signifies that the third countries are more efficient suppliers and thus that the future FTA is more likely to result in trade diversion. Also, there may be limited scope for trade expansion from forming a FTA between countries that do little trade with each other. On the contrary, if in the initial situation the countries trade significantly then it is more likely that they importing from the more efficient suppliers and the chances for trade diversion are lower.

All calculations in this chapter are based on the World Integrated Trade Solutions (WITS) database. However, it is important to note that the CIS countries are known to have persistent problems in the recording of international transactions explained by weak border control, a lack of control over parts of territories (in the case of Moldova and Georgia), poor customs procedures and evaluation techniques (Freinkman, Polyakov and Revenco, 2004). The consistency of trade data over time is also a matter of concern. CIS countries anti-corruption and customs reform initiatives influence the dynamics of their trade figures. As a result, CIS trade statistics are often deficient and the exercise with comparing

mirror trade flows confirms this[26] (see Table 4.3) with mirror trade statistics for Georgia's main partners).

**Table 4.3. Georgia mirror statistics for main partners, 2006 (USD million)**

| | Georgia trade statistics | | | Mirror trade statistics of trade partners | | |
|---|---|---|---|---|---|---|
| | **Export** | **Import** | **Balance** | **Export** | **Import** | **Balance** |
| **Armenia** | 73.6 | 40.2 | 33.4 | 47.5 | 34.7 | 12.8 |
| **Azerbaijan** | 92.2 | 318.5 | -226.3 | 285.3 | 49.2 | 236.1 |
| **Ukraine** | 57.0 | 303.2 | -246.2 | 295.8 | 70.3 | 225.5 |
| **Russian Federation** | 75.7 | 558.6 | -482.9 | 446.4 | 68.4 | 378 |
| **Iran** | 2.7 | 40.3 | -37.6 | 48.3 | 7.7 | 40.6 |
| **Turkey** | 124.9 | 522.4 | -397.5 | 225.9 | 182.8 | 43.1 |
| **EU27** | 255.3 | 1060.9 | -805.6 | 1159.4 | 648.9 | 510.5 |
| **Total** | 681.4 | 2844.1 | -2162.7 | 2508.6 | 1062.0 | 1446.6 |

Source: WITS.

As can be seen from Table 4.3., major discrepancies appear in mirror data on Georgia's trade with Armenia and Azerbaijan (on Georgia's export side), the EU (Georgia's export side) and Turkey (Georgia's import side). One of the possible explanations of such discrepancies is the misspecification of the country of origin after the transit trough the territory of a transit country regardless of the share of its content that actually comes from this country. For instance, the WITS data on the EU imports from Georgia report USD 350.5 million imports of mineral fuels (HS 27) making up 54% of total imports from Georgia to the EU in 2006. At the same time, according to the WITS data for Georgia imports of mineral fuels equal only USD 15 million (or 5.9% of Georgia's total exports to the EU) (see Table 4.7 and Table 4.8). Since Georgia is a main transit route for Azerbaijani oil exports to the EU, the misspecification of their origin is likely to arise.

Data discrepancies with Armenia and Azerbaijan are most evident for HS 87 commodity group "Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof" and can be possibly explained with the fact that Georgia imports used cars from the Western Europe and then re-export them to its neighbouring countries (ADB, 2007). In 2006, reported exports of HS 87 group from Georgia to Azerbaijan and Armenia are 38.4% (USD 35.4 million) and 11.1% (USD 8.2 million) of total Georgia's exports to these countries, while no such imports from Georgia were reported by Armenia and Azerbaijan (see Appendix 2 Table 1 for commodity composition of trade with Georgia's main trade partners). A similar situation arises when looking at the data on exports of cereals (HS 10) from

[26] Imports are recorded in CIF prices while exports are recorded in FOB prices, thus imports should exceed exports by transportation and insurance costs.

Georgia to Armenia (Georgia reports USD 11.8 million exports of cereals to Armenia in 2006 while no such imports from Georgia are reported by Armenia). Georgia was a net importer of cereals in 2006 (USD 109.6 million imports vs. USD 11.8 million exports); moreover, all exported cereals from Georgia were directed to Armenia. Similarly, data on Turkey's exports to Georgia seem to be substantially underestimated.

In order to provide a consistent set of measures for the remainder of this report we use Georgia's trade data for further analysis, however the reader should bear the above considerations and caveats in mind.

Table 4.4 presents Georgia's ten largest partners in 2006. The EU was Georgia's largest trade partner accounting for 28.7% of Georgia's total trade in 2006. It was followed by three neighbouring countries Turkey (14.1%), Russia (13.8%) and Azerbaijan (9%). Trade with the five largest partners attributed for 73.5% of Georgia's trade turnover in 2006 signifying its high geographical concentration. Over the last decade, the role of trade with traditional CIS trade partners Russia, Armenia, and Azerbaijan has been declining. At the same time, Georgia has increased its trade with Turkey, Ukraine and Turkmenistan. Georgia has also diversified its trade towards other partners – United Arab Emirates, China, United States and Rest of the World. The registered share of trade with the EU has slightly declined compared to 1996 due to the reduction of EU weight in Georgia's total imports (see also Table 4.9 below).

**Table 4.4. Georgia's 10 largest trade partners in 2006**

| Trade partner | Trade turnover | Balance | Balance as a share of bilateral trade | Share in total trade, 2006 | Share in total trade, 1996 |
|---|---|---|---|---|---|
| | *million USD* | *million USD* | *%* | *%* | *%* |
| EU27 | 1316.1 | -805.64 | 61.2 | 28.7 | 33.3 |
| Turkey | 647.3 | -397.43 | 61.4 | 14.1 | 11.6 |
| Russian Federation | 634.3 | -482.97 | 76.1 | 13.8 | 20.8 |
| Azerbaijan | 410.7 | -226.35 | 55.1 | 9.0 | 11.6 |
| Ukraine | 360.2 | -246.26 | 68.4 | 7.9 | 5.0 |
| United States | 188.5 | -70.82 | 37.6 | 4.1 | 3.5 |
| Turkmenistan | 172.9 | -29.25 | 16.9 | 3.8 | 2.0 |
| United Arab Emirates | 132.0 | -86.23 | 65.3 | 2.9 | 0.1 |
| Armenia | 113.9 | 33.37 | 29.3 | 2.5 | 4.3 |
| China | 113.6 | -92.95 | 81.8 | 2.5 | 0.1 |
| RoW | 497.4 | -199.7 | 40.1 | 10.8 | 7.7 |
| **World** | **4586.9** | **-2604.2** | **56.8** | **100** | **100** |

Source: WITS.

### 4.6.1. Export Structures by Main Trading Partners

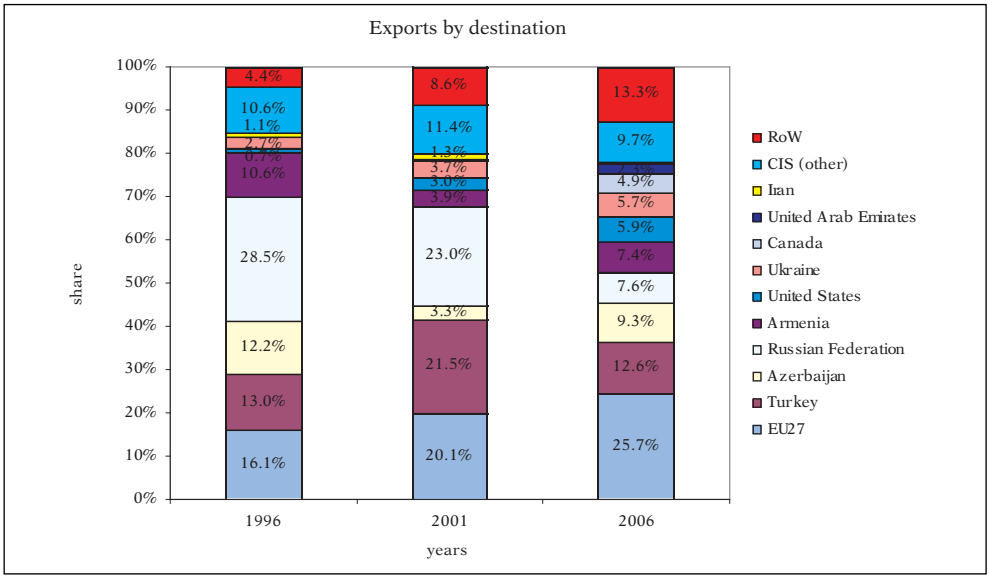
On the export side, the EU27 is Georgia's most important trading partner. The registered level of Georgia's exports to the EU27 has grown substantially over the last decade – by almost 8 times. As a result, the share of Georgia's exports to the EU in total Georgia's export has expanded from about 16% in 1996 up to 25.7% in 2006 (see Table 45 and Figure 4.2.).

Traditionally, Georgia's exports were largely oriented to the CIS markets; however, their importance as Georgia's dominant destination markers has been decreasing. This is especially pronounced for the Russian market, which was the first among Georgia's destination markets in 1996 and in 2001 (28.5% and 23.0% respectively in total exports) and moved down to the fourth position in 2006 (7.6% of total exports). This is partly due to Russia's trade restrictions, as well as Georgia's greater penetration into other world markets. At the same time, the share of exports to the Ukrainian market has increased from 2.7% in 1996 up to 5.7% in 2006 (e.g., upon Russia's trade embargo the Georgia's wine and spirits market is shifting from Russia to Ukraine).

Turkey, Azerbaijan and Armenia were the second, third and fifth partners respectively in 2006. The role of Turkey in Georgia's export was almost the same in 2006 as it was in 1996 – about 13% (while in 2001 it made up 21.5% of Georgia's exports). Although in value terms, Georgia's exports to Azerbaijan and Armenia markets increased substantially (by about 3.7 times), still their shares in Georgia's total exports have declined as compared to 1996 and have increased as compared to 2001. At the same time, there has been a considerable shift of Georgia's exports towards non-CIS partners such as United States, Canada and United Arab Emirates (accounting for 5.9%, 4.9% and 2.3% respectively in 2006 vs. 0.7%, 0.0% and 0.0% respectively in 1996). Also, Georgia's export markets are becoming more diversified (and thus less concentrated): the share of exports to the Rest of world has increased from 4.4% in 1996 up to 13.3% in 2006.

Given the considerable weight of the EU as an export market and its growing importance for Georgia over time, we can expect in accordance with the Sussex Framework that there are opportunities for Georgian exporters to create more trade on the EU market if barriers to trade are further reduced between countries. Still, since the pre-FTA tariff barriers in the EU on Georgian goods are already low, shallow integration effects as a result of the EU tariff reduction will not likely to be significant for Georgia. At the same time, the elimination or reduction of regulatory

**Figure 4.2. Geographical distribution of Georgia's exports, selected years**




Source: WITS.

**Table 4.5. Geographical distribution of Georgia's exports**

| Country name | 1996 | | 2001 | | 2006 | |
|---|---|---|---|---|---|---|
| | million USD | % | million USD | % | million USD | % |
| EU27 | 32.2 | 16.1% | 64.3 | 20.1% | 255.3 | 25.7% |
| Turkey | 25.9 | 13.0% | 68.7 | 21.5% | 124.9 | 12.6% |
| Azerbaijan | 24.3 | 12.2% | 10.6 | 3.3% | 92.2 | 9.3% |
| Russian Federation | 56.7 | 28.5% | 73.5 | 23.0% | 75.7 | 7.6% |
| Armenia | 21.0 | 10.6% | 12.3 | 3.8% | 73.6 | 7.4% |
| United States | 1.3 | 0.7% | 9.5 | 3.0% | 58.9 | 5.9% |
| Ukraine | 5.4 | 2.7% | 11.7 | 3.7% | 57.0 | 5.7% |
| Canada | 0.0 | 0.0% | 0.04 | 0.01% | 48.9 | 4.9% |
| United Arab Emirates | 0.0 | 0.0% | 1.3 | 0.4% | 22.9 | 2.3% |
| Iran | 2.2 | 1.1% | 4.3 | 1.3% | 2.7 | 0.3% |
| CIS (other) | 21.0 | 10.6% | 36.3 | 11.3% | 96.3 | 9.7% |
| RoW | 8.7 | 4.4% | 27.5 | 8.6% | 132.0 | 13.3% |
| **Total exports** | **198.8** | **100.0%** | **320.0** | **100.0%** | **991.3** | **100.0%** |

Source: WITS.

and institutional non-tariff barriers in the process of deep integration will enhance Georgia's export potential and improve its access to the EU market. There is also the possibility of long term gains to the extent that opening up the domestic market makes the Georgian firms more productive, and hence more competitive. Becoming more productive (either because of reallocation effects or because of firms increasing their productivity levels) will increase overall productivity in the economy and raise levels of GDP per capita.

From the EU perspective, the low level of trade with Georgia and the current low level of tariff protection (GSP+ system) applied to Georgian products suggest that there will be little scope for both trade creation and trade diversion effects. At the same time, it should be taken into account that Georgia, as a transition economy, is only partly reconstructed following the devastating collapse of USSR industrial structures; the development of new industrial structures under the future EU-Georgia FTA could well enhance the Georgia's export potential in the EU market in a longer perspective.

### 4.6.2. Export Structures by Commodities

The Sussex Framework suggests considering the sectoral pattern of trade in order to help to identify (1) the sectoral distribution of likely trade creation and trade diversion and (2) those sectors which are of particular importance to the economies concerned. This is important from the perspective of economic significance, but also important from a political economy perspective.

Table 4.2 presents the 10 largest commodity groups of exports in 2006 aggregated at HS-2 level, as well as changes in their exports over time. The ten largest export groups are comprised of non-energy mineral products, base metals, vegetables and foodstuffs, machinery and equipments, and chemical products. "Iron and steel" HS group, mainly ferro-alloys and ferrous metal scrap, were the major source of Georgia's export (16.6% of all exports in 2006 vs. 5.9 % in 1996). Iron and steel exports have increased as much as 14 times over 1996-2006. In 2006, the key destination markets for iron and steel were Turkey (37.3% of all group exports), the USA (18.7%), and Russia (14.2%).

The second most important export category in 2006 was "Beverages and spirits" including wines and mineral waters, and made up 12.1% of total exports. Beverages and spirits have lost its leading export position, though their exports have grown by 7 times from 1996. The key markets for this group were Ukraine (28.9%), Russia (28.2%), and the EU (22.6%). The second largest group of agricultural exports included edible fruit and nuts (6.2% of total exports in 2006). The key markets included the EU (77.4%), Russia (8.8%) and Ukraine (7.0%). "Ores, slag and ash" group was the third and captured 8.2% of in 2006; its share almost sustained over the period. The EU was the main destination market (85%). Vehicles, aircrafts[27] and machinery and mechanical appliances together comprised 19.2% of

[27] Major part of aircrafts was exported to Turkmenistan due to the barter deals with Turkmenistan against the debt on gas supplied to Georgia in 90-es.

total exports in 2006 vs. 3% in 1996 and 8.8% in 2001. Their exports showed the strongest growth by about 30 times from 1996. The key markets of vehicles (HS 87) were Azerbaijan (48.4%), Turkey (12.4%) and Armenia (11.2%). Aircrafts (HS 88) were mainly exported to Turkmenistan (83%) due to the barter deals with Turkmenistan against the debt on gas supplied to Georgia in 90-es. The EU (43.8%), United Arab Emirates (15.2%) and Turkmenistan (12.1%) were the key markets for machinery and mechanical appliances (HS 84). The importance of precious stones and metals also has grown over the period in total imports (from 0.5% to 5.2%). Canada was the key destination market for this group (94%).

Overall, in 2006 as compared with 1996 there have been considerable changes in the export structure of Georgia. The ten most important commodity groups in 2006 captured 75% of all exports, while in 1996 they were only 36% of total exports (67.7% in 2001). Furthermore, there has been a shift in the export composition from foodstuffs and agricultural products toward resource-based and high-technology products over the last decade. Noteworthy, the share of all agricultural and foodstuffs exports in Georgia's total exports declined from 30.2% in 1996 to 23.7% in 2006.

**Table 4.6. The 10 largest commodity groups of Georgia's total exports, by 2 digit HS**

| HS code | Product description | 1996 | | 2001 | | 2006 | |
|---|---|---|---|---|---|---|---|
| | | million USD | % | million USD | % | million USD | % |
| 72 | Iron and steel | 11.7 | 5.9% | 50.79 | 15.87% | 164.8 | 16.6% |
| 22 | Beverages, spirits and vinegar | 16.4 | 8.2% | 53.59 | 16.75% | 119.6 | 12.1% |
| 26 | Ores, slag and ash | 13.7 | 6.9% | 23.32 | 7.29% | 81.7 | 8.2% |
| 87 | Vehicles other than railway or tramway rolling-stock | 2.1 | 1.0% | 2.46 | 0.77% | 73.2 | 7.4% |
| 84 | Nuclear reactors, boilers, machinery and mechanical appliances | 3.4 | 1.7% | 11.68 | 3.65% | 62.5 | 6.3% |
| 8 | Edible fruit and nuts; peel of citrus fruits or melons and watermelons | 10.9 | 5.5% | 11.64 | 3.64% | 61.7 | 6.2% |
| 88 | Aircraft, spacecraft, and parts thereof | 0.4 | 0.2% | 36.08 | 11.28% | 54.9 | 5.5% |
| 71 | Natural or cultured pearls precious or semi-precious stones, precious metals | 0.7 | 0.3% | 14.11 | 4.41% | 51.4 | 5.2% |
| 31 | Fertilizers | 11.9 | 6.0% | 4.93 | 1.54% | 46.6 | 4.7% |
| 74 | Copper and articles thereof | 0.1 | 0.0% | 7.67 | 2.40% | 30.2 | 3.0% |
| | **Total** | **71.3** | **36%** | **216.28** | **67.6%** | **746.6** | **75.0%** |

Source: WITS.

**Table 4.7. The 10 largest commodity groups of Georgia's exports to the EU, by HS 2-digit**

| HS code | Product description | 1996 | | 2001 | | 2006 | |
|---|---|---|---|---|---|---|---|
| | | million USD | % | million USD | % | million USD | % |
| 26 | Ores, slag and ash | 13.4 | 41.5% | 9.74 | 15.15% | 69.4 | 27.2% |
| 8 | Edible fruit and nuts | 0.7 | 2.2% | 6.93 | 10.77% | 47.7 | 18.7% |
| 84 | Nuclear reactors, boilers, machinery and mechanical appliances | 0.9 | 2.7% | 2.61 | 4.05% | 27.4 | 10.7% |
| 22 | Beverages, spirits and vinegar | 1.1 | 3.6% | 4.67 | 7.26% | 27.0 | 10.6% |
| 27 | Mineral fuels, mineral oils and products of their distillation | 4.7 | 14.6% | 0.86 | 1.33% | 15.0 | 5.9% |
| 31 | Fertilizers | 2.7 | 8.5% | 1.59 | 2.47% | 13.3 | 5.2% |
| 72 | Iron and steel | 1.8 | 5.6% | 4.90 | 7.61% | 12.0 | 4.7% |
| 87 | Vehicles other than railway or tramway rolling-stock | 0.0 | 0.0% | 1.00 | 1.55% | 6.1 | 2.4% |
| 20 | Preparations of vegetables, fruit, nuts | 1.1 | 3.4% | 1.02 | 1.59% | 5.0 | 2.0% |
| 88 | Aircraft, spacecraft, and parts thereof | 0.1 | 0.2% | 0.11 | 0.17% | 4.7 | 1.8% |
| | **Total** | **26.5** | **82.30%** | **33.42** | **51.96%** | **227.6** | **89.20%** |

Source: WITS.

**Table 4.8. The 10 largest exports of Georgia to the EU in 2006, by HS 2-digit (the EU mirror statistics)**

| HS code | Product description | million USD | % |
|---|---|---|---|
| 27 | Mineral fuels, mineral oils and products of their distillation; | 350.49 | 54.02% |
| 26 | Ores, slag and ash | 69.81 | 10.76% |
| 8 | Edible fruit and nuts | 50.00 | 7.71% |
| 22 | Beverages, spirits and vinegar | 45.74 | 7.05% |
| 85 | Electrical machinery and equipment | 25.98 | 4.00% |
| 31 | Fertilizers | 19.28 | 2.97% |
| 72 | Iron and steel | 13.27 | 2.05% |
| 84 | Nuclear reactors, boilers, machinery and mechanical appliances | 10.75 | 1.66% |
| 76 | Aluminium and articles thereof | 9.30 | 1.43% |
| 74 | Copper and articles thereof | 7.41 | 1.14% |
| | **Total** | **602.03** | **92.78%** |

Source: WITS.

Bilateral trade with the EU is more concentrated compared to Georgia's total trade, though Georgia has diversified to some extent its exports to the EU over the last decade (see Table 4.7). Non-energy mineral products (ores, slag and ash)

traditionally led the list of most important exports to the EU (27.2% in 2006), though its share has declined compared with 1996 (41.5%). At the same time, there has been a considerable rise in importance of edible fruits and nuts as compared with 1996 and 2001 (from 2.2% in 1996 up to 18.7% in 2006), and beverages and spirits (from 3.6% in 1996 to 10.6% in 2006). Machinery and mechanical appliances was the third largest group and their share expanded considerably from 2.7% up to 10.7% over 1996-2006. Among other important export products to the EU were mineral fuels (5.9%), fertilizers (5.2%), and iron and steel (4.7%), etc. As previously mentioned, there is a huge difference in countries' reporting of Georgia's exports of mineral fuels (HS 27) to the EU (see Table 48 for the EU mirror statistics).

Taking into the account the fairly low level of the EU tariffs on both Georgian agricultural and non-agricultural commodities, the scope of shallow integration-induced trade creation due to the tariff reduction is likely to be limited. In the longer perspective, Georgia's future comparative advantages still remain to be created by investment in new economic structures (for example outsourcing by Turkish industries) to take advantage of low Georgian labour costs.

### 4.6.3. Import Structures by Major Trading Partners

Georgia is an import-oriented economy, with a merchandise trade balance making up about 33% of GDP. The EU is Georgia's largest supplier with a reported 29.5% share in Georgia's total imports in 2006 (see Table 4.9, Figure 4.3). Georgia is a net importer of the European products with the registered USD 805 million negative trade balance in 2006 (or about 61% of bilateral trade). Over the last decade, imports from the EU have grown by about 4 times, though the EU import share has declined by almost 9 percentage points (from 38.3% to 29.3%). The import share of Russia, the other principal supplier to Georgia, has also declined, but to a lesser extent (from 18.5% in 1996 to 13.4% in 2001 and 15.5% in 2006). Russia exports energy resources to Georgia and is also a significant exporter of food products (mostly cereals and their preparations), machinery and mechanical appliances, electrical equipment and vehicles (see Appendix 2 Table 1). Imports from Turkey, third largest supplier in 2006, have risen by about 7 times from 1996 increasing its share from 11.2% in 1996 up to 14.5% in 2006. Turkey exports mainly machinery and mechanical appliances, plastics, electrical equipments, chemicals, paper and metal products. Azerbaijan is the forth largest Georgia's importer with share of about 9% in total imports in 2006 exporting mainly oil and oil products.

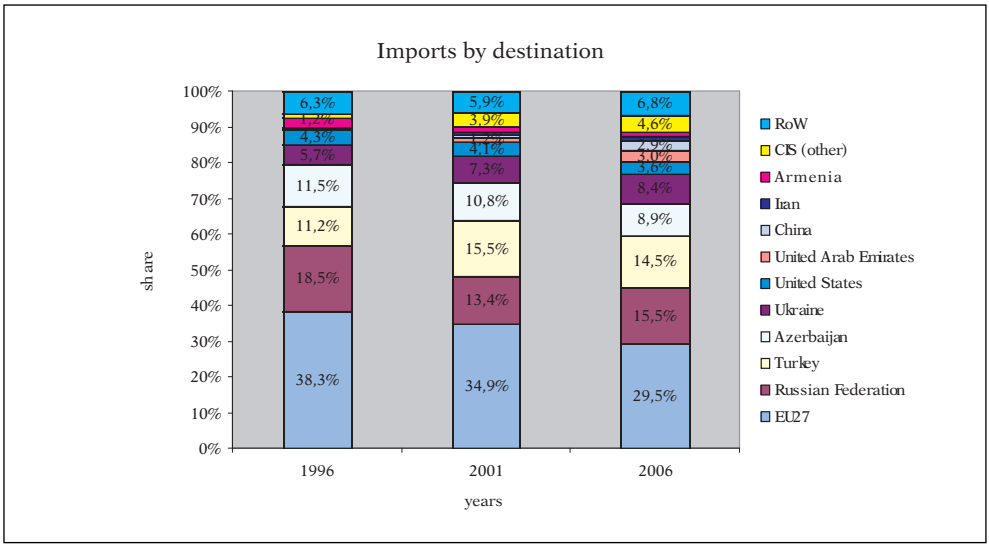
Ukraine's share in Georgia's imports has been substantially increasing over 1996-2006 (from 5.7% to 8.4%). Ukraine exports metals and metal products,

**Table 4.9. Geographical distribution of Georgia's imports**

| Country name | 1996 | | 2001 | | 2006 | |
|---|---|---|---|---|---|---|
| | milion USD | % | million USD | % | million USD | % |
| EU27 | 263.1 | 38.3% | 236.7 | 34.9% | 1060.9 | 29.5% |
| Russian Federation | 127.1 | 18.5% | 91.2 | 13.4% | 558.6 | 15.5% |
| Turkey | 76.6 | 11.2% | 105.0 | 15.5% | 522.4 | 14.5% |
| Azerbaijan | 78.7 | 11.5% | 73.2 | 10.8% | 318.5 | 8.9% |
| Ukraine | 38.8 | 5.7% | 49.5 | 7.3% | 303.2 | 8.4% |
| United States | 29.8 | 4.3% | 27.8 | 4.1% | 129.7 | 3.6% |
| United Arab Emirates | 0.6 | 0.1% | 8.2 | 1.2% | 109.1 | 3.0% |
| China | 0.1 | 0.0% | 3.8 | 0.6% | 103.3 | 2.9% |
| Iran | 2.7 | 0.4% | 6.3 | 0.9% | 40.3 | 1.1% |
| Armenia | 17.2 | 2.5% | 10.4 | 1.5% | 40.2 | 1.1% |
| CIS (other) | 8.6 | 1.2% | 26.6 | 3.9% | 163.9 | 4.6% |
| RoW | 43.6 | 6.3% | 39.9 | 5.9% | 245.4 | 6.8% |
| **Total** | **686.8** | **100%** | **678.7** | **100.0%** | **3595.5** | **100.0%** |

Source: WITS.

**Figure 4.3. Geographical distribution of Georgia's imports, selected years**




Source: WITS.

machinery and vehicles, and food products (vegetable oils, tobacco, dairy produce) to Georgia. The share of other CIS countries has also risen (from 1.2% to 4.6%). The strongest growth over the period has been revealed by imports from the United Arab Emirates and China driving their shares up to about 3% for each (from almost zero level in 1996). The three major groups of United Arab Emirates imports to Georgia include electrical equipments, vehicles, and machinery and

mechanical appliances, while China supplies to Georgia machinery and mechanical appliances, electrical equipments and footwear. The weight of United States has almost sustained over the period (at about 4%), with such key imports groups as vehicles, electrical equipments and machinery, and foodstuffs (meat products, cereals, fish). Noteworthy, the share of the Rest of the world has been also fairly stable (at about 6%). Overall, the share of CIS countries in total imports has remained almost the same over the last decade, with a slight shift from Russia to other CIS countries. There has also been a shift in Georgia's structure of import sources from the EU to new partners such as United Arab Emirates and China.

The relatively high share of imports from the EU in Georgia's total imports suggests that there is some potential for trade creation arising from future EU-Georgia FTA. At the same time, the fact that this share has been declining over time may signify an increasing competitiveness of third country suppliers for Georgia (Georgia has been shifting its sources of imports towards less-cost imports from other partners). It is also the case that over 70% of Georgia's imports is from non-EU countries, which suggests scope for import supply switching. Where this is from e.g. CIS countries with whom Georgia already has an FTA (accounting for about 38% of total imports in 2006), then there is likely to be welfare increasing trade reorientation. Where this is away from non-partner countries than this would entail welfare decreasing trade diversion. The future FTA may serve to increase the EU share in total imports and thus it is likely to induce trade diversion as well; hence net welfare effect from this FTA for Georgia will be ambiguous.

Nevertheless, bearing in mind the current low level of pre-FTA tariffs (with zero tariffs for non-agricultural trade) in Georgia for all its partners, the shallow integration-induced welfare effects are not expected to be significant. It is worth noting that the there may be significant effects still to come from the 2006 tariff reductions in Georgia (first of all, for non-agricultural products) in the form of i) the increase of Georgia's trade with its main partners, as well as ii) the trade re-orientation from CIS partners towards non-CIS partners due to the reduction of preferential margin earlier received by CIS bloc. However, the magnitude of these effects depends on how much the differences in competitiveness across countries (CIS and non-CIS) are actually affected by tariff changes. It is also important how far the improvements in the general business climate in Georgia through trade-related and other reform measures succeed in triggering a sustained period of high economic growth.

### 4.6.4. Import Structure by Commodities

Natural gas and oil products, followed by vehicles, machinery and mechanical appliances and electrical equipment topped the list of Georgia's imports in 2006 (see Table 4.10). The largest part of Georgia's imports traditionally has been accounted for by energy products, but their share has been significantly falling over 1996-2006 (from 38.8% to 19.8%). The key suppliers of mineral fuels (HS 27) are Azerbaijan (34% of all imported mineral fuels), Russia (32%) and Turkmenistan (14%). Imports of machine-building produce were represented by three commodity groups (HS 87, 84, 85) whose total importance (28.5%) much exceeded that of energy products in 2006. Over the last decade, their share has been expanding substantially – by over 19 percentage points, and by 7 p.p. compared to 2001. The major suppliers of vehicles into Georgia were represented by the EU (55%), the US (13%), and Japan (8%), and Ukraine (5.4%); machinery and mechanical appliances – by the EU (53.2%), Turkey (16.5%), Russia (6%) and China (5.9%), followed by United Arab Emirates and Ukraine (4.7% each); electrical equipment – by the EU (35%), Turkey (17%), United Arab Emirates (15.4%) and Ukraine (8%). Imports of pharmaceuticals comprised 3.5% of total imports in 2006, which is greater than in 1996 (2.3%) but lower than in

**Table 4.10. The 10 largest commodity groups of Georgia's total imports, by HS 2-digit**

| HS code | Product description | 1996 | | 2001 | | 2006 | |
|---|---|---|---|---|---|---|---|
| | | milion USD | % | milion USD | % | million USD | % |
| 27 | Mineral fuels, mineral oils and products of their distillation | 266.3 | 38.8% | 155.48 | 22.91% | 713.3 | 19.8% |
| 87 | Vehicles other than railway or tramway rolling-stock | 8.3 | 1.2% | 21.82 | 3.22% | 401.7 | 11.2% |
| 84 | Nuclear reactors, boilers, machinery and mechanical appliances | 24.2 | 3.5% | 69.46 | 10.23% | 335.7 | 9.3% |
| 85 | Electrical machinery and equipment | 30.8 | 4.5% | 55.58 | 8.19% | 286.5 | 8.0% |
| 30 | Pharmaceutical products | 15.6 | 2.3% | 40.44 | 5.96% | 124.2 | 3.5% |
| 10 | Cereals | 65.0 | 9.5% | 11.53 | 1.70% | 109.6 | 3.0% |
| 39 | Plastics and articles thereof | 4.9 | 0.7% | 14.77 | 2.18% | 102.8 | 2.9% |
| 73 | Articles of iron or steel | 4.6 | 0.7% | 26.16 | 3.85% | 98.4 | 2.7% |
| 17 | Sugars and sugar confectionery | 35.4 | 5.1% | 25.12 | 3.70% | 76.6 | 2.1% |
| 72 | Iron and steel | 3.5 | 0.5% | 11.34 | 1.67% | 74.7 | 2.1% |
| | **Total** | **458.6** | **66.80%** | **431.70** | **63.61%** | **2323.5** | **64.60%** |

Source: WITS.

2001 (6%). The main importers of pharmaceuticals included the EU (60%), Switzerland (10.6%), and Turkey (6.5%) and Ukraine (6%). Only two agricultural commodity groups were among 10 largest import groups in 2006 in accordance with HS 2-digit classification: cereals, with the 3% share, and sugars, with the 2% share. The importance of these groups has been falling over the last years.

Georgia's imports from the EU are concentrated in machinery and transport equipment, chemicals, manufactured goods, as well as mineral fuels. In 2006, the major HS 2-digit commodity groups of Georgia's import from the EU included: vehicles (HS 87) accounted for 20.8% of total imports from the EU, machinery and mechanical appliances (HS 84) – 16.8%, mineral fuels (HS 27) – 9.4%, electrical equipment (HS 85) – 9.4%, and pharmaceuticals – 7.1% together capturing for over 63% of total imports form the EU in 2006 (see Table 4.11). The structure of main commodity groups imported from the EU has changed notably over the decade. The most pronounced changes in 2006 vs. 1996 import structures have been observed for

**Table 4.11. The 10 largest commodity groups of Georgia's imports from the EU, by HS 2-digit**

| HS code | Product description | 1996 | | 2001 | | 2006 | |
|---|---|---|---|---|---|---|---|
| | | million USD | % | million USD | % | million USD | % |
| 87 | Vehicles other than railway or tramway rolling-stock | 2.7 | 1.0% | 14.40 | 6.08% | 221.0 | 20.8% |
| 84 | Nuclear reactors, boilers, machinery and mechanical appliances | 12.3 | 4.7% | 39.69 | 16.8% | 178.4 | 16.8% |
| 27 | Mineral fuels, mineral oils and products of their distillation | 80.4 | 30.5% | 19.08 | 8.1% | 100.0 | 9.4% |
| 85 | Electrical machinery and equipment | 13.1 | 5.0% | 21.35 | 9.0% | 99.8 | 9.4% |
| 30 | Pharmaceutical products | 3.8 | 1.5% | 29.07 | 12.3% | 75.6 | 7.1% |
| 90 | Optical, photographic, cinematographic, measuring, checking, precision, medical instruments | 3.0 | 1.2% | 10.54 | 4.5% | 33.2 | 3.1% |
| 33 | Essential oils and resinoids; perfumery, cosmetic | 1.0 | 0.4% | 4.73 | 2.0% | 32.0 | 3.0% |
| 94 | Furniture | 2.9 | 1.1% | 3.98 | 1.7% | 26.6 | 2.5% |
| 73 | Articles of iron or steel | 0.6 | 0.2% | 12.10 | 5.1% | 21.5 | 2.0% |
| 95 | Toys, games and sports requisites | 0.2 | 0.1% | 0.67 | 0.3% | 18.9 | 1.8% |
| | **Total** | **120.0** | **45.7%** | **155.6** | **65.8%** | **807.0** | **75.9%** |

Source: WITS.

vehicles (a rise of almost 20 percentage points from 1996), mineral fuels (a decline of over 20% p.p.), and machinery and mechanical appliances (a rice of about 12% p.p.). At the same time, 2006 import structure is much more similar to the 2001 one, with only vehicles imports revealing a sharp change of 14 p.p. over 2001-2006.

As can be seen, Table 4.11 does not contain agricultural products. When looking at agricultural imports from the EU to Georgia in 2006, there are two major commodity groups included – beverages and spirits, HS 22 (1.7% of total imports from the EU) and dairy products, eggs and natural honey, HS 4 (1.1%). These products are among those under the highest tariff protection in Georgia – hence there is some scope for trade creation and trade diversion effects in regard to these products if they are included into the FTA[28].

Under the future EU-Georgia FTA, trade creation and trade diversion are likely to appear mainly in regard to those goods, in which the pre-FTA trade between partners has been concentrated, that is in regard to machinery and transport equipment, chemicals and manufactured goods. Furthermore, the EU will compete with those partners, who import a similar set of goods into Georgia; hence the future FTA may cause Georgia's trade to divert from those partners. On the contrary, less trade diversion is expected in regard to partners with dissimilar structures of exports to Georgia. When we compare Georgia's imports from other main partners with that from the EU, we conclude that the EU competes with the US, Japan and Ukraine in regard to vehicles; with Turkey, Russia, China, United Arab Emirates and Ukraine in regard to machinery and electrical equipment; with Turkey and Ukraine in regard to pharmaceuticals. Imports from the EU in these products currently predominate.

All the products referred to above are already exempted from tariff barriers in Georgia suggesting that the current distribution of Georgia's sources of those imports does not incorporate tariff-induced distortions and imports come from their most efficient suppliers. Therefore, we conclude that little direct shallow integration-induced effects are likely to occur from any future Georgian FTA in regard to these products. Distortions in trade are possibly created by non-tariff barriers and thus cooperation between countries in this area should be welfare increasing.

[28] Imports of beverages and spirits made up 1.1% of total imports to Georgia in 2006; dairy products – 0.9%.

## 4.7. Finger-Kreinin Indices

According to the third and fourth rules of thumb, the extent to which trade creation on the production side will occur depends on the degree of overlap in production and trade structures across the economies of future partners, and on the differences in relative costs of production between them. The more similar the production bundles of the economies and the higher the elasticities of supply, the greater the possibility of trade creation from the PTA, since countries are able to source the good to the more efficient partner supplier (Gasiorek et al, 2006). Otherwise, trade diversion is likely to occur.

The degree of similarity between two partners with regard to their trade or production structures is measured by the Finger-Kreinin (FK) index. The FK index is equal to 1 (or 100 if expressed as percent) when the structure of trade across the two countries is identical, and is equal to 0 when the structure of trade is completely different. Ideally, it is computed on the basis of production data, but since it is not readily available, highly disaggregated trade data is used instead. We have calculated the FK indices to measure similarities of export structures between Georgia and its main trade partners – the EU27, Armenia, Azerbaijan, Ukraine, Russia, Iran[29], Turkey, as well as across these partners at the HS 6-digit and 4-digit level. Given the higher level of aggregation at the 4-digit level, the reported degree of similarity is inevitably higher when compared to the 6-digit level. We also carried out the same exercise for imports (see Table 414 through Table 4.15).

The FK indices measuring export similarities between Georgia and its main trade partners are extremely low (see Table 4.12, Table 4.13). The highest FK index (19.11 at HS 6 digit level and 31.33 at HS 4 digit level) is between Armenian and Georgian exports. The FK index for Georgia and the EU is 16.13 at HS 6 digit level and 23.29 at HS 4 digit level. The low FK index for Georgia and the EU suggests a low level of export similarity between them. Therefore, according to the fourth rule of thumb there is not much evidence to suggest trade creation on the production side under the future Georgia and the EU FTA. Due to recent trade liberalisation in Georgia, it can be concluded that Georgia is already undergoing the process of switching towards more efficient sources of supply and deepening its trade specialisation. In regard to other partners, Georgia's export structure also does not overlap much with their export structures either. Not surprisingly, if we consider the degree of overlap with regard to imports we see that this is significantly higher. This occurs because of the common need across the CIS countries for imports of intermediates and final goods which are not produced domestically (see Table 4.14, Table 4.15).

[29] Trade data for Iran is of 2005.

**Table 4.12. FK indices for exports, HS 6 digit, 2006**

| | Georgia | Armenia | Azerbaijan | Ukraine | Russia | Iran | Turkey |
|---|---|---|---|---|---|---|---|
| Armenia | 19.11 | - | | | | | |
| Azerbaijan | 5.89 | 1.80 | - | | | | |
| Ukraine | 10.03 | 5.00 | 9.26 | - | | | |
| Russia | 5.96 | 3.22 | 53.94 | 21.14 | - | | |
| Iran | 4.26 | 1.56 | 62.63 | 4.94 | 38.90 | - | |
| Turkey | 7.95 | 7.58 | 3.47 | 16.38 | 5.51 | 4.49 | - |
| EU27 | 16.13 | 7.41 | 8.18 | 27.01 | 18.12 | 6.91 | 23.01 |

Source: WITS.

**Table 4.13. FK indices for exports, HS 4 digit, 2006**

| | Georgia | Armenia | Azerbaijan | Ukraine | Russia | Iran | Turkey |
|---|---|---|---|---|---|---|---|
| Armenia | 31.33 | - | | | | | |
| Azerbaijan | 7.35 | 2.49 | - | | | | |
| Ukraine | 18.42 | 9.18 | 11.70 | - | | | |
| Russia | 11.60 | 5.23 | 55.83 | 25.50 | - | | |
| Iran | 6.98 | 2.93 | 64.86 | 7.48 | 42.01 | - | |
| Turkey | 12.47 | 10.72 | 4.74 | 21.26 | 7.18 | 7.65 | - |
| EU27 | 23.29 | 10.08 | 10.42 | 34.49 | 20.77 | 9.76 | 27.89 |

Source: WITS.

**Table 4.14. FK indices for imports, HS 6-digit, 2006**

| | Georgia | Armenia | Azerbaijan | Ukraine | Russia | Iran | Turkey |
|---|---|---|---|---|---|---|---|
| Armenia | 53.31 | - | | | | | |
| Azerbaijan | 39.76 | 32.23 | - | | | | |
| Ukraine | 37.92 | 35.52 | 38.41 | - | | | |
| Russia | 42.19 | 31.94 | 34.50 | 56.27 | - | | |
| Iran | 20.25 | 18.24 | 26.59 | 34.00 | 35.11 | - | |
| Turkey | 22.29 | 20.87 | 24.39 | 50.16 | 38.61 | 42.06 | - |
| EU27 | 35.28 | 31.41 | 31.51 | 53.01 | 51.13 | 35.99 | 48.08 |

Source: WITS.

**Table 4.15. FK indices for imports, HS 4 digit, 2006**

| | Georgia | Armenia | Azerbaijan | Ukraine | Russia | Iran | Turkey |
|---|---|---|---|---|---|---|---|
| Armenia | 64.11 | - | | | | | |
| Azerbaijan | 51.97 | 47.65 | - | | | | |
| Ukraine | 53.57 | 50.59 | 46.40 | - | | | |
| Russia | 54.62 | 44.17 | 44.36 | 56.27 | - | | |
| Iran | 39.29 | 37.46 | 36.33 | 42.74 | 43.44 | - | |
| Turkey | 39.36 | 42.69 | 33.83 | 51.18 | 46.36 | 51.70 | - |
| EU27 | 53.26 | 46.43 | 43.05 | 62.96 | 60.33 | 43.84 | 55.75 |

Source: WITS.

## 4.8. Revealed Comparative Advantage

It is important to analyse the relative competitiveness of producers of the partners of future FTA. Great differences in comparative advantage between partners producing a similar mix of goods suggest that there may be a welfare improving FTA (on the production side). When there are differences in production efficiency and costs (i.e., relative competitiveness) between partners trade creation arises since countries are able to source the goods from the most efficient and less-cost FTA partner. In other words, countries have the potential to greater specialise in those goods, in which they have a comparative advantage. The greater the differences in comparative advantage the greater are the trade creation effect and welfare gains.

The relative competitiveness of producers is usually measured by indices of revealed comparative advantage (RCA). The RCA compares a country's share of exports in a given good with the world share of exports of this good. A country has a comparative advantage when its share is above the world share for that good, that is when RCA is greater that 1; disadvantage is expressed by an RCA that is less than 1. We calculated the RCAs for Georgia and for the EU, as well as for all Georgia's main partners, namely Armenia, Azerbaijan, Turkey, Ukraine, Russia, and Iran, at the HS 6-digit level for 2006. Furthermore, to analyse the evolution of Georgia's comparative advantage over the last decade we also calculated its RCAs for 1996. We also compared Georgia's largest export items by export shares vs. exports with the highest RCAs to show if Georgia exported products in which it had a comparative advantage. In addition, we computed Georgia's RCAs for non-agricultural exports in order to be able to focus on this area. Finally we repeated the same exercise with respect to Georgia's exports the EU (see Appendix 1 Table 1 through Appendix 1 Table 13 and Appendix 3 (Appendix 3 Table 1-Appendix 3 Table 6)).

The major conclusions about Georgia's export structure and its RCAs are:

- Georgia's export are fairly highly concentrated at the HS 6-digit level, in comparison to those of the EU, Turkey, or the Ukraine, but considerably less so than other countries in the region. The 15 top export sectors accounted for about 62% of total exports in 2006. For comparative purposes the corresponding figures for the following countries are given in brackets: EU (21.13%), Armenia (80.9%), Azerbaijan (93.4%), Russia (78.4%), Turkey (35.5%), Ukraine (36.6%), and Iran (90.5%). For Georgia, the principal exports consist of ferrous-alloys, copper ores and concentrates, ferrous and

copper waste and scrap, hazelnuts and beverages, and some machinery (see Appendix1 Table 1). In almost all of these goods Georgia has a comparative advantage, except for petroleum oils, HS 270900. Furthermore, 4 among 15 largest export items are simultaneously belong to the list of exports with the highest RCAs in 2006, namely ferro-silico-manganese, hazelnuts without shells, ammonium nitrate, and mineral waters and aerated waters (see Appendix1 Table 2). At the same time, there is some potential for Georgia to enhance its specialisation in other exports revealing the highest comparative advantage.

- There have been significant changes in Georgia's export structure in 2006 vs. 1996. The 15 largest export sectors in 2006 made up only 12% of exports in 1996 (see Appendix 1 Table 1). The most significant rise of export shares has been observed for ferro-silico-manganese, ferrous waste and scrap, hazelnuts without shells, gold in other semi-manufactured forms and certain automobiles. At the same time, the greatest positive changes in RCAs have occurred for: ferro-silico-manganese, hazelnuts without shells, isotopes, and white and other hydraulic cements; and negative changes – for thyme, bay leaves (see Appendix 1 Table 2). The RCAs have remained almost unchanged for ammonium nitrate, mineral waters and aerated waters, and petroleum oils (see Appendix 1 Table 3, Appendix 1 Table 4). Overall, there has been high positive correlation between changes in export shares and levels of RCAs over time.
- The relatively high concentration of Georgia's exports is also true if we focus only on non-agricultural exports (see Appendix 1 Table 5, Appendix 1 Table 6). Just over 66% of Georgia's non-agricultural exports were accounted for by the top 15 sectors. Ferro-silico-manganese, isotopes, ammonium nitrate and white cement top the list of exports with highest RCAs. At the same time, Appendix 1 Table 6 also contains machine-building produce such as: helicopters of an unladen weight, parachutes and their parts, trucks. We also see that there has been considerable change over time in the composition of Georgia's non-agricultural exports. The top 15 sectors in 2006, only accounted for 24.9% of exports in 1996, and eight of the 2006 sectors had no reported exports in 1996.
- In regard to the EU market: we can see again a higher concentration of Georgia's export to the EU: seven top export items (copper ores and concentrates, hazelnuts without shells, waters, including mineral waters, petroleum oils, ammonium nitrate, self-propelled bulldozers and angledozers, track laying, and ferro-silicon-manganese) accounted for about 70% of all

exports to the EU in 2006 (see Appendix 1 Table 7). Georgia's most important export items reveal even higher RCAs on the EU market in regard to the following goods: hazelnuts without shells, nonradioactive and other isotopes, hazelnuts in shell, copper ores and concentrates, and ammonium nitrate (see Appendix1 Table 8). In addition, women's or girls' suits of synthetic fibres, graders and levellers, other seeds, fruit and spores, self-propelled bulldozers and angledozers, track laying, manganese ores, and mineral waters also have high relative competitiveness on the EU market. Noteworthy, that top 15 Georgia's exports to the EU revealed on average a considerably higher comparative advantage than the total exports to the world markets (see Appendix 1 Table 1 and Appendix 1 Table 7). On the other hand, the top 15 export items with highest RCAs made up 68% of Georgia's exports to the EU market in 2006, and only 27% on the world markets; 8 among 15 largest export items to the EU market simultaneously belong to the list of exports with the highest RCAs in 2006 (see Appendix 1 Table 2, Appendix 1 Table 8). This signifies that Georgia specialises its trade with the EU in sectors in which it exhibits greater comparative advantage. Once again, we also see important compositional shifts if we compare the top 15 exports in 2006 to those in 1996.

Next, we compare the preceding with the key exports for some of Georgia's key trading partners, in particular those in the region. Appendix 1 Table 13 and Appendix 3, Appendix 3 Table 1-Appendix 3 Table 6 give the composition and RCAs of the top 15 sectors for the EU, Armenia, Azerbaijan, Russia, Turkey, the Ukraine, and Iran respectively. From this we note that there is little similarity between the countries RCAs, as well as between countries top export sectors. We then explore this more formally by computing the bilateral correlation coefficients of the RCA's at the 6-digit HS level across all the pairs of countries (Appendix1 Table 14). Overall we see that the correlation coefficients extremely low, and indeed in most cases negative, suggesting very little similarity in both the export patterns, and in the revealed comparative advantage they indicate. Once, again this is evidence to suggest that there is little likelihood on the basis of existing patterns of trade and production of considerable trade creation arising from greater regional integration among these countries. The highest correlation coefficient, though still rather low, is that between Georgia and Turkey RCAs (0.2). There is little correlation between Georgia and the EU RCAs (the FK index was also among the lowest between Georgia and the EU=0.02).

If we compare the FK indices and correlation coefficients, for example, for the EU and Turkey: 16.13 and 0.02. (EU) vs. 7.75 and 0.2 (Turkey) respectively, we can conclude that there is more overlap in exports between Georgia and the EU than between Georgia and Turkey (see also Table 4.12 and Table 4.13). While for those exports, which overlap, the RCAs are more similar between Georgia and Turkey. As such, according to the third and fourth rules there may be more possibilities for trade creation on the production side between Georgia and the EU than between Georgia and Turkey.

## 4.9. Deep integration and Grubel-Lloyd index

With the reduction of tariffs to very low levels, coupled with the liberalisation of services, capital and labour movements, it is possible that a new integration dynamic in Georgian trade structures could be developing. However it is very important to consider opportunities from the deep (positive) integration between Georgia and the EU. The removal or reduction of existing non-tariff barriers including regulatory, institutional and infrastructure impediments, could trigger considerably higher welfare implications for Georgia than those induced by a process of shallow integration.

The potential for gains from deeper integration depends on the extent to which the FTA leads to convergence of regulatory and economic policies among partners. The greater the countries' convergence of regulatory policies, the greater is the potential for welfare gains as a result of the FTA. This convergence implies both a removal of barriers to trade that operate beyond borders (such as discriminatory regulations, institutional impediments, etc.) and undertaking common policies to promote trade and investment and to generate positive externalities and productivity gains (Gasiorek et al, 2006).

Intra-industry trade (IIT) is a key indicator of existing and by implication potential deep integration between partner countries in market terms. IIT takes three forms. First, it is the exchange of similar goods of roughly similar qualities and prices; secondly, it is the exchange of similar goods of different qualities and prices; thirdly, it is the exchange of goods within a trade classification that represents a vertically integrated supply chain (parts for finished or partly finished goods). Each of these represents a way in which economic integration can encourage the niche specialisation that generates productivity gains. These gains

represent the main advantages of deep integration and may compensate for losses to trade diversion from shallow integration (Gasiorek et al, 2006). The levels of IIT are measured by the Grubel-Lloyd index ranging from 0 for no IIT between countries to 1 (or 100 in percentage form) if all trade is IIT.

We computed the IIT indices for Georgia and its main partners in 2006 and in 1996 at the HS 6 digit level and in 2006 at the HS 4 digit level (for comparison). In addition, for the purposes of comparison we calculated the IIT indices for the EU and the same countries at HS 6 digit level. Table 4.16 shows the low level of IIT between Georgia and the EU in 2006 (only 8.2% at HS 6 digit level and 9.9% at HS 4 digit level). Noteworthy, that in case of using the EU mirror trade data for calculations of the IIT index between Georgia and the EU, the index equals 38.9% for all bilateral trade and only 9.3% for all trade excluding mineral fuels, HS 27 group (reflecting the fact of that HS 27 group is the major discrepancy in Georgia and the EU bilateral data).

**Table 4.16. IIT indices for Georgia in 2006 (HS 6 digit and 4 digit levels), for Georgia in 1996 (HS 6 digit level) and for EU27 and Armenia in 2006 (HS 6 digit level), %**

| | Georgia, HS 6 digit, 2006 | Georgia, HS 6 digit, 1996 | Georgia, HS 4 digit, 2006 | EU27, HS 6 digit, 2006 | Armenia, HS 6 digit, 2006 |
|---|---|---|---|---|---|
| **Georgia** | - | - | - | 38.89 (9.3*) | 27.18 |
| Armenia | 16.29 | 14.41 | 13.59 | 18.45 | - |
| Azerbaijan | 7.78 | 12.38 | 4.74 | 3.21 | - |
| Ukraine | 3.24 | 12.87 | 3.68 | 14.33 | 7.80 |
| Russia | 13.44 | 23.05 | 15.37 | 6.16 | 15.24 |
| Iran | 23.07 | 18.06 | 16.80 | 3.34 | 38.69 |
| Turkey | 12.28 | 13.64 | 9.41 | 18.68 | 13.73 |
| EU27 | 8.17 | 11.65 | 9.88 | - | 16.27 |

Source: WITS Note: * excluding HS 27 group (Mineral fuels, mineral oils and products of their distillation

The highest levels of IIT were revealed between Georgia and Iran and Georgia and Armenia (see Table 4.16) – 23.1% and 16.3% at HS 6 digit level. Again, these indices are sensitive to the bilateral data used. For instance, if we calculated IIT index on the basis of Armenia's trade data, the appropriate index equals 27.2%.

The low level of IIT between Georgia and the EU suggests about the low level of existing deep integration between countries and confirms the earlier considerations about the non significant overlap between Georgia and the EU trade patterns (captured by FK index) and competitiveness (captured by RCAs). Nevertheless, following the Deep EU-Georgia FTA the development of new industrial structures in Georgia may strengthen intra-industry trade linkages.

From the Georgia perspective, the eventual welfare implications from the future FTA with the EU will depend on the success in converging its regulatory policies to those of the EU, reducing trade-restricting barriers and creating the trade and investment supporting regulatory and institutional framework. The effective implementation of the above will result in closer relations between firms leading to technology transfer; the creation of supply chains; the improved business environment leading to the reduction of the risk premium on investment; development of new industrial structures, etc. A greater level of Georgia's regulatory and institutional approximation with the EU would lead to higher welfare gains for Georgia as a result of the future deep and comprehensive FTA with the EU. Therefore, the continuation of the profound economic reforms in accordance with the European standards and best practice, as determined by the PCA and ENP Action Plan trade and investment provisions, is of primary importance for Georgia.

## 4.10. Conclusions

Georgia has almost done free trade on its side already for non-agricultural products and significantly liberalised also imports of agricultural goods as a result of the tariff reductions implemented in mid 2006. About 90% of tariff lines are presently exempted from tariffs. From Georgia's perspective, the overall conclusion is that the low level of tariffs in Georgia suggests there is little scope for significant shallow integration induced welfare effects (both trade creation and trade diversion) arising from a potential EU-Georgia FTA. There are likely, however, to be greater gains arising from appropriate measures of deeper integration.

Georgia's principal imports from the EU include: vehicles, machinery and electrical equipment, pharmaceuticals, instruments and chemicals. All these products are already exempted from tariff barriers in Georgia suggesting that the current distribution of Georgia's sources of those imports does not incorporate tariff-induced distortions (thus little direct welfare effects are likely to occur from any future Georgian FTA in regard to these products). Distortions in trade are, however, possibly created by non-tariff barriers and thus cooperation between Georgia and the EU on their reduction should be welfare increasing.

The reduction of import tariffs by Georgia in 2006 is expected i) to increase Georgia's trade with its main partners, as well as ii) to induce some trade re-orientation from CIS partners towards non-CIS partners due to the reduction of

preferential margin earlier received by CIS bloc. Such a trade reorientation is likely to be welfare-increasing since importers can now freely (in terms of tariffs) source from the most efficient suppliers. Moreover, opening up of the domestic markets results in greater competition and force the Georgian firms to restructure and become more efficient.

Bearing in mind the relatively low level of Georgian tariffs, when we look in more detail at the trade patterns, and trade and production structures, of Georgia and its' main trading partners we conclude, that trade diversion is on balance more likely than trade creation from a future EU-Georgia FTA. This is for the following reasons: i) over 70% of Georgia's imports are from non-EU countries, which suggest a greater likelihood of import supply switching (hence trade diversion). At the same time, the declining share of the EU in Georgia's imports implies the increasing competitiveness of imports from third country suppliers for Georgia; ii) the low similarity between the production and trade structures of Georgia and the EU along with the low correlation between the countries RCAs suggests that there is little scope for trade creation on the production side (for the shifting of production and trade to the more efficient FTA partner).

However, the EU is an important market for Georgia's exports and its importance has been growing over time. Access to the large EU market allows Georgian producers to exploit greater economies of scale, resulting in productivity gains. Mineral products, edible fruits and nuts and beverages and spirits, machinery and mechanical appliances, and iron and steel products are the main sectors where Georgia has an export interest in the EU market. Overall, the evidence shows that Georgia specialises in its trade with the EU in those sectors in which it exhibits a high revealed comparative advantage. This includes (as of 2006) copper ores and concentrates, hazelnuts without shells, other nuts and seeds including mixtures, ammonium nitrate, waters, including mineral waters, self-propelled bulldozers and angledozers, track laying, and ferro-silicon-manganese, nonradioactive and other isotopes. Overall, on the export side we would expect that closer integration with the EU is likely in the first instance to benefit most those sectors with a clear revealed comparative advantage and where trade growth is already positive. Nevertheless, owing to the low levels of pre-FTA EU tariffs, and non-tariff protection measures (such as quantitative restrictions), the direct shallow-integration induced impact of the FTA on Georgia's exports to the EU is likely to be comparatively small. In the longer perspective, Georgia's future comparative advantages still remain to be created by investment in new economic structures (for example outsourcing) to take advantage of low Georgian labour costs.

Deeper integration is also likely to generate more substantial gains within the Georgian economy itself arising from producing a more stable and attractive investment climate and from increasing the competitiveness / contestability of the Georgian economy. Probably, the most important issues in this regard includes harmonisation of custom procedures and product standards, elimination of illegal payments, improving trade-related infrastructure, reduction of border delays and transport costs and other administrative barriers to trade. Here it is worth noting that Georgia has already demonstrated substantial progress in addressing some of these issues in recent years. Georgia and the EU also cooperate on the reduction of non-tariff barriers between them in the framework of the PCA and ENP Action Plan's implementation.

Not surprisingly, presently there is little evidence of significant deep integration between the EU and Georgia as expressed by the intra-industry trade between them. Nevertheless, following the Deep EU-Georgia FTA the development of new industrial structures in Georgia may strengthen intra-industry trade linkages.

From the EU perspective, since i) the level of trade with Georgia is low for the EU and ii) the EU tariffs are already low, if not non-existent, for Georgian goods (GSP+ system), trade creation and trade diversion effects from the future EU-Georgia FTA are not expected to be significant for the EU as well.

Turkey is also a relatively important partner for Georgia (second largest trade partner in 2006). As the second largest trading partner Turkey might be vulnerable to trade diversion towards the EU. This vulnerability is clearly greater than that of Russia (the third partner) due to the fact that Turkey's exports to Georgia are quite similar to those of the EU, much more so than in the case of Russia which is mainly selling oil and agricultural products. However, the dangers of trade diversion are likely to be well mitigated by the fact that the preference margins for the EU will be low, if non-existent, due to the low (zero tariffs for non-agricultural products) MFN tariffs, the operation of a Georgia-Turkey FTA, and the likelihood that any deep integration benefits that promote trade with the EU will also facilitate trade with Turkey which has undergone regulatory harmonisation with the EU.

To conclude, the risks of welfare-decreasing trade diversion for both Georgia and the EU as a result of shallow integration are low due to the current low level of tariffs. Any big welfare gains therefore could come from deeper integration between the parties, i.e. through a deep and comprehensive FTA and from the reduction of the risk premium on investment as a result of the improved business environment. The stylized implications of such scenarios are developed further with the CGE model in chapter 9.

# 5. Institutional and regulatory harmonization issues in trade with the EU and Georgia

## 5.1. Product standards

The system of standards, technical regulations and conformity assessment serves two main objectives:

- Averting threats to public safety, health, and other public interests arising from the use of product by ensuring product safety; and
- Recognition of Georgia's products on international markets, which will bring a better access to the EU markets.

The legislative base for standards system in Georgia consists of the following (amended) laws, all adopted on 24 June, 2005: the Law on Standardization, Law on Uniformity of Measurements (metrology), and the Law on Certification of Products and Services (conformity assessment). The agency responsible for the system is the National Agency for Standards, Technical Regulations and Metrology under the Ministry of Economic Development (MoE; Agency's Charter was approved by the Minister of Economic Development in October 2005) and the Accreditation Center under the same ministry. The Agency consists of the Department for Standards and Technical Regulations charged with elaboration of standards (drawn up in Technical Committees) and technical regulations, and the Institute for Metrology. The Accreditation Center accredits private laboratories to conduct testing thus ensuring separation of public and private functions in the quality assurance infrastructure.

According to the principle of voluntary standardization, local entrepreneurs are now free to use a great variety of standards: international standards, GOSTs (ex-Soviet standards), and even their own standards. ISO standards are available to the

local producers through the Agency which has an access to the ISO standards database. Each standard applied by the producer should be registered with the Agency. The Agency also carries out the registration of international standards (mainly ISO standards) as national standards. The Agency has already registered around 20 000 GOSTs, 400 ISO and ASTM (petroleum product) standards. The application of GOSTs is still very wide. Adoption of new national standards based on European norms, shows very little progress.

Reformation of legal framework on standardization, technical regulation and accreditation in 2005 had to be followed by extensive elaboration and endorsement of mandatory national technical regulations in relevant fields. However, the progress in this field has been slow.

Government Decree No. 45 of 24 February 2006 recognized mandatory standards and technical regulations which are being applied worldwide and, in particular, by main Georgian trade partners, such as EU, OECD and CIS countries. This has been a major trade-liberalization measure. Pursuant to the existing legislation the domestic producers are entitled to produce according to EU and OECD member states' technical regulations and CIS GOSTs. The scheme of application of foreign technical regulations is the following: the producer should register the applied technical regulation at the Agency, which carries out the expertise of the technical regulation in order to be sure that it is active. So far, there has been only one case of registration of foreign technical regulation — Italian technical regulation on gas stations.

The adoption of national technical regulations is sporadic and there is no overall governmental policy in this area. Although the Law gives the priority to EU Directives as a model on which the national technical regulations should be based, it is doubtful whether this approach is firmly followed. The Institute for Metrology is performing a systematization of regulations issued by different government agencies. Below are a few examples of recently adopted regulations.

In 2006-2007, the MoE endorsed a number of technical regulations in the field of metrology. The mentioned legal acts have been developed following the recommendations of International Organization of Legal Metrology. In line with relevant ISO and EU standards, new rules on accreditation of laboratories and certification bodies have been introduced. In May 2007 the MoE adopted the Safety Rules of Attractions, which is claimed to be based on German legislation.

In June 2007, the Transport Administration under the MoE adopted technical regulations in the field of transport safety (technical requirements for motor vehicles, testing methods etc.) The regulations meet the requirements of EU Directive 96/96/EC (on roadworthiness tests for motor vehicles and their trailers), except for ecological standards, which were considered unfeasible at the current stage.

In 2006-2007 the Ministry of Agriculture adopted a number of technical regulations in the field of pesticides and agrochemicals, in particular, the rules of marking; testing and registration; storage, transportation, placement and use. The regulations are broadly in line with international standards and EU rules.

As regards the ongoing legislative activity, the office of the State Minister for Reforms is currently working on new architectural-construction rules. Soon, the outdated Construction Norms and Rules (SNIPs) retained from the Soviet times will be replaced by new technical regulations. New rules will be based on International Building Codes of International Code Council (US standards) as well as Eurocodes.

Overall, however, Georgian quality assurance regulations are not consistent with EU *acquis*. Georgia needs a solid regulatory strategy in standardization and quality assurance consistent with deregulation policies. EU Directives on product safety (2001/95/EC) and general product liability (85/374/EEC) should be considered as the minimum framework for legislative harmonization between the EU and Georgia. Further steps may also include the transposition into the national legislation of some EU directives, including EU New Approach Directives, Global Approach, Modular Approach and Sectoral Directives of Old Approach, as well as the adoption of the Law on General Product Safety in line with Directive on product safety (2001/95/EC). EU-Georgia ENP AP envisions establishment and strengthening in Georgia a modern institutional system of technical regulation, standardization, accreditation, metrology, conformity assessment, and market surveillance system (which is completely inapt today) based on the practice of EU Member States[30].

Another grave problem is the poorly exercised market surveillance function. Since the food safety control is suspended until the end of 2009, the market surveillance function is mainly performed by two bodies, Architectural-Building Inspection under the MoE, which is responsible for oversight of construction works, and the Technical Supervision Inspection, which oversees hazardous plants,

[30] Other donors are also interested in this issue. Thus the World Bank is to undertake an assessment of standards and technical regulations in Georgia.

sites and works. However, current enforcement of safety regulations in Georgia is weak by any measure. Even the SNIPs are not followed very thoroughly, endangering the safety of new buildings.

In order to further streamline inspection methods and procedures, the office of the State Minister for Economic Reforms is currently developing the concept of reform of market surveillance system. According to the planned reform, these two bodies will be merged while the functions of state administrative supervision and conformity assessment will be separated. The latter will be carried out by special inspection bodies (which may be private entities), which, along with already existing laboratories and certification bodies, will constitute the conformity assessment infrastructure. State administrative supervision will stay with a new governmental body.

Regarding metrology, Georgia does not have a set of measurement standards ("etalons") and hence calibration of instruments lacks traceability. (Traceability is a chain of measurements relating an instrument's measurements to a known standard.) Currently, the metrological services of neighbour countries, most recently the Ukraine were used to compensate for this deficit.

In sum, while the separation of functions between the public and private sectors in the quality assurance has been achieved, the state barely performs its regulatory functions in the area of standardization and quality assurance. Conformity certificates issued by Georgia are not recognized internationally. Domestic consumers are poorly protected against risks associated with substandard products.

Summarizing, the measures adopted for recognizing EU/OECD/CIS standards is a radical liberalizing measure, which eliminated NTBs on their import side. At the same time, standards for domestic market are poorly administered.

The commitment of Georgia to approximate its legislation with EU *acquis* in the area of technical rules and standards is provided for by the PCA, which suggests that "the required actions [in quality assurance infrastructure] will facilitate progress towards mutual recognition in the field of conformity assessment, as well as the improvement of the quality of Georgian products". Unfortunately, this progress has been insufficient. ENP AP further detailed necessary actions in regulatory convergence. The list of the actions reads as a program of the development of standards infrastructure that has not been implemented so far. Besides the minimal approximation with *aquis* in the priority sectors detailed

above, Georgia should create etalon laboratories of international classification in order to ensure a compatibility with international system of measurements; and emphasize the development of market surveillance capacities based on the practice of EU Member States, all of which was stipulated in ENP AP.

A Simple FTA between the EU and Georgia under the current incongruities in the standards systems will not remove associated non-tariff barriers, which now pose much larger impediment to trade than the already low tariffs of both sides, i.e., EU GSP+ and Georgia's MNF tariffs. Better access for exports to the EU will depend on how well Georgian companies adopt EU standards voluntarily. Georgia does not have a diversified export-oriented economy and adopting EU standards will surely help to establish new product lines which might become competitive on the European markets. A Deep FTA with substantial investment in standards infrastructure may bring substantial benefits but only in the medium- to long-term.

## 5.2. Customs

Customs in Georgia is administered by the Customs Department of the State Revenue Service, which was set-up in April 2007, by merging the tax administration with the customs administration and financial police, in order to improve coordination of these agencies. Multiple and serious problems facing Georgia's Customs after independence (such as the weak control over borders, widespread smuggling, general inefficiency, poor management, personnel problems, corruption) have been seriously reduced since 2004, with a comprehensive Customs reorganization. The old Customs organization was in fact dissolved (in order to cope with massive corruption) and after that 80 percent of staff was recruited on the basis of short term contracts. It is still to be seen how decision on replacement of 80% of staff will influence the operational capacity and efficiency of customs service.

Although Georgia still lacks jurisdiction over Abkhazia and South Ossetia, the control over the borders of the rest of the country has been established, smuggling and corruption drastically reduced, organization, management and human resources strengthened, and efficiency improved. As a result, Georgia ranks favourably in regards to the trade-related business environment - see, for example, World Bank's Doing Business survey (World Bank, 2008) and the American Chamber of Commerce regional survey (U.S. Chamber of Commerce, 2008).

Currently there are following Georgian normative acts defining main customs matters: Customs Code and its secondary legislation, Tax Code (covering VAT, Excise, customs duty, appeals, and fines), and the Law on Fees. New Customs Code and subordinated legislative acts have been enacted on January 1, 2007. One of the main goals of legislative changes was the harmonization of Georgian legislation with European; consequently, the customs legislations of the EU and Latvia have been used as the models for Georgia's Code.

The main body of the new Customs Code of Georgia is harmonized with the European Community Customs Code and the revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures and serves both trade facilitation and fiscal purposes. The structure of and terms used in the Georgian Customs Code are in compliance with the Community Customs Code. Like the Community Code, the Georgian Code defines customs procedures and the rules of their implementation, namely as formalities related to entry of the goods into the customs territory; customs approved treatment or use; summary declaring; customs procedures[31]; methods of customs valuation; origin of goods etc.

New customs legislation brought some elements of EU customs practice in Georgia, such as:

- Like in the EU legislation, there are no restrictions and barriers to movement of the TIR Carnet goods in the Georgian territory.
- Procedures defined for cargo clearance by the customs checkpoints (at the border) and clearance groups (customs territory) are in full compliance with European legislation.
- Customs applies the customs declaration processing system ASYCUDA++ which is in concordance with the EU customs declaration format. The more advanced ASYCUDA World system was launched on January 1, 2008.
- Georgian Customs uses the commodity nomenclature which is in compliance with the Harmonized Commodity Description and Coding Systems of the World Customs Organization, which means that it is also in compliance with the EU goods commodity nomenclature.

However, differences with EU *acquis* still persist. Despite the facts that the provisions of Georgian Customs Code are in compliance with European legislation, there are several issues defined by the European Community Customs Code but missing in the Georgian Customs Code:

[31] *Georgia applies all customs procedures defined in the Community Code, except for processing under customs control.*

1. Post clearance audit has not been yet been established in Georgia albeit work in this area has started[32]. The related risk management system has been introduced only very recently, in February 2008.
2. While Georgian legislation on customs valuation is in full compliance with EU requirements and the Agreement on Customs Valuation of the WTO, the practice of customs valuation quite often contradicts legislation, especially in the case of imports from high-risk countries. The Georgian Customs directly jumps from the transaction value method (the first method in the valuation sequence) to the computed method (the sixth method in the sequence) thus forgoing preceding four methods. As a matter of fact, reference price lists are being used instead of computed method, which is a further contradiction with EU and WTO rules. However, since Georgia has already moved to zero tariffs for almost all industrial goods, the issue of Customs valuation is relatively unimportant for customs duties, it however matters for the amount of taxation on imported goods calculated on the basis of the customs value. It is mostly a matter of agricultural produce, construction materials, and excised products.
3. Customs Code of Georgia defines CN22 and CN23 postal declarations (adopted by the World Customs Organization and World Postal Union and laid down in the Community Customs Code as well as secondary legislation) but the rules of their application do not comply with the EU rules of application.
4. Temporary admission procedure is fully in compliance with the European Community Customs Code and Istanbul Convention[33], except for one issue, such as: upon temporary import of the goods with total relief from duties, in case of extension of the pre-defined term, Georgian customs requests the payment of 3% of import duties for each month, which contradicts relevant provisions of the Code and Convention.
5. It is not possible to make deferred payment of customs duties in Georgia, which is defined by the European Community Customs Code and its secondary legislation.

As a general matter, the provisions of secondary legislation frequently complicate customs procedures defined by the Customs Code of Georgia. Regulators try to explicitly define specific details of each and every case in the secondary customs legislation, which causes inflexibility of normative acts,

[32] With the assistance of the EU Georgian Customs Project.
[33] Convention on Temporary Admission, 26 June 1990, Istanbul.

collision between provisions and, consequently, frequent changes to the legislation. This is a major drawback of Customs regulations. Until clear and straightforward implementation provisions are put into place, the implementation of Customs legislation will be severely hampered.

Finally, the Ministry of Finance of Georgia is aware of the above legislative incongruities and is currently working on solving them. The Global Competitiveness of the Financial Sector Act, currently in the Parliament, is expected to bring Georgian Customs regulations closer to the Community Customs Code.

An important issue of Customs control is the existence of the breakaway regions of Abkhazia and South Ossetia which formally are included in the Georgian Customs area. However, for practical reasons, the current situation of trade in the region is not in line with internationally recognised rules. On the one hand, Abkhazia and South Ossetia allow imports of goods from both Russia and Georgia free of customs duties. On the other hand, Georgia considers all goods that enter Georgia proper via Abkhazia and South Ossetia as smuggled, irrespectively of their origin as there is no customs control between the breakaway regions and Georgia proper. All goods that come into Georgia through South Ossetia and Abkhazia are therefore considered by Georgia as illegally entering the country. Certificates of origin are theoretically issued by Georgia for the whole country (including South Ossetia and Abkhazia) although in practice no such certificates are issued for goods originating in the breakaway regions.

The ENP AP envisions reinforcing customs controls on imports and exports of pirated or counterfeit goods; developing an integrated border management strategy by strengthening co-operation between customs and other agencies working at the border; and developing EU-Georgia cooperation with regard to risk-based controls. The Customs has implemented a new project on combating counterfeit importation. Any company can now register their product with the Customs[34] in order to protect the product from counterfeit importation. For example, the official exclusive representative in Georgia of lighter brand "Cricket" has registered their product.

Border management has undergone serious changes in the last three years. A multitude of Government agencies controlling the border gave way to just two – the Customs and Border Guard under the Ministry of the Interior. However, some functions at the border (most notably, phytosanitary and veterinary controls) are not

[34] The procedure includes submitting photos of the product, its detailed description, etc.

being adequately carried out. Risk-based controls have been successfully introduced in the late 2007 and an EU-funded project is helping Georgia to further develop the risk-assessment system and launch post-clearance audit. Nevertheless, the above efforts represent just initial steps in reaching the goals spelled out in the ENP AP. Georgia has signed Protocol on Mutual Assistance in Custom Matters with a number of EU Member States. It remains to be seen if Georgian Customs are able to fully implement those Protocols. Any future free trade agreement with the EU will contain a protocol on mutual assistance in customs matters which will replace all existing agreements with EU Member States for all matters of Community competence.

Customs reform in Georgia proceeds independently of the prospect of an FTA with the EU. An impact of Simple FTA on the Customs will be minimal. A Deep FTA could have a significant effect if it leads to a surge in trade between EU and Georgia which would require a further harmonization in Customs matters, and especially in the area of secondary legislation and practices.

### 5.3. Competition policy

The basic law governing competition policy is the Law on Free Trade and Competition adopted on 3 June 2005. This Law replaces all previous laws, regulations and decrees developed and adopted over more than a decade with extensive international support. The new Law, however, is a step back with regards to previous legal arrangements. It only touches on the regulation of monopolies and its main thrust is in regulating state aids instead. The main issues of competition law, such as the abuse of the dominant position, concerted practices, restrictive agreements, mergers, publicly owned enterprises, and, to a large extent, monopolies, were not addressed in the new Law.

The implementing agency of competition policy is the Agency for Free Trade and Competition. According to the Law, the primary role of the Agency is to issue recommendations to the central and local government authorities exercising state aid programs. The authorities then make decisions on if and how to follow these recommendations. The Agency's investigative powers are limited. The Agency has powers to regulate itself as well as proceedings under its auspices but has not exercised those powers yet. The functions of the Agency require strengthening and improvement in terms of efficiency and transparency. The independence of the Agency should also be strengthened.

It is clear that current legal and institutional framework does not provide for a solid basis for an effective competition policy. As a result, powerful companies will seek dominant positions on the market and eventually abuse them for profit reasons reducing product variety and increasing prices. In the provision of public services, economic rents for certain players may emerge fuelling rent-seeking and corruption. Liberalization and de-regulation process undertaken by the Government can not succeed in the end without a sound competition policy.

Georgia's legal framework is clearly non-compliant with EU competition policy in disagreement with Georgia's obligations under the PCA and ENP AP. Competition policy framework should be stressed in the review of the implementation of these agreements, which give clear guidelines for strengthening competition policy and its legal base.

Potentially, a Deep FTA+ with the EU may serve as a powerful tool to influence Georgia's policy in this respect. However, the impact of a Deep FTA+ may not be sufficient to tip the scales, as the experience of the new EU Member States shows. Problems with competition in those countries started to resolve only after the accession, when the European Commission took control over competition policy. In another perspective although, openness is the primary instrument of competition policy for a very small economy, and here Georgia has done very well.

## 5.4. Property rights, corporate governance and accounting standards

### Property rights

While the inviolability of property rights is guaranteed by the Constitution of Georgia as well as adequately safeguarded by a number of legal acts, there have been many cases of arbitrary depravation of property by the state in the recent period. Hence there is a common perception that if the Government decides that it wants to take possession of a particular property, for any reason, it will always find a way of doing it.

The situation is aggravated by serious deficiencies of the judiciary system. Judges are allegedly under undue influence from the executive thus seriously jeopardizing the independence of the courts. Besides, after the reorganization of the common courts in 2005, high level positions were given to relatively inexperienced

judges. As a result, the level of competence and professionalism among judges has dropped significantly.

However, foreign investors' rights are protected better than those of domestic investors, as the current Government actively seeks to attract foreign investment and is very sensitive towards its international reputation.

**Corporate Governance**

The key normative act that defines the legal framework for companies is the Law on Entrepreneurs, which is only partly compatible with EU company law. Since there is no separate law on joint stock companies, their regulation falls under the purview of the Law on Entrepreneurs. Joint Stock Companies in Georgia are rather poorly regulated, with the Law providing only general or vague formulations on some important issues, or none at all. The Law has been amended a few times since adoption.

According to the amendments on 30.03.2007, the partners whose shares comprise at least 5% of the charted capital of joint stock companies has been made entitled to request from the managing body of the company the copies of and information on all transactions concluded or planned to be concluded on behalf of the company. Another instrument aimed at protection of minority shareholders has been introduced by the amendments on 24.06.2005 on mandatory tender offer, which was later on refined by amendments on 11.07.2007. According to the new regulation, if upon the acquisition of shares of the company the shareholder becomes a controlling shareholder (with one-half of the voting rights), he/she is obliged to make an offer to the remaining shareholders. Price of shares shall be determined by independent expert or securities brokerage company.

On the other hand, a series of amendments to the Law on Entrepreneurs reduced the level of protection of minority shareholders as well as the interest of creditors and third parties. The requirement to pay up the half of the charter capital of limited liability and joint stock companies have been abolished (amendments of 30.03.2007). According to the amendments on 24.06.05, the convocation of the general meeting of shareholders is not any more obligatory if the shareholder with 75% of charter capital agrees with the issues to be discussed at the meeting. However, this provision seriously damages the interests and rights of minority shareholders, since the general meeting of shareholders is not a merely decision making forum but an important mechanism for the minority shareholders to obtain information about company. A newly established electronic entrepreneurial

registry under the Tax Department of Ministry of Finance improves significantly access to companies' information.

The basic law for security regulation in Georgia is the Law on Securities Market adopted in 1998 and amended in 2000, 2003, and 2007. In general, the Law shows a considerable degree of comparability with EU legislation but not without gaps and inconsistencies. Lober (2007) carried out a legal review of the harmonization of the Georgian regulation on security market with that of the EU and made over a hundred recommendations on bringing Georgian legislation up to European standards.

According to the recent amendments to the Law on Securities Market (28.03.2007), the regulation of *transactions with related parties* has been introduced. The amendments introduced the obligation of interested person to disclose to the supervisory board of the company (or if the price of transaction exceeds certain threshold - to the general meeting of shareholders) any transaction in which he/she is an interested party. Such transactions should be approved either by the supervisory board or by the general meeting of shareholders depending on the price of transaction. However, the scope of application of the mentioned regulation is limited to reporting companies[35] only.

Discrepancies between Georgian law and EU *acquis* include the scope of information to be disclosed by companies. The scope is much more limited in Georgia. Also, issues related to maintenance and alteration of capital of limited liability companies are not adequately regulated and does not meet EU standards. The regulations on reorganization of companies (mergers and divisions) are also inadequate and incompatible with EU directives.

Here again, implementation is the central issue and the general weakness of the legal system exacerbates the matters. Harmonization with the EU law has a long way to go in this area.

### Accounting standards

Accounting framework in Georgia is not very consistent. The joint stock companies as well as other designated entities are required to use International Financial Reporting Standards (IFRS) and publish audited annual financial statements. However, there is a persistent gap between the IFRS version used by Georgian

[35] Company the securities of which have been placed trough public offer or are admitted to trading to stock exchange.

companies and up-to-date version of IFRS, which is caused by delays in translation and official enactment of IFRS as national standards. Thus, since 2005 Georgian companies are required to use IFRS issued in 2004, which is rather outdated.

Another problem relates to compliance with IFRS, which is generally very low. The compliance problem is mainly caused by the poor knowledge of company accountants of the basics of IFRS, which often leads to low quality and unreliability of financial statements. In addition, qualification requirements for audit firms which carry out statutory audits were abolished in 2005. Nowadays an audit firm without adequate technical expertise is entitled to audit a bank, an insurance company, a brokerage house, or a public joint stock company.

In order to address existing shortcomings the draft law on accounting and auditing was prepared by the government and submitted to the parliament. The draft law assigns special powers of regulation to the accounting and auditing profession to professional body.

The PCA and ENP AP contain provisions regarding property rights, company law, corporate governance, and accounting standards. Georgia still has to carry out deep domestic reforms in this area, with the help from the EU and other donors. Effective implementation of the PCA and ENP AP is an important milestone on this road, which has yet to be achieved.

A Simple FTA will have only limited effect in this regard. A Deep FTA+ might help over a long term by exposing Georgian companies even more to the scrutiny of their European partners and a change in business culture and judicial practices.

## 5.5. Intellectual property rights

Georgian legislation in Intellectual Property Rights (IPR) is largely compatible with EU requirements, including EU Directives on enforcement of IPRs (2004/48/EC) and Customs Regulation concerning customs action against goods suspected of infringing IPRs (1383/2003). Recent harmonization steps included the following:

Amendments to the Law on Copyright and Related Rights (adopted in June 2005) introduced and updated terminology in line with WIPO conventions of the new copyright and related rights, regulated the copyright and related rights on the

Internet, the intellectual rights of the authors of audio-visual works, intellectual right protection of databases, rules on collecting societies, and lending right and improving administering cable retransmission with proper procedures. These changes brought the Georgian copyright law in line with the following EU Directives: on the legal protection of computer programs (91/250/EEC); on rental right and lending right and on certain rights related to copyright (92/100/EEC); on the term of protection of copyright and certain related rights (93/98/EEC and 2001/29/EC); on the resale right for the benefit of the author of an original work of art (2001/84/EC); on copyright applicable to satellite broadcasting and cable retransmission (93/83/EEC); and on the legal protection of databases (96/9/EC).

Amendments to the Law on Trademarks (2005) strengthened procedures on enforcement of trademarks, helped to combat production and distribution of counterfeit goods, harmonized legislation with the First Council Directive 89/104/EEC on trademarks. It implemented the recommendations of the Caucasian Brand Protection Group on legal practice in anti-counterfeiting measures.

Amendments to the Law on Custom Border Measures Related to Intellectual Property (TRIPS; December 2005) fulfil TRIPS requirements (introduction of ex officio procedures), introduce suspension procedures and establish product registry. Any intellectual property right holder would have the right to register objects of intellectual property and the right to require that the customs suspend goods produced in violation of intellectual property. The amended Law complies with EU Customs Regulation 1383/2003 concerning customs action against goods suspected of infringing certain intellectual property rights and the measures to be taken against goods found to have infringed such rights and the Resolution of the representatives of the Governments of the Member States of 24 July 1984 on measures to combat audio-visual pirating. It also incorporated the recommendations of the Caucasian Brand Protection Group. Changes in the Criminal Code of Georgia (passed together with the above amendments) incorporate these three laws into the Criminal Code.

On 11 November 2005, Georgian Parliament ratified International Convention for the Protection of New Varieties of Plants (UPOV). In order to implement the obligations assumed under the Convention, the Law on Protection of New Varieties of Plants was adopted (29 December 2006). In 2007, the Law was found in conformity with the 1991 Act opening the way for Georgia to deposit its instrument of accession. Georgia has recently deposited its instrument to the UPOV secretariat and is supposed to become a member of UPOV shortly.

Under the new legislative framework the function of granting the selectionist rights was transferred from the Centre of Protection of Plant Variety Breeder's

Rights of Georgia (Sakjishtsentri) under the Ministry of Agriculture (MoA) to the National Intellectual Property Centre (Sakpatenti). According to the new law, Distinctness, Uniformity and Stability test should be carried out by special accredited body according to the rules set forth by the MoA on the basis of UPOV Guidelines, however, the relevant rules have not been promulgated so far. Therefore, plant varieties bred in Georgia cannot be confirmed as Novel (New), Distinct, Uniform and Stable. The issues related with protection of selections achievements in animal breeding have been regulated by the Law on Protection of New Species of Animals (29 December 2006).

The lead agencies implementing the IPR policy include the Georgian National Intellectual Property Centre (Sakpatenti) - in the area of industrial property rights, patents, and appellations of origin; the Copyright Agency - in charge of copyrights; Cultural Department in the Ministry of Foreign Affairs - responsible for copyrights on literary, artistic, musical, photographic, and audiovisual works; and the Ministry of Agriculture in charge of plant variety protection. Enforcement is carried out by the Ministry of the Interior and the Customs Department as regards trade.

For further harmonization of the Georgian IPR legislation with EU standards Sakpatenti is currently working on draft amendments to the Law on Patents on industrial designs (in line with EU Directive 98/71/EC on legal protection of designs), the protection of utility model, and streamlined procedures related to granting rights, expertise and opposition. Another legislative initiative being under consideration at Sakpatenti relates to revising the Law on Appelations of Origin and Geographical Indications of Goods in line with WTO panel decision of March 2005 on a case brought by Australia and the United States on EU regulation related to the protection of geographical indications for agricultural products and foodstuffs.

Finally, it should be mentioned that the major problem related to IPR protection in Georgia lies not in statutory framework, which is quite well-designed and rather compatible with EU and WTO rules, but in poor enforcement, especially in the areas of computer software, audio- and video-works. This is a complex issue related to lack of capacity of law-enforcement bodies and judiciary system to deal with IPR infringements. This is not uncommon for most post-Soviet and many developing countries. However, as a small economy, Georgia does not attract much attention of large international companies whose IPRs are violated there, so there is not enough pressure to improve the situation.

Georgia is under obligation in the PCA to provide the protection of IPRs at the level similar to that of the Community but this obligation did not materialize. ENP AP stresses the importance of the enforcement of IPR legislation conformant with Georgia's obligations under the PCA and TRIPS. Full realization of Georgia's commitments under the PCA and ENP AP is an absolutely necessary measure to ensure compatibility with EU *acquis*.

A Simple FTA is unlikely to improve enforcement of IPRs in Georgia. As a small market, Georgia is unlikely to attract attention of big international players even under an FTA, which would exert pressure on the Government to dramatically improve enforcement of IPRs. Flanking measures in a Deep FTA+, if implemented, will have more substantial impact. However, much progress can be achieved by implementing the existing PCA and ENP AP commitments without Georgia taking additional obligations under yet another agreement.

## 5.6. Public Procurement

Public procurement is regulated by the Law on State Procurement, adopted by the Parliament in 2005 and put into force on January 1, 2006. The major innovation in this Law over the old procurement Law (1998, amended in 2001) was that restricted (close) tender as a method of state procurement was abolished and the open tendering recognized as the primary method of implementation of state procurement. Single source procurement was envisaged for *Force Majuro* cases. Other amendments include reduced tender fee, increased monetary ranges for procurement objects, and shorter tender period. The Law is harmonized with UNCITRAL Model Law on Procurement of Goods, Construction and Services. It provides for equal treatment of foreign and domestic bidders.

The implementing agency is the State Procurement Agency (SPA), an independent body for coordinating the public procurement and tendering process. The State Procurement Agency elaborates regulatory instruments and standard bidding documents, carries out supervision, monitoring, and administrative reviews, conducts training and disseminates information on procurement system.

Nevertheless, the Law and evolving practices of public procurement do not fully conform to the EU standards in the areas of procurement procedures (selection criteria for procurement methods, qualification requirements, and advertising

rules) and access to legal recourse. In general, SPA's employees do not have a sufficient knowledge and understanding of EU regulatory framework in the area of public procurement. Enforcement is rather weak in certain aspects due to inadequate training of officials and the low level of awareness of this law. Although the tender system has become more transparent, circumvention of the procurement regulations on competitive bidding still exists as well as instances of corruption. So far, there have been no serious developments in the introduction of the appropriate legal and institutional framework for e-procurement.

There is much to be desired in the effective implementation of the relevant PCA and ENP AP provisions, which envision conversion to the European legislative principles in the area of public procurement. A Deep FTA could serve as an extra impetus for change via involvement of EU companies in state procurement in Georgia and associated pressure to implement Georgia's commitments in this area.

## 5.7. Rules of origin

Georgian customs legislation on rules of origin is in compliance with the WTO and EU legislation. Georgia issues three different types of certificates of origin for different countries:

- (All countries) As a WTO member country, Georgia adheres to WTO rules related to the determination of country of origin. The Customs Code and the Governmental Resolution No. 256 (of 27 December 2006) define the criteria for determination of the country of origin as well as the rules for the issuance of non-preferential certificate of origin. Certificate of origin defined by WTO Agreement is issued by the Georgian Chamber of Commerce.
- (CIS countries) As a member of a free trade area in the Commonwealth of Independent States, Georgia issues preferential certificate of origin for the CIS free trade area in accordance with the rules of origin defined by the Decision of Council of Governments of CIS countries, 30 November 2000.
- (EU countries) In addition, certificate of origin Form A is issued in Georgian territory, which is used for application of the preferences assigned by the EU General System of Preferences (GSP/GSP+). This form is issued by the Ministry of Economic Development. All the procedures of determination of country of origin are in compliance with EU legislation.

There is a new Free Trade Agreement concluded between Georgia and Turkey on November 21, 2007, in Tbilisi. The Agreement contains exclusions from free trade regime. It shall be ratified by parliament of Georgia and after this relevant changes shall be made in national legislation. It is not clear yet if there will be new form of certificate of origin regarding this agreement or usual certificate of origin will be used.

Our survey shows that the Georgian exporters do not find it particularly difficult to obtain certificate of origin Form A for export to the EU. As Georgian exports to the EU are comprised mostly of simple products and raw material, the most complicated requirements of rules of origin for the EU GSP de facto do not apply.

It would also be highly beneficial if the rules of origin under an EU-Georgia FTA allowed for cumulation within Paneuromed system of origin (on condition that Georgia had the capacity to negotiate and implement these rules) avoiding the adverse effects of the hub-and-spoke model[36] which tends to allocate the benefits from integration to the largest markets.

On the import side, the rates of customs tax defined in the Tax Code of Georgia are the same for every WTO member or non-member countries. Practically speaking, there is no point in having Certificate of Origin for tariff preference purposes during importation of the goods into the territory of Georgia (other than from CIS countries).

In case of an FTA with the EU, the certificate of origin is ought to be issued by the Customs Department rather than the Ministry of Economic Development. Currently, the Customs Department does not have capacity to issue such certificates. Therefore, if the FTA is to be signed, it will be necessary to build the capacity of the Customs in this area, including staff transfer from the Ministry of Economic Development to the Customs. The impact of the break-away regions Abkhazia and South Ossetia on the management of preferential rules of origin by Georgia will have to be carefully appraised.

## 5.8. Sanitary and Phytosanitary Measures

The framework Law on Food Safety and Quality was adopted in December 2005 after an intense public debate on food security issues and considerable involvement of the donor community. The Law is generally compliant with EU legislation, *Codex Alimentarius*, and other international standards and conventions. The Law incorporates key elements of the EU Regulation 178/2002/EC, which laid down the

[36] Baldwin (1994).

general principles and requirements of food law and established the European Food Safety Authority. The Law, however, is more limited in scope than Regulation 178/2002/EC. It excludes primary and artisan food production (instead of full HACCP system, a simplified version of HACCP - Internal Control System - is to be implemented by the food producers), does not require mandatory approval and licensing of the food establishments, and does not include animal and plant or plant products identification and traceability systems. However, in order to meet the EU regulations on imports of food products of animal origins, Georgia will be required to introduce a system for approval/licensing of slaughterhouses, dairies, meat cutting plants etc. This would be a necessity if Georgia is able to develop relevant export potential in the future.

In accordance with the Law, important institutional changes were introduced, such as the creation of the Food Security Department in the Ministry of Agriculture and the National Service of Food Safety, Veterinary and Plant Protection. The Food Security Department was charged with the responsibility to elaborate policy and regulatory measures, including secondary legislation which was almost absent. The Department has prepared a large number of secondary legal instruments necessary for the functioning of the Law and is currently working on the Veterinary Law, with a help of donor community. The new Veterinary Law will replace the acting Veterinary Law, adopted in 1995 but substantially limited in scope in the process of subsequent revisions. The goal is to harmonize the Veterinary Law with the Food Safety Law as well as EU regulations. Secondary legislation passed up to date includes: The Rules for destruction of harmful food; Rules for traceability, hazard analysis and critical control points; Risk assessment and communication procedures in the framework of the risk analysis; Rules and procedures to be implemented by Authorized officials to exercise their authority; On adoption of food monitoring, supervision and control procedures; Rules for food/animal feed sampling and transfer to the laboratory; Rules and procedures for inspection; Rules and procedures on methods of official control; Procedures for food border control (joint with the Ministry of Finance); Rules for issuance of hygienic certificate on food and food related packaging; Pesticide and agrochemical labeling rules; Pesticide and agro-chemical storage, transportation, sales, and application rules; Charter of pesticide and agro-chemical registration test expertise and registration; On rules for introduction into Georgia samples of pesticides, etalon preparates and analytical standards for testing purposes; State catalogue of pesticides and agro-chemicals permitted for use in Georgia; Veterinarian (veterinary sanitary doctors, and veterinary pharmacists) State Certification. Although not without deficiencies, the secondary instruments provided a workable framework for the enforcement of the Food Safety Law.

Since December 2005, responsibility for SPS controls at the territorial borders and ports rested solely with the Customs Department of the Ministry of Finance, with exception for the inland terminals which are still under the purview of the Ministry of Agriculture. The new Law on Customs, adopted in 2007, brought all controls under the Customs Department and they since then have been performed only at the borders. Although bringing controls within a unified management is in line with EU policies, the Customs Department does not have necessary capacities to make checks regarding animal health, food safety, and plant health other than documentary checks, exposing the country to significant risks to animal, plant and human health. Furthermore, Georgia does not have a long-term development strategy of the SPS import control system. This situation is not only inconsistent with EU regulations but contradicts important multilateral conventions, such as International Plant Protection Convention[37] and the requirements of International Office for Epizooties, which call for adequate levels of SPS and veterinary controls.

The National Service of Food Safety, Veterinary and Plant Protection, set up in 2006, is charged with responsibility over inspections and controls. However, inspections have never started. The consecutive amendments to the Food Safety Law deferred the start of inspection inspections till further and further dates, now the end of 2009. Moreover, current regulations do not allow inspectors to enter establishments before a lengthy legal procedure involving court hearings and lasting over two weeks. Even in the case of inspectors entering the premises and finding violations, the National Service does not have the right to impose sanctions but only transfer the case to financial policy or another authoritative body.

The National Service issues export SPS and veterinary certificates. However, the Service representatives in the regions of Georgia do not have equipment for testing and issue certificates based on the known presence or absence of harmful pests, epidemics and epizootics in the regions under their purview. Such system rightfully renders these certificates invalid in the eyes of many importer countries, including the EU.

Licensing of veterinary laboratories and pharmacies has been discontinued. Veterinary medicines are regulated by the Ministry of Health based on documentary evidence; however; the Ministry, however, does not have a laboratory for testing.

At the same time, both the Food Security Department and the National Service have been restructured and substantially downsized. For instance, Food Safety Department in the National Service has been almost completely disbanded and its

[37] Georgia has recently adhered to the International Plant Protection Convention.

functions eliminated. The personnel of both agencies are subject to frequent turnover. In its current shape, the National Service is unlikely to be able to carry out meaningful inspections even if directed to do so.

Lack of official controls and inspections poses significant health risks for humans, animals, and plants in Georgia and countries importing Georgian agricultural products. The 2007 outbreak of African swine fever with inadequate Government response capacity was an example of Georgia's vulnerability regarding animal health safety.

The deferral of controls and inspections contradicts EU-Georgia ENP AP and the PCA. It severely restricts the capacity of Georgian products to be exported to the EU market. Georgia has a long way to go to convergence towards EU food safety requirements. Two main regulations should be taken as an initial guide for such process and adhered to the fullest – the aforementioned Regulation 178/2002/EC (especially in parts of animal and plant or plant products identification and traceability systems; hygiene in food processing) and "General Guidance for third country authorities on the procedures to be followed when importing live animals and animal products into the European Union", DG SANCO/FVO October 2003 (EU requirements on animal health and for the processing of animal products).

It is clear that the establishment of the SPS system in Georgia compatible with the EU could take a long time. This severely restricts the capabilities of Georgian food products to be exported to the EU market. Only those products that do not require official health certification and for which the exporting industries in Georgia could ensure that they meet EU food safety criteria are currently exported to the EU, most importantly wine (with specific standards of the wine industry) and hazelnuts (where the producer can prove conformity). Other prospective food exports could follow similar course. Most of animal origin products require official health certification and their exports into the EU could be ruled out. Therefore, unresolved SPS issues in Georgia would lead to the effective exclusion of agriculture and food products from the benefits of an FTA.

## 5.9. Institutional capacity to negotiate and implement commitments under an FTA

Georgia would not have problems in negotiating and implementing its commitments under a Simple FTA with the EU. As a member of the WTO and a party

to FTAs with CIS countries and Turkey, Georgia has considerable experience in trade negotiations and agreement implementation. Agency-wise, foreign trade issues fall under purview of the Ministry of Economic Development. Other line Ministries and agencies such as the Ministry of Agriculture, the Ministry of Finance, and the Customs Department would play an important role in FTA negotiations and implementation. Other agencies mentioned in this chapter will participate as well. The human resources of the Government bodies are uneven in terms of education, qualifications, and international experience. There is a small group of internationally educated young cadres occupying high positions while the majority of staff has limited understanding of European regulations, international practices, and foreign languages. However, this situation could be eased with technical assistance.

In a Deep FTA, flanking measures will probably go along the path outlined in the PCA and ENP Action Plan, so the implementation of Georgia's commitments taken under PCA and ENP AP could serve as a guide of the Government capability to implement a more challenging agreement. As recent experience shows, Georgia has been progressing in harmonizing its legislation with EU. However, implementation of statutory laws and obligations remains a problem in many areas, as was stressed in this report. Laws on the books and obligation under PCA and ENP AP did not stop Georgia from effectively scrapping the enforcement of SPS measures and product standards until the time when the markets demonstrate the need for such institutions and export capacity develop. Therefore, implementation of the flanking measures would be seriously influenced by the stance of the Georgian Government on the practical economic policies of the day.

The most important issue today is the implementation of the adopted legislation. The SPS example highlighted the non-triviality of this task. The Government of Georgia has greatly liberalized the economy and undertook a largely successful anti-corruption effort. At the same time, doubts within the Government remain about the degree of regulatory harmonization with the EU that is appropriate for Georgia. Heavy regulations are seen as excessive and burdensome under the current underdeveloped state of the economy, and fragile and immature institutional structure. Therefore, a Deep FTA would probably require finding a balance between the views of the Georgian Government and the EU on the feasible degree of harmonization. The position of the EU, as reflected in the European Commission's Communication "On Strengthening European Neighbourhood Policy" endorsed by the EU Member States is that "implementation of ENP AP, particularly on regulatory areas, will prepare the ground for the conclusion of a new generation of "deep and comprehensive free trade agreements" with all ENP partners"[38].

[38]COM (2006) 726, p. 4.

# 6. Survey of non-tariff barriers in trade between EU-Georgia and Georgia with neighbouring countries

## 6.1. Survey method

This section presents the results of the survey of exporters in Georgia. By sample design, the majority of firms were exporting to the EU and the minority – to CIS countries. Some firms exported to both destinations. The sample consisted of about 100 firms exporting to the EU and the rest exporting to the CIS. The survey was conducted in October-November, 2007, by CASE Transcaucasus, Tbilisi. Detailed description of the sample is presented in Appendix 4.

The questionnaire was modelled on CASE (2006) study of non-tariff barriers in Ukraine, which, in turn, was based on a survey of recent surveys on NTBs carried out in developing and transition countries. Respondents answered questions on export destinations and sectors, certificates of origin, customs procedures, standards and technical regulations, conformity assessments, sanitary and phytosanitary measures, and antidumping and countervailing measures. They also provided background information about their companies covering ownership, staff, and time in business, etc. The questionnaire is included in Appendix 4.

## 6.2. Results for Georgia

### 6.2.1. Certifying origin of goods

A significant proportion of Georgian goods entering the EU market benefits from the General System of Preferences. The EU's General System of Preferences (GSP)

facilitates the access to the EU market for certain countries, and for specific products. It allows applying reduced, preferential or zero tariffs to goods, which were produced or manufactured in a beneficiary country. In order to benefit from the EU GSP upon importation into the EU, the following conditions must be fulfilled:

- goods must originate in a beneficiary country defined in accordance with the EU GSP rules of origin,
- goods must be transported directly from the beneficiary country to the EU, and
- a valid proof of origin must be submitted (certificate of origin – issued by the competent authorities in the beneficiary country, or invoice declaration).

The interviewers inquired whether exporting firms from Georgia have experienced any difficulties in regards to the above, and whether these regulations constituted a nuisance in terms of time and expenses. Actually, 91 % of all firms in the sample obtained certificates or origin during the last year, although only 81 reported exports to the EU. Only 4 % did not obtain them and only 5 % were either not able to answer this question or were not familiar with this subject. The firms, which did not obtain certificates, belong exclusively to the both groups of firms with a maximum of 25 employees.

Within the group of firms that obtained a certificate of origin, on average each firm obtained such a certificate 22 times per year, whereby the dispersion was high and ranged from 1 to 200 times per year. The median, however, was only 12, meaning that 50 % the firms obtained between 1 and 12 certificates per year. Furthermore, only ten firms obtained more than 40 certificates per year. The larger values of certificates are concentrated in the group of firm with more than 50 employees. Here, the mean is 79 and the median is 50. Thus, not surprising, larger firms tend to make more frequent deliveries to the EU.

The questionnaire also asked for the costs of obtaining the certificate of origin for one delivery. The firms reported costs between 50 GEL and 2100 GEL with a mean of 263 GEL and a median of 200 GEL. Actually, the distribution is clearly skewed towards lower values. On the one hand, 38 firms reported costs of only 50 GEL, and, on the other hand, three firms reported costs of 500 GEL and four firms the costs of 2000 and 2100 GEL, respectively. There seems to be no relationship between the size of a firm and the costs of one certificate. The extreme high costs are found within the group of firms with 10 to 25 employees and the next group with 26 to 50 employees. Otherwise, the cost structures of these groups are very similar to the others with a median of 200. Only the first group of very small firms has a higher median of 275.

When asked about the perception of costs of obtaining the certificate of origin, most firms answered that they are not at all important (82 firms or 89 % of the firms obtaining a certificate). Only 10 firms answered that the costs are somewhat important (11 %). No firm found the cost important or very important. Firms, which did not obtain certificates, did not answer this question. With regard to firm size, the 10 firms considering costs somewhat important are scattered across all classes. The same holds for the costs of one certificate.

When asked about indicating difficulties in obtaining a certificate of origin, 91 firms (99 % of the firms obtaining a certificate) reported no difficulties. Only one firm complained about time-consuming procedure.

Summing up, the interviewed firms seem to use extensively the EU trade preferences, and are familiar with the procedure of certifying origins of goods. Obtaining a certificate of origin was neither considered as an important nor costly obstacle to trade.

### 6.2.2. Customs procedures

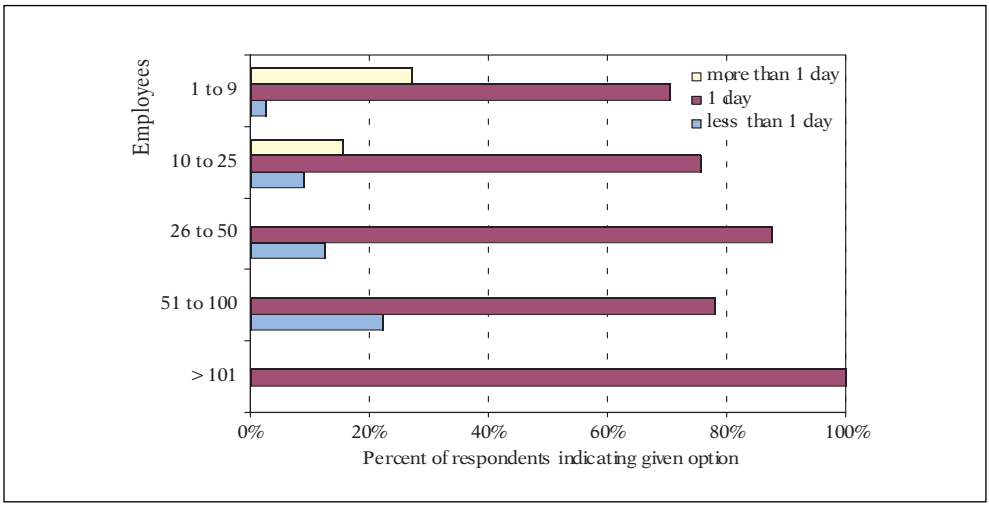
Export customs costs seem to be very low for Georgian exporters. The 102 firms in the sample reported that they spent between 0.005 % and 1.1 % of their export value to pass the Georgian Customs, with the mean of 0.183 % and standard deviation of 0.168 %. Sector-wise, companies in agriculture and food paid much less than average why companies in the metals industry paid more than double the average.

With regard to the length of customs procedures, nine firms reported that their carrier spent less than one day at their countries' border while exporting products. Seventy-six firms reported one day and further 17 firms more than one day. Figure 6 1 shows that there is obviously a certain link between time spent at the border and firm size. The share of answers reporting waiting times of more than one day decreases with firm size, while the share of answers reporting waiting times of less than one day increases with firm size.[39]

With regard to exports the EU, for all 80 reporting firms the ordering party based in the EU country is carrying all costs related to import customs procedures. Things look a little bit different for the costs of passing CIS country import customs procedures when exporting to one of those countries. Here, ten firms reported that they or their representative in CIS countries is carrying all the cost related to import customs

[39] Results for larger firms with more than 101 employees should be treated with caution since the sample size was very small even in comparison to the groups with 26 to 50 employees and 51 to 100 employees.

**Figure 6.1. Time spent at borders while exporting products**




Source: Survey results.

procedures, while 41 firms indicate that the ordering party is carrying these costs. However, the costs, which the ten firms had to carry, were rather low. On average, they spent less than 1 % of their export value to pass import customs procedures in CIS countries. Nevertheless, these procedures seem to be a little bit time consuming. These firms reported 1 day for most CIS countries, but 2 to 3 days for Ukraine.

To conclude, Customs costs and clearance times appear to be quite modest and do not represent a major barrier to export.

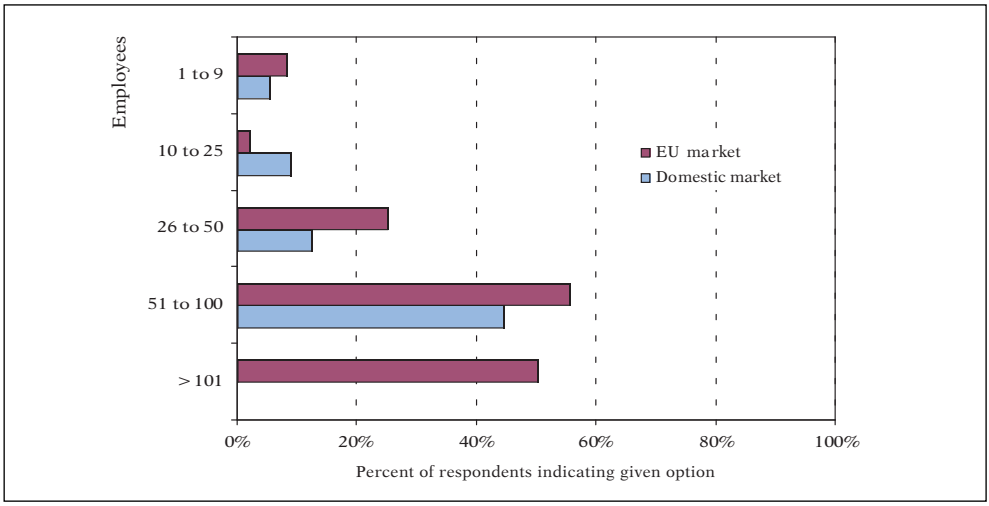
### 6.2.3. Technical standards

**Observance of technical standards in the domestic and the EU market**

The term "technical standards" has a rather broad meaning in the context of this survey. When asking about technical standards we meant any norms (formal and informal) with regard to the characteristics of products or processes that producers have to account for to be able to sell at the market. Such requirements are not necessarily fixed in official documents and obligatory to producers or exporters.

Out of all firms in the sample, 11 reported that they have to meet domestic technical regulations in order to sell in domestic markets. Further 12 firms do not have to take such regulations into account, while 77 firms indicate that they do not sell at the domestic market. With regard to the EU market, things look a little bit different. Out of the 91 exporters to the EU, 12 firms reported that they have to meet regulations to sell

**Figure 6.2. Shares of firms by size that have to comply with technical regulations in order to sell at the market**




Source: Survey results.

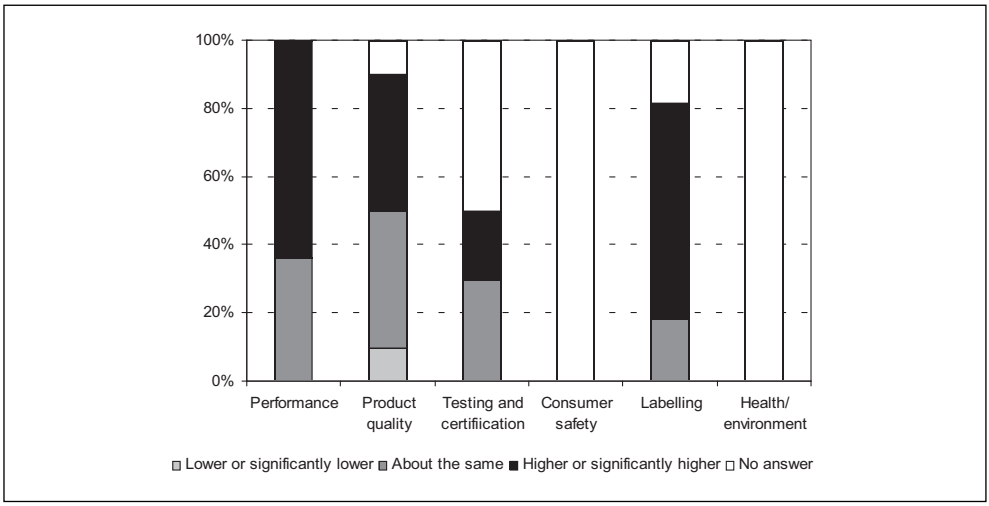
to the EU market; further 24 are not confronted with such regulations in their EU export business, while 55 firms indicated that they do not know.[40] At the first glance, it could be assumed that larger firms are often affected by technical regulations; however, it should be taken into account that the number of surveyed firms is rather small for the three classes of firms with more than 25 employees. Due to the larger sample size, the finding seems to be more robust that very small firms (one to nine employees) are more affected from EU technical regulations than small firms (10 to 25 employees), while the situation is reversed for technical regulations concerning the domestic market.

### Costs of ensuring compliance with the EU technical standards and ease of access to information

The relative costs of domestic technical regulations compared to foreign regulations seem to depend on the area of regulation (Figure 6.3). Domestic regulations concerning performance and labelling are considered by the majority of responding firms as more expensive than the same type of foreign regulations, while those concerning product quality are regarded as inducing the same costs. However, these conclusions should be treated with caution, since just ten to eleven firms answered these questions.

[40] Nine of these twelve firms belong to the sector "Manufacture of food products and beverages", two to the sector "Agriculture, hunting and related service activities" and one to the sector "Manufacture of basic metals". Since the twelve firms form the subsample for the next 20 questions, it does not make sense to differentiate in their statistical evaluation between the different sectors.

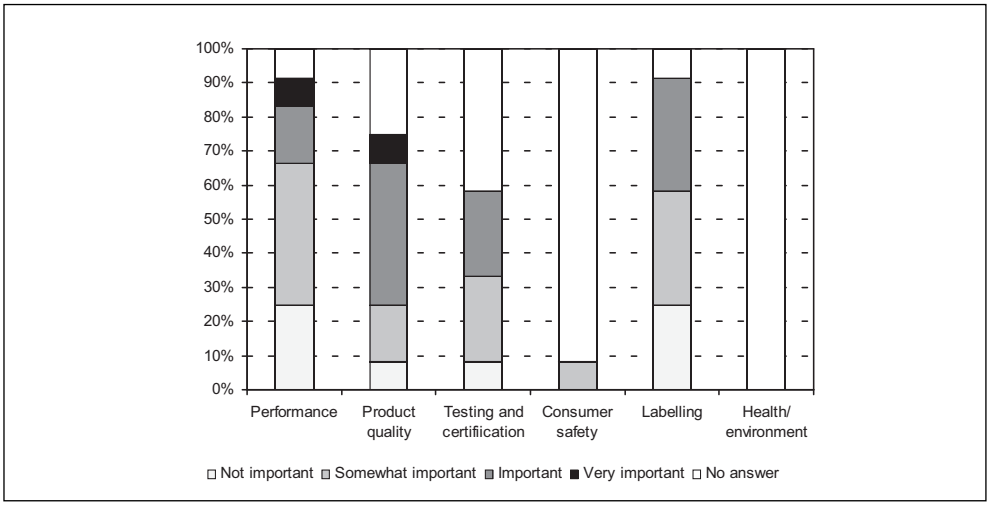
**Figure 6.3. Costs of compliance with domestic technical regulations compared to foreign technical regulations for exports**




Source: Survey results.

Firms were also asked what types of EU technical standards were most burdensome and expensive. Product quality and labelling seem to play an important role here, followed by performance as well as testing and certification (Figure 6.4). On other hand, the respondents did not separate health and consumer safety regulations from overall product quality requirements. But again, these conclusions should be treated with caution, since just twelve firms answered these questions.

**Figure 6.4. Burden and expensiveness of EU technical standards**




Source: Survey results.

However, even if certain EU technical standards were qualitatively considered as burdensome and expensive, actual relative costs of meeting the EU requirements were quite low. Four firms reported that the approximate costs of meeting the product characteristics amount to between 0.01 % and 1 % of their total sales, with a mean of 0.528 %. In agriculture, the cost was 1%, that is, double the average while it was negligible in the metals industry. With regard to marking, labelling and packaging requirements, 10 firms estimated that their relative costs were in the range between 0.01 % and 5 %, with a mean of 1.554 %. These costs amounted to 1 and 2 %, respectively, for agriculture and food and were negligible for the metal industry. One firm answered that other technical requirement costs amounted to 1 % of total sales. All other firms either had zero costs to meet the EU requirements or did not answer these questions.

A final important question with regard to technical regulations is the ease of access to the necessary information. Here, 3 out of the relevant 12 firms reported that the access was easy, 7 that it was not very easy, and 2 found it difficult.

In sum, EU technical standards do not seem to be too burdensome. This might be explained by the nature of Georgian exports to the EU which include mostly mineral and raw materials, as well as niche products that a priori satisfy EU regulations. However, technical requirements in the destination market prevent the majority of Georgian firm from exporting to the EU but non-exporters were not presented in the survey.

**Testing for conformity with technical regulations**

This group of questions was additionally answered by a large group of "volunteers." Although only the twelve firms answering that they had to meet domestic technical regulations in order to sell in the EU Market were urged to answer them, actually up to 72 firms filled in this part of the questionnaire.

With regard to the question whether their products were tested for conformity with the foreign technical regulations before they were shipped to the EU, 57 firms indicated yes and only three firms no. Twelve firms reported that they did not know. However, the importance of the resulting costs was considered as rather low. Fifty firms reported that they are not at all important and further eight firms that they are somewhat important. No firm answered that they are important or even very important. Furthermore, the acceptance of test results and conformity certificates issued domestically by the customs authorities of EU countries did not seem to be a problem.

This was at least the opinion of all 56 answering firms. But the willingness to release information came to a halt with the question whether the products of the firms were tested over the last year for conformity with the EU technical regulations in the destination country. Here, 56 firms answered that they did not know, while one firm respectively indicated yes or no. The same holds for the importance of the costs these tests. Only one firm considered the costs as somewhat important, while 10 firms answered that they did not know.

Furthermore, nine firms reported that they need to have several product tests if they export to more than one EU country, while two firms answered that this is not necessary. Altogether, the relative costs of product testing (% of last year's sales) were again rather low. Four firms placed them between 0.01 % and 0.5 %, while the other firms reported no costs or did not answered this question.

The problem of duplication of testing to meet both domestic and foreign technical requirements does not seem to be relevant. Two firms answered that there was no duplication and seven firms observed only minor duplication. Finally, more as anecdotic evidence, one firm reported that technical regulations conformity inspections lasted on average two to four days upon arrival in an EU country.

**Sanitary and phytosanitary measures**

None of the 12 firms, which answered the question about the implementation of the HACCP system, had implemented it. Furthermore, none of them encountered burdensome sanitary and phytosanitary regulations when they were exporting to the EU. Consequently, they also did not spend anything to ensure compliance with the respective regulations. Three of the firms accentuated this by answering additionally that the costs of meeting the sanitary and phytosanitary regulations in the EU were not important for their company, while the others did not answer this question.

Sanitary and phytosanitary requirements affect mostly food and agriculture exports. In this product group, Georgia exports only wine and hazelnuts to the EU. In case of wine, the exporters set up special labs furnished with European equipment to test for conformity with EU requirements. In case of hazelnuts, satisfying EU requirements does not take much extra effort due to the nature of the product.

At the same time, despite being an agricultural country, Georgia is unable to export other food and agricultural products, because Georgian producers cannot meet the SPS and standards requirements of EU countries. However, it is not reflected in the survey results, since the survey covers active exporters only.

### 6.2.4. Other NTBs

The questionnaire also asked briefly about other impediments to trade, namely

- antidumping duties,
- countervailing duties, and
- other measures affecting prices (e.g. minimum import prices, voluntary export price restraints).

However, no firm reported that it is subject to any of these measures. No firm indicated any other type of restriction.

## 6.3. Conclusions

Export sector in Georgia, at least as represented in our sample, is differentiated from the domestic sector. The majority of surveyed firms (77 out of 102) do not sell on domestic markets. Since exports to EU represent a small part of Georgian economy, these firms stand out from the average firm.

Business relations of the reporting firms with the EU have been in most cases established rather recently. Georgian exporters do not seem to experience much difficulty in obtaining certificates of origin. Customs barriers appear to be low as well.

The survey results indicate that the firms do not feel much burden resulting from NTBs in European markets. This perception might be explained by the nature of Georgian exports to the EU which include mostly mineral and raw materials that satisfy EU regulations with little difficulty. There are just two agriculture products exported to the EU – wine and hazelnuts, which have special (and rather easy to comply with) arrangements for SPS conformity certification.

Manufactured products are often produced under special arrangements similar to the outward processing scheme. Under such arrangements, the Georgian firms provide production services rather than the finished product. The European partners take care of the most of the logistical issues and requirement certifications. Hence, Georgian counterparts are not even familiar with full costs involved in exporting to the EU.

EU requirements act as an export barrier for firms producing products currently not represented in the exports to the EU, and comprising the bulk of the Georgian

economy. The average Georgian company does not export to the EU, partly because it cannot offer an attractive product meeting quality and safety standards of the European market.

# 7. Services in Georgia

## Introduction

This section discusses current developments in the services sectors in Georgia and the likely implications of free trade agreements with the EU or regional trading agreements. We also analyze current laws, regulations, and practices with respect to the establishment of business and, where relevant, cross-border issues affecting services and investment. We identify the areas where increased convergence of regulatory oversight may assist in promoting services and investment flows. Georgia undertook very wide-ranging commitments to liberalise trade in services in acceding to the WTO. At the general level, therefore, the study focuses mainly on the Deep FTA+ scenario, and on the flanking measures that will be necessary to make liberalization a reality. In this section we are working with the Simple FTA and the Deep FTA+ scenarios as defined in the Introduction. In the area of services a Simple FTA means no formal barriers to trade and reinforcement of the principles of market access and national treatment. A Deep FTA+ scenario describes significant degree of regulatory convergence and introduction of flanking measures leading to a considerable improvement of the business climate in Georgia.

Services made up 65.9% of Georgian GDP in 2006. This is an unusually high figure for a transition economy – the corresponding figure for Russia is just 55% - and it puts Georgia within sight of the UK (corresponding figure 75%), one of the leading service economies in the world, on this indicator**.** Of course, many of the services sold in Georgia are labour-intensive, low-tech services, and these will fall in importance as the Georgian economy develops. Georgia has a small surplus on balance of services within the current account, probably largely reflecting income relating to the Baku-Ceyhan pipeline, but there is no indication of revealed

comparative advantage for the services sector as a whole. Some services sectors, however, are set to become the growth points of the future, because they seek to exploit Georgia's unique natural and geographical advantages and/or because they bring to bear key generic technologies on the Georgian economy as a whole. So any agreement between the EU and Georgia which aims to facilitate the process of economic catch-up in the latter country must devote substantial attention to the services sector.

The discussion focuses on a number of sectors deemed to be of particular importance for the Georgian economy, viz.-

*7.1. Tourism*
*7.2. Information and communications technology (ICT)*
*7.3. Construction and engineering services*
*7.4. Financial services and banking*
*7.5. Energy-related services*

## 7.1. Tourism

### 7.1.1. Introduction

This is an area of great natural advantage for Georgia, with considerable potential for both sea-side tourism on the Black Sea coast line and mountain tourism on the southern slopes of the Caucasus Mountains. In the Soviet period mass tourism was a major industry, with some 5 m visitors a year, mostly from other parts of the Soviet Union. It is now a rapidly growing service export sector, though tourist numbers are now only a fraction of what they were in Soviet times. The total number of foreign tourist visitors to Georgia grew from 298,469 in 2002 to 548,107 in 2005[41]. Some two-thirds of Georgia's foreign tourists come from the CIS (on the basis of 2005 data – but this must have been subsequently affected by the Russian economic blockade). The number of tourists coming from Europe excluding the CIS grew from 98,913 in 2002 to 158,820 in 2005.

There are some restrictions on foreign nationals and companies in the WTO accession agreement, mostly with reference to presence of natural persons, but they do not appear to be onerous.

The main issue facing the Georgian tourist industry is the development of the related services needed to exploit the full tourist potential of the country, and that

[41] NB all foreigners entering Georgia are classed as tourists.

means close cooperation between the public and private sectors. Foreign direct investment in tourism has been growing rapidly in Georgia over the last few years. And the government is also making big investments in tourist infrastructure, notably in Batumi and Sighnaghi, an old town high up in the mountains on the eastern side of Georgia, near the border with Azerbaijan**.** In March 2008 a national programme for marketing tourism was adopted. However, Georgia still does not have a facility capable of hosting a large conference, congress or exhibition.

A new hotel school opened in Tbilisi in late 2007. But there are no general tourism development programmes in Georgia (Tait and Miller, 2007). An FTA would have no direct effect on these key training issues. Any national tourist training facilities that do exist will obviously benefit from provision for student exchange with EU countries. It is again not clear, however, that such exchanges would be facilitated by a free trade agreement, whether simple or deep.

### 7.1.2. Tourist infrastructure

A Deep FTA+ would effectively involve Georgia signing up for the 'common aviation area' (although technically this could be negotiated as a separate agreement). The EU is currently negotiating on the common aviation area with the countries of the Western Balkans, and aims to get all the countries covered by the Neighbourhood Policy into it by 2010. Prices of flights to and from Georgia have been going down steadily, and one may expect that one of the big budget airlines will start flying to Georgia soon. Batumi Airport is managed by a Turkish company, and is classified by the Turkish authorities as being within their air domain. This means that Turkish carriers can run scheduled flights between Batumi and Turkish airports (e.g. Batumi-Istanbul).

Road transport infrastructure is a major bottleneck for Georgian tourist development. While international trunk roads are in reasonable condition and well signposted, smaller roads, including city roads, are often in poor condition and poorly signposted.

The inadequacy of the road network for tourism is most acute in relation to the Svaneti region of the high Caucasus. This has potential at the level of the best parts of the Swiss and French Alps, but today it can only be accessed by helicopter or by a road up the Kodori valley on the edge of Abkhazia, where there is a real danger of hostage-taking. Among other prime tourist sites, Uplistsikhe, Vardzia and David Garedja are also very difficult to get to.

Until recently road travellers, both Georgian and foreign, were subject to the deplorable tendencies of the traffic police to use their powers arbitrarily to extort petty bribes. This practice was so acute that the government took the drastic measure of sacking the entire traffic police force on the grounds that the problem could not be cured in any other way. This is illustrative of the government's determination to attack the corruption problem, even at considerable cost of social frictions with the targeted group. A cultural dimension which intensifies the road transport problem is the Georgian way of driving, which is generally too fast, and tends to ignore the existence (or indeed the right to exist) of pedestrians. Road laws seem to be largely unenforced. There is scope here for international harmonization, backed up by technical assistance. Clearly, none of this has anything to do with a Simple FTA. But it could plausibly feature as a flanking measure for a Deep FTA+, with a significant potential effect on the development of tourism. It should be noted that the EU/Georgia Action Plan predicates a specific action plan on road safety.

There are also some specific issues in relation to sea transport. There are plans to develop Batumi as a cruise ship port, but these plans are being held up by the insistence of the port authorities on charging cruise ships the same docking fees as cargo ships.[42] It is expected that this issue will in any case be resolved over the next year or so.

Overall, infrastructure is a critical bottleneck for the tourist industry. A Deep FTA+ could help here, because it would make it easier for foreign investors to commit themselves to long-term, infrastructural projects. The EU/Georgia Action Plan contains quite specific goals in relation to transport infrastructure and regulation. To that extent a Deep FTA+ can be seen as complementary to the ENP Action Plan in this area.

### 7.1.3. Abkhazia

As in other areas, the Abkhazia problem rears its head in relation to tourism. There are plans to build new hotels in Abkhazia to house guests at the 2014 Winter Olympics in Sochi, in Russia. The Georgian government has condemned these plans as an infringement of Georgian sovereignty in Abkhazia, and is threatening to organise a boycott of the Sochi Games on these grounds. But Georgian sovereignty in Abkhazia does, of course, mean that any FTA signed by Georgia would cover Abkhazia as well. Since many of the visitors staying at these hotels would be EU

[42] International practice is not consistent on this point. In Lebanon, passenger ships pay 65% of the standard docking fee for cargo ships. In Norway, they pay slightly more than cargo ships.

citizens and many of the related hotel bookings would be by EU travel agents and tour operators, any measures by the Georgian government to block the business activity of those (as yet unbuilt) hotels would contravene any FTA with the EU that might in the meantime have been signed.

In conclusion, the potential impact of a Simple FTA on the Georgian tourist industry could only be minor. A Deep FTA+ could have a much greater impact, notably in the key areas of tourist infrastructure and deregulation of air travel, which would tend to increase with time.

## 7.2. Information and Communications Technology (ICT)

### 7.2.1. Introduction

This is a uniquely important sector, because it provides a whole range of essentially technological services, which can be used to upgrade production and management systems in virtually every sector of the economy. If we accept that dissemination of world best practice is the key to sustained growth in productivity and GDP in Georgia, then we must place special stress on the ICT sector.

### 7.2.2. The sector in outline

There are some minor restrictions on provision of computer services by foreign firms and nationals in Georgia under the WTO accession agreement, mainly in relation to presence of natural persons, but overall the Georgian computer services sector is already highly liberalized. There are six internet providers in Georgia. One of these, Caucasus Online, does have an effective monopoly over the provision of ADSL internet services, with over 90% of the market. And the service offered by Caucasus Online does not seem to be particularly good. It will no doubt improve once the company has finished laying its new fibre-optic cable on the Black Sea bed between Poti in Georgia and Varna in Bulgaria.[43] In any case Caucasus Online only has 30% of the total internet access provision market, with Telenet also on 30%, and the other 40% shared between a number of smaller providers (Hardabkhadze and Kvemadze, 2006, p.23). So the overall structure of the market is duopoly rather than monopoly. The conclusion must still be that only a Deep FTA+, with substantial flanking in terms of a strengthened competition and monopoly

[43] In conjunction with the US company Tyco Telecommunications

authority, would be of significant benefit to Georgian internet users. As Table 7.1. shows, Georgia is comparatively well endowed with computers, but has a low rate of internet use.

The Georgian telecoms sector is already highly liberalized. But there is a feeling in the industry that the system of regulation needs to be reformed. The *National Communications Commission* (GNCC) is seen as weak, as lacking vision, and as unable to implement its own regulations (but as incompetent rather than corrupt). One specific issue which has been recently resolved is that of *allocation of frequencies*. This was previously done on a bureaucratic basis, with applicants having to justify their requests. Now frequencies are auctioned on a purely financial basis.

In the context of all this, *regulatory convergence with the EU* is an immediate flanking issue for Georgia, within the framework of the ENP Action Plan commitment to developing a national telecommunications and IT policy. Here, the best way forward would be full adoption of the relevant parts of the *acquis communautaire*, but on the basis of the 1998 telecom regulation package rather than the current 2002 package. The 1998 package is at once more detailed and more appropriate for a country at an earlier stage in development. The European Commission could support this process of regulatory convergence in the way that it has done for the non-EU countries of South-Eastern Europe, by preparing detailed annual reports on the progress of convergence, backed up by regular meetings of a working group and selective technical assistance as required (CEPS, 2006, p.93). In principle, therefore, full convergence could be achieved soon after the signing of a Deep FTA+.

It is unclear to what extent *convergence in technical standards for telecoms equipment* is an issue for Georgia. As evinced by the case of Russia, there are huge differences between GOST and EU standards in this area. Since the great bulk of telecom products come under the EU New Approach to conformity assessment, however, and since Georgia in any case produces very little telecoms equipment itself, convergence should be an essentially technical problem. But it may be a very complex technical problem, involving on-going cooperation between the Georgian authorities and the European Commission and EU-sponsored user-groups. Standards issues of a technical nature have been reported in relation to e-commerce – not strictly a technical standards issue, but closely related. The approach of the Georgian government here has been to draft new legislation based on the principle of harmonization with EU law, and using the model UN law on e-commerce (Hardabkhadze and Kvemadze, 2006, p.19). But the issue is very complicated, and this may help to explain why passage of the law has been delayed.

Full convergence in this area, as in the area of technical standards per se, may well require a Deep FTA+, and might only be achieved some time after the signature of such an agreement.

As Table 7.1 shows, Georgia is comparatively well endowed with telephone land lines. The long-distance carrier, Telecom Georgia, is owned by the US-Russian company MIG. The local fixed-line carrier is United Telecom Georgia (UTG), owned by the Kazakh Bank Turan Alem. UTG, which owns the national cable infrastructure, is official designated by the GNCC as having 'significant market power'. The kinds of problems to which this can give rise were recently highlighted by a dispute between UTG and two independent operators – Highline and Telenet, which use mobile technology to provide fixed-line services. UTG tried to increase its rates for Highline and Telenet from two to twenty tetri per minute. The issue went to GNCC, and the regulator found in favour of Highline and Telenet, pending the decision of a special committee set up to review the case. Clearly there are real monopoly problems in the fixed telephony sector, but in this case at least GNCC acted quickly and decisively in favour of competition. And it should be stressed that these problems touch only on the relationship between the common carrier and the operators. Among the latter, there is a wealth of competition, with 34 international providers and 30 local providers. Nevertheless the interests of Georgian fixed telephony users would clearly be served by a Deep FTA+ involving specifically a significant strengthening of the competition and monopoly authority, in line with the ENP EU/Georgia Action Plan. A total of 35.2% of total telecoms revenue in Georgia is generated by fixed-line telephony (Hardabkhadze and Kvemadze, 2006, p.32).

Table 7.1 shows that Georgia is comparatively poorly endowed with *mobile phones* (NB the figure for mobile phones per 1000 persons seems to have more than doubled between 2003 and 2005). The Georgian mobile phone market is dominated by the Georgian/Turkish Geocell and the Georgian/US Magticom, which have roughly equal shares in the market. The Russian Beeline entered the market in 2007, with lower prices but more limited coverage. It does not seem to have made a big impact up to now, taking only about 5% of the market. Local sources suggest that the mobile market is effectively a duopoly, with significant barriers to entry. There is no suggestion that this duopoly situation is improperly supported by the state. But the competition and monopoly authority has not been able to make a decisive impact on the problem.

It is clear that there are significant problems of excessive market power in both fixed and mobile telephony markets in Georgia. Local institutions are not powerless

in the face of these problems, but comprehensive liberalization of the telecoms market will require significant strengthening of competition policy, in line with the goals of the EU/Georgia Action Plan. This would be surely on the agenda for a Deep FTA, but given the seriousness of the issue the government should try to act as soon as possible. Even in a Deep FTA+ there would probably be some lag here, with flanking measures (like reinforcement of the executive power of the competition authority) taking some time to bite. Our conclusions for the ICT sector as a whole are similar.

**Table 7.1. Telephone and computer endowment: some regional comparisons**

| | Azerbaijan | Armenia | Georgia | Lower Middle average | Average for the ECA region | High Income Average | World Average |
|---|---|---|---|---|---|---|---|
| **Communications** | | | | | | | |
| Telephone Mainlines per 1000 peoples (2003) | 114 | 148 | 133 | 175 | 228 | 560 | 183 |
| Mobile Phones per 1000 peoples (2003) | 128 | 100 (2005) | 107 | 207 | 301 | 708 | 223 |
| **Computers and Internet** | | | | | | | |
| Personal Computers per 1000 peoples (2003) | n/a | 15.8 | 31.6 | 35.6 | 73.4 | 466.5 | 100.8 |
| Internet users per 1000 peoples (2003) | 37 | 37 | 31 | 75 | 161 | 377 | 150 |
| Monthly price for 20 hours of use of Internet UD $ (2004) | 108 | 45 | 26 | 30 | 26 | 23 | 37 |

Source: IBM Business Consulting Services (2007), p.79

## 7.3. Construction and engineering services

This relates primarily to the import of construction services, where cross-border supply is generally unbound under the Georgian WTO agreement, with regard to both market access and national treatment. For most construction service sub-sectors, national treatment is qualified in relation to commercial presence by the requirement that at least half the staff should be Georgians. So there are some Simple FTA issues here at the general level.

*Provision of management services for building projects:* there is only one specialist construction project management company in Georgia, and construction project management is clearly an area where free market access for foreign companies is

very important. It might require a Deep FTA+, to guarantee this. Export of management services for building projects does not seem to be an issue at the present time.

*Organisation of distribution of imported building materials:* import of building materials into Georgia is tariff-free, except for a 12% tariff on imported stone for building. This tariff may be unilaterally removed in 2008. Georgia took on no binding commitments in relation to presence of natural persons in wholesale trade on joining the WTO. It is improbable that this would significantly affect freedom of trade in building materials, but it might have to be addressed in an FTA.

*Organisation of export of building materials:* this issue has arisen in relation to one very specific and politically highly charged way. The Russian authorities have announced that they intend to import cement and gravel for the 2014 Sochi Winter Olympics from Abkhazia, the breakaway region of Georgia. Any such shipments will obviously be classified as Georgian exports to Russia. The Georgian government has reacted very strongly to the announcement, threatening to organise a boycott of the Sochi Games in retaliation. A free trade agreement with the EU would have little immediate bearing here, because the dispute is essentially a bilateral one between Georgia and Russia. But it raises a general issue which could create difficulties once an FTA is signed. Since Abkhazia is legally part of Georgia, it would be covered by such an FTA. That means that any measures taken by the Georgian government to limit trade between Abkhazia and the EU (e.g. export of Abkhazian citrus fruits to the EU by Russian companies operating in Abkhazia) would be in contravention of the agreement. By the same token, however, any agreement between the EU and Georgia on property rights and intellectual property rights would hold in Abkhazia, and claims on property in Abkhazia could be pursued on that basis.

*Provision of design and architectural services:* there are three or four Georgian companies active in this area, so that there may not be a great deal of competition on the domestic market. There is probably no export activity. Only a Deep FTA+ with significant reinforcement of competition policy could establish real international competitiveness in the area.

As we have seen, Georgia does not export construction services. But she does export aircraft maintenance services. She does so, however, only to Turkmenistan, in payment of an old debt relating to gas supplies. When that debt is paid off, the provision of these services to Turkmenistan will probably cease. The circumstances

here are, therefore, very specific, and the impact of a possible FTA difficult to gauge, but probably negligible.

In conclusion, engineering services is an area where a Simple FTA would have little or no effect. To take the process further, particularly in relation to effective market access, would require a Deep FTA+.

## 7.4. Financial services and banking

### 7.4.1. Introduction

The Georgian financial sector is among the smallest relative to GDP in the World Bank's Europe and Central Asia region. Under the WTO accession agreements, the *banking sector* is largely liberalized in Georgia. But the Georgian banking sector remains about 50% domestically-owned. Comparison with the experience of other transition countries, where banking liberalization has generally been followed by overwhelming foreign penetration, suggests that there is room for flanking measures here, such as might be incorporated into a Deep FTA+. Under the WTO agreements the Georgian insurance *sector* remains subject to some restrictions, mainly in relation to presence of natural persons, but these do not appear to be onerous.

### 7.4.2. The banking sector in Georgia

There are currently 18 banks in Georgia. The six largest banks hold around 87% of the total assets of the sector, 90% of the total outstanding loans, and about 89% of deposits. Pressure for consolidation in the sector comes from the new minimum capital requirement regulation, which requires all banks to have paid-up capital of at least US$6.5 m by 2008. At the same time the National Bank lists maintenance of competition in the banking sector as a priority in its Banking Strategy for the Period 2006-9. There are also 42 credit unions, working mainly in the countryside, and some small finance companies that lend money to SMEs. There is a high rate of dollarisation of bank business – 72% in terms of deposits and 76% in terms of loans in December 2005 (Billmeier and Ding, 2006, p.8). But the rate of dollarisation is going down – to 70.8% in terms of deposits in the first quarter of 2006 and 68.7% in terms of deposits in the first quarter of 2007 (*Georgian Economic Trends*, 2007, p.29). Spreads are high – in 2004 they were averaging nearly 20% on short-term lari deposits/loans, before coming down to something above 10% in

2005 and early 2006; from late 2006, however, they started to rise again (see Table 7.2). Short-term lending rates of interest in lari are typically in the range 20-22%. Lending rates and spreads are generally lower on foreign-currency denominated deposits/loans. Liquid assets are a high proportion of total assets – 76% at the end of 2005. At the same point in time the non-performing loan ratio (to total loans) was surprisingly low, at 3.8%. There has been a rapid expansion of credit recently – at an annual rate of around 45% (43% year-on-year in the first quarter of 2007[44]), possibly due partly to increased efficiency in the system, and to improvements in the (still unsatisfactory) legal environment, especially with respect to the recovery of bad loans. The Georgian banking sector is moderately profitable, with a rate of return on assets (ROA) of 3.1% and a rate of return on equity (ROE) of 14.9% in 2005 (National Bank of Georgia, 2006, p.11).

**Table 7.2. Commercial bank interest rates (annual weighted average)**

| | On loans | | | | On deposits | | | |
|---|---|---|---|---|---|---|---|---|
| | Lari | | Foreign currency | | Lari | | Foreign currency | |
| | Short-term | Long-term | Short-term | Long-term | Short-term | Long-term | Short-term | Long-term |
| 2000 | 22 | 17 | 30 | 20 | 11 | 2 | 11 | 13 |
| 2001 | 24 | 17 | 27 | 21 | 8 | 3 | 11 | 12 |
| 2002 | 25 | 16 | 25 | 20 | 11 | 12 | 11 | 12 |
| 2003 | 25 | 19 | 23 | 19 | 10 | 12 | 10 | 11 |
| 2004 | 27 | 20 | 22 | 17 | 8 | 12 | 9 | 11 |
| 2005 | 22 | 21 | 20 | 16 | 9 | 12 | 8 | 10 |
| 2006 | 21 | 20 | 18 | 16 | 10 | 13 | 7 | 10 |
| Q1 | 21 | 20 | 19 | 15 | 10 | 13 | 8 | 11 |
| Q2 | 20 | 20 | 19 | 16 | 7 | 13 | 6 | 10 |
| Q3 | 20 | 20 | 18 | 16 | 7 | 13 | 6 | 10 |
| Q4 | 22 | 19 | 18 | 16 | 7 | 13 | 7 | 10 |
| 2007 | | | | | | | | |
| Q1 | 22 | 19 | 18 | 16 | 7 | 12 | 7 | 10 |

Source: Georgian Economic Trends, 2007, p.31

Banks have generally become more willing to lend without collateral in recent years. The share of long-term credit (more than one year) in total credit has also increased – from 27% in 2000 to 64.2% in December 2005 (National Bank of Georgia, 2006, p.9). But more than 70% of SMEs and around 60% of big companies never go to the banks for credit (Billmeier and Ding, 2006, p.5; confirmed by interview with local bankers in October 2007). Micro loans are a growth area, and picked out as a priority area in the Banking Strategy for the Period 2006-9, but there is a long way to go. In terms of bank credits to particular sectors, health care and social services saw the most rapid year-on-

[44] *Georgian Economic Trends,* July 2007, p.29

year increase in the first quarter of 2007 – 213%, with education, construction and hotels and restaurants also showing rapid growth. (Strikingly, the key transport and communications sector showed a fall in credits of 8% over the same period.) (*Georgian Economic Trends*, 2007, p.29) But around half of total credits still go to the trade sector (National Bank of Georgia, 2006, p.9). The government would like to see the banking sector becoming more flexible, and more prepared to take risks – but on the basis of proper risk assessments. The National Bank of Georgia is currently drafting a Methodological Manual of Risk Management Evaluation.

There are no direct restrictions on foreign bank ownership in Georgia, and 50% of the total capital of the Georgian banking sector was held by foreign organizations at the end of 2005. As much as 76% of the gross assets of the sector were held by banks with foreign participation at the same point in time (National Bank of Georgia, 2006, p.10). But there is only one first-tier foreign bank in the country – the French *Société Générale*, which holds about 11% of the market in terms of deposits and over 30% of the plastic cards in circulation in Georgia through its subsidiary, Bank Republic. The Austrian *Creditanstalt* bought the EBRD's 11.8% stake in the Bank of Georgia, the second biggest bank, in May 2006, on behalf of a range of institutional investors. The Russian *Vneshtorgbank* (VTB), the German *Procredit*, the Kazakh Turan Alem Bank and the Armenian Cascade Bank are also present, in addition to a number of multilateral funding organisations. There are branches of the Turkish Ziraat Bank and the Azeri Development Bank of the Caucasus in Tbilisi. HSBC will enter the Georgian market in early 2008. But they plan to open just one branch, so that they will not be challenging *Société Générale's* premier position for the time being. The old rule that non-bankers were not allowed to own more than 25% of a bank may have acted as an effective barrier to foreign investment in the past. That was removed in March 2006.

Georgian banks are primarily regulated on the basis of the Basle-1 rules of risk assessment. A law of 1 January 2004 on Facilitating the Elimination of Legalisation of Illegal Incomes provides the basis for the work of the Financial Monitoring Service of the National Bank in countering money laundering. *Société Générale*, which is supervised by the National Bank of Georgia but also reports to the French *Commission Bancaire*, is regulated on the basis of Basle-2, which is more self-regulatory than Basle-1 but better suited to the operations of highly sophisticated first-tier banks. It is unclear whether this is also the case for the other foreign banks active in Georgia.

Recent positive developments in the Georgian banking sector include the creation of a *credit information bureau* in 2006, to help banks with risk assessment.

Measures have also been taken to strengthen the process of bank audit. Georgia now has Standard and Poor's and Fitch Ratings sovereign credit ratings of, respectively, B+/B with stable outlook and BB-/B with stable outlook. Among the commercial banks, *Société Générale* has, of course, an AA- rating, but the mainly domestically-owned Bank of Georgia also has good international ratings - B+/B rating with stable outlook from Standard & Poor's, and B-/B with positive outlook from Fitch Ratings. All of this makes it easier for banks to borrow on international financial markets. The government originally proposed to introduce a *deposit insurance scheme* in 2007, but the idea has been dropped for the time being. It remains an element in the Banking Strategy for the Period 2006-9.

The fact that, even with virtually 100% liberalisation, there is only one first-tier foreign bank in Georgia suggests that a Simple FTA would have little impact on the sector. Flanking measures are again the key here, but they would have to be very thorough-going, including fundamental legal reform, e.g. on recovery of bad loans, to have any impact. It is clear, however, that the stakes are high. Georgia desperately needs first-tier foreign banks to improve the flow of investment finance to its rapidly emerging economy. Nearly 99% of the financial intermediation in Georgia comes through the banking system (National Bank of Georgia, 2006, p.5). This pattern is not going to change in the medium term, so that Georgia's development prospects depend crucially on the evolution of the banking system. If that evolution is in turn dependent on a Deep FTA+, then the latter may emerge as a key condition of sustained economic development in Georgia.

### 7.4.3. The insurance sector in Georgia

The insurance sector in Georgia is very small, with total premia collected in 2004 amounting to just 0.5% of GDP. In 1999 Georgia had the third lowest gross premium volume in the CIS, with only Armenia and Kyrgyzstan below it (Mu et al., 2004, p.14). There are foreign insurance companies in Georgia – BCI and GPI, and there are also some joint ventures. Their limited impact, despite the liberality of the related clauses of Georgia's WTO accession agreement, suggests that a Simple FTA would have little effect here. Georgia does have actuaries, grouped together within the Georgian *Association of Actuaries*, so that there is a professional basis for developing life insurance. The generally low level of living standards in Georgia means, however, that there is scant short-to-medium-term prospect of the development of a significant market for life insurance in Georgia. There is little that an FTA could do to change this except for indirect impact of a Deep FTA+ on the purchasing power of the population.

### 7.4.4. The stock market in Georgia

The Georgian stock exchange is tiny, and accounts for less than 1% of total financial intermediation in the country. The government is anxious to develop it, and the Banking Strategy for the Period 2006-9 includes an ambitious programme of related legislation, concerned mainly with electronic means of payment. But on the most optimistic assumptions, the Georgian stock market will remain a minor element in the Georgian financial system for the foreseeable future.

### 7.4.5. The financial regulatory framework

The Georgian Banking Strategy for the Period 2006-9 envisages harmonization of the Georgian banking framework to EU banking legislation, in accordance with the provisions of the EU/Georgia Action Plan. In this context, it is in fact probably not appropriate for Georgia simply to copy all the sections of the *acquis communautaire* relating to the financial sector. As has been argued in relation to Ukraine (CEPS, 2006, p.9), the EU's Financial Services Action Plan (comprising 42 legislative measures) was drafted to take account of the needs of countries with highly sophisticated financial markets. Georgia is not in that category, and will not join it for some time to come. The important thing for Georgia is that legislation should be *acquis*-compatible, reflecting *passive compliance* with the EU system. In essence that means simply ensuring that there are no serious inconsistencies between the Georgian and EU systems. Even so, on the more substantive issues of financial regulation, progress will be slow, and the conclusion of an FTA would not, in itself, do much to accelerate it. A Deep FTA+would have a significant impact.

Among key corporate governance/audit/accounting flanking measures, Georgia has already made the EU *International Financial Reporting Standards* (IFRS) compulsory for listed companies. Of course, the number of listed companies in Georgia is very small, and it would likely take several years of a Deep FTA+ to make a significant impact on this situation.

With the sector already highly liberalised, the effect of a Simple FTA on financial services would be negligeable. A Deep FTA+, involving key flanking measures on the legal dimension (corporate governance overall financial regulation, recovery of bad loans), would have a much greater effect. That effect would probably grow over time as legal reform began to impact on actual patterns of behaviour.

## 7.5. Energy-related services

This covers a wide range of transit issues, and also issues relating to domestic distribution of energy.

Under Georgia's WTO accession agreement energy-related services are largely liberalized, and the electricity industry is mainly privately owned, apart from high-voltage transmission lines. The Czech Energo-Pro controls 60% of power distribution in the country, having bought two distribution companies in July 2007, and also owns six hydroelectric stations.

The new oil pipeline to be built from Supsa to Odessa and north-east Europe will have major implications for Georgia in terms of international energy services. There is a pipeline through Georgia which comes out at Poti/Batumi, but it might not be big enough to take the increased traffic once the Supsa-Odessa pipeline is on-stream, and it might be necessary to build another pipeline across Georgia.

The strategy of the government is to develop the country as an exporter of energy,[45] and as a transit country for energy. That means that Georgia's energy strategies have to be placed firmly in regional context. The natural pattern is for Georgia to export electricity in the summer and import it in winter. Turkey is expected to have a big energy deficit 2010-2011. If the Russian embargo could be settled, Russian electricity could transit through Georgia to Turkey. The Georgian government wants to develop a circle of transmission lines for export, and to increase the reliability of these lines. It extends cheap loans to public-sector organizations for development of the energy sector in accordance with these priorities. It is unlikely that that would give rise to any difficulties in terms of the issue of subsidization within the context of an FTA. Georgia is also a transit country for gas with gas currently going from Russia, through Georgia, to Armenia. NB the price of this gas to Georgia is twice the price to Armenia. Georgia obtains most of its gas from Azerbaijan and is also a transit country for Azeri gas, via the South Caucasus gas pipeline. Clearly the government's vision of Georgia as an energy-exporting and transiting country cannot be realized without much better regional cooperation at the political level. In principle, a Deep FTA+ between Georgia and the EU would buttress regional energy cooperation, especially if it were flanked by similar agreements with Armenia, Azerbaijan and Russia. But the improved political cooperation would probably have to come first, and the whole process would be very long-term.

[45] In the recent past, Georgia has been a net importer of electricity, but this year (2007) it is a net exporter.

As with most service sectors, it is the Deep FTA+ scenario that counts for energy-related services. But in this case the effectiveness of a Deep FTA+ would be critically dependent on political developments at the regional level, such as would establish the necessary conditions for regional energy cooperation, so that it would be unrealistic to expect a substantial immediate effect from the signing of such an agreement.

## 7.6. Likely changes to investment climate due to FTA

Consideration of international experience shows that there is no clear pattern of response to FDI flows to trade agreements. The FDI boom in China predated the accession of that country to the WTO by a number of years, and accession did not produce any clear-cut upward shift in the FDI trend. In the Central-East European countries, the FDI boom started as soon as transition began (Poland was something of an exception), and accession to the EU did not result in any sharp break in the FDI trend. (There was a leap in FDI inflow in Poland in 2004, but it was not maintained.) Likewise in Russia, we have seen a very sharp upward trend in FDI over the past few years, culminating in a jump to a total of over $30 bn and a per capita level comparable to that of the CEECs in 2006, during a period in which Russia's relations with the rest of the world have come under strain, and in which concerns over the special difficulties of doing business in that country have increased rather than decreased.

How do we make sense of these patterns? In Central-East Europe companies may, with some justification, have anticipated ultimate EU accession on the part of those countries. The same thing can be said of FDI in China and Chinese accession to the WTO. It may equally plausibly be argued that multinational firms use FDI primarily in order to gain access to the specific resource endowments of particular countries, or to the markets of those countries. Cheap labour in the case of China, (relatively) cheap skilled labour in Central-East Europe, energy resources in Central Asia, access to CEEC markets, have clearly all been important drivers of FDI in the transition countries. In the Russian case, access to energy resources, and to the large Russian domestic market, have been of central importance. Cheap labour has been less important in Russia because of uncertainties about Russian productivity and anxieties about how easy it would be to develop modern management systems in Russian conditions. Reference to patterns of factor availability hardly explains, however, the huge leap in foreign investment in Russia over the last year or so. High oil prices, leading to high economic growth and

rapidly increasing domestic consumption, may lie at the heart of the process, but it is, again, difficult to adduce conclusive evidence.

CEEC accession to the EU put FDI in the new Member States under the legal protection of the *acquis communautaire* as well as admitting them to the Single Market. Still, there was no dramatic leap in FDI. Remaining legal uncertainties and widespread corruption in China have not stopped FDI continuing to grow in that country. Improvements in the business environment must surely ultimately have positive effects on investment flows. But they may have relatively minor effects on the strategies of oil companies used to fishing in troubled waters and retailers working on relatively short planning horizons. Where the business environment may be much more important is in relation to the scope for building whole complexes of companies in the form of supply chains and design/production matrices.

One of the major impacts of FDI in CEEC has come in the form of a build-up of supply networks centering on major investments, especially in the automotive and consumer electronics sectors. Leading these new supply hierarchies have been the *first-tier suppliers*, making complex components and cooperating actively with lead companies in relation to technological development and design. Examples from the car industry include engines and gear boxes. Below that level, *second- and third-tier suppliers* have been engaged to make individual components (ranging from technologically advanced down to simple) for the finished products. Patterns of development of supply hierarchies in CEEC have not been wholly satisfactory from a development point of view. The great majority of first-tier suppliers are themselves wholly or partly foreign-owned, and Slovenia is the only new Member State of the EU to boast of a significant number of domestically-owned first-tier suppliers. In China FDI has given a tremendous boost to the development of supply hierarchies. But here, there is a significant number of Chinese-owned first-tier suppliers, some of them exporting all over the world (Dyker, 2006).

How do these various factors affect Georgia? She has no significant oil or gas reserves, but is a key transit country for hydrocarbons, especially with regard to pipelines, and it is clear that recent trends in FDI into the country have largely been driven by investment in the Baku-Ceyhan pipeline. Georgia cannot offer a big domestic market, though this has not stopped substantial foreign investments in retail distribution and mobile telephony. There appears to be no significant degree of supply network-building in Georgia. A Simple FTA could help to kick-start this kind of development, and a Deep FTA and Deep FTA+ would help to sustain it, once started. But as the CEE and Chinese experience have demonstrated, patterns of capability and relative wages are more important here than free trade agreements.

### 7.6.1. MFN pre-establishment

Georgia's WTO membership should in principle guarantee MFN for the great majority of sectors, and a Simple FTA would require removal of any residual discriminatory constraint on inward investment. The dispute with Russia has introduced a whole range of discriminatory elements into the bilateral trading relations of the two countries, but do not appear to have affected Russian FDI in Georgia to any great extent. Since Russia is a member of neither the WTO nor the EU, however, this matter is tangential to present concerns. More important, and still involving Russia, is the Abkhazia issue, in its various manifestations, as discussed above, which could impinge seriously on any level of FTA.

### 7.6.2. National treatment

Again, Georgia's WTO membership should in principle guarantee this, and a Simple FTA would merely reinforce this guarantee. The big problem here, however, is the complexity and difficulty of doing business in Georgia (see Table 7.3). In principle, this factor affects foreign companies and domestic companies equally. In practice, it is always easier for local companies to find ways round regulations. A more directly discriminatory factor in the local business environment is the inefficiency and corruptibility of courts. Again, the latter factor generally tends to favour insiders, to the detriment of the level playing field principle. Finally, it is easier for local firms to evade taxes than for foreign firms. On all these counts, only a comprehensive Deep FTA+ would make a significant impact.

**Table 7.3. Selected indicators of doing business in Georgia, with regional comparisons**

| | Georgia | Armenia | Azerbaijan | Baltic countries |
|---|---|---|---|---|
| **Starting a business** | | | | |
| *Procedures (no)* | 8.0 | 10.0 | 14.0 | 6.3 |
| *Duration (days)* | 21.0 | 25.0 | 115.0 | 25.7 |
| **Dealing with licenses** | | | | |
| *Procedures (no)* | 29.0 | 20.0 | 28.0 | 15.7 |
| *Duration (days)* | 282.0 | 176.0 | 212.0 | 142.3 |
| **Registering property** | | | | |
| *Procedures (no)* | 6.0 | 4.0 | 7.0 | 5.3 |
| *Duration (days)* | 9.0 | 6.0 | 61.0 | 40.7 |
| **Enforcing contracts** | | | | |
| *Procedures (no)* | 18.0 | 24.0 | 25.0 | 20.7 |
| *Duration (days)* | 375.0 | 185.0 | 267.0 | 163.3 |
| *Cost (% o debt)* | 31.7 | 17.8 | 19.8 | 10.0 |

Source: World Bank Doing Business database

### 7.6.3. Market access restrictions

Again, these have largely disappeared in formal terms with WTO accession. A Simple FTA would in principle clear up any remaining formal obstacles. Problems of business environment as discussed under the last sub-heading might continue to impose some informal market access restrictions, hence a Deep FTA+ could be critical here.

## 7.7. Conclusions

A Simple free trade agreement would have only a very marginal impact on the services sector. Deep FTA could have a very substantial impact, and could transform some sub-sectors. An effective Deep free trade agreement would, certainly, need far-reaching flanking measures which would be difficult to incorporate into a trade agreement. But many of these flanking measures – strengthening the rule of law, improving the general business climate, combating corruption and reinforcing the authority of the competition policy -, are listed under the priorities of the EU/Georgia Action Plan. A Deep FTA+ could therefore be seen as essentially complementary to continued implementation of the ENP Action Plan.

# 8. Likely changes in FDI flow due to an FTA in Georgia

Up to 2006 FDI inflows to Georgia had been rather modest, totalling below USD0.5 billion a year. From the countries that are geographically closer to the EU, inflows of similar magnitude were recorded in recent years in Bosnia and Herzegovina. In the early 1990s, FDI coming to Romania were also in this range. Year 2006 brought a change with FDI inflows to Georgia totalling USD1.2 billion. If trends observed for the first half of 2007 are sustained, incoming foreign investment in 2007 may be just this high. For additional statistics on FDI see Appendix 5 (Appendix 5 Table 1 through Appendix 5 Table 3).

By 2006 FDI stock *per capita* in Georgia was around USD800, which was close to the average for the European transition economies. Around 20-30% of total investment in the economy has been due to FDI. The share of foreign investment in total investment may seem high, but is comparable to Armenia. Georgia has been much less dependent on FDI than Azerbaijan, where energy-resources driven share of foreign investment has been extremely high.

**Table 8.1. FDI statistics, Georgia, 1998-2006**

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|---|---|---|---|
| FDI inflows in million of USD | 265 | 83 | 135 | 133 | 167 | 340 | 499 | 450 | 1190 |
| FDI stocks in million of USD | 512 | 595 | 730 | 863 | 1031 | 1371 | 1870 | 2320 | 3510 * |
| FDI stock in USD per capita | 106 | 125 | 155 | 185 | 223 | 300 | 414 | 519 | 785* |
| FDI inflows in % of total investment | 28.7 | 11.3 | 17.4 | 15.2 | 20.1 | 32.3 | 33.6 | 24.0 | |

Source: UNCTAD and Ministry of Economic Development of Georgia
Note: * - own estimate

Until recently, the most important foreign investment was connected with the Baku-Tbilisi-Ceyhan (BTC) oil and gas pipeline projects. The main pipeline became operational in 2006 (although has not yet reached its full capacity), so that the amount of FDI connected with the BTC projects is expected to decrease. Inflows of non-pipeline FDI started to rise strongly in 2006. The situation is reflected in Table 8.2, where the share of BP (dominant owner of the consortium that operates the BTC pipeline) in total foreign direct investment falls sharply in 2006-2007.

**Table 8.2. Pipeline and non-pipeline FDI inflows, 2000-2007**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 IQ |
|---|---|---|---|---|---|---|---|---|
| BP's Investments | | | 61 | 231 | 360 | 265 | 306 | 26 |
| Other FDI | 131 | 110 | 107 | 109 | 139 | 185 | 884 | 260 |
| BP's Share, % | | | 36.1% | 67.9% | 72.1% | 58.9% | 25.7% | 9.1% |
| Total FDI | 131 | 110 | 167 | 339 | 499 | 450 | 1190 | 286 |

Source: Ministry of Economic Development of Georgia

A significant part of inflows has thus been connected with pipeline transportation. The rest has been dominated by the sales of state-owned assets either in the network industries (telecom, energy generation and distribution, oil terminals, media), real estate (hotels), and low-processed industries and extraction of mineral resources (ferrous metals, fertilisers, copper, cement; (Schmidt, 2007)). New FDI inflows in the second quarter of 2007[46] went mainly to the energy sector, various services (of which half to banking), construction and to the industrial sector.

**Table 8.3. Foreign investment in Georgia, by sectors, in USD million, 20072Q**

| | 2007 Q2 | |
|---|---|---|
| | USD million | Share |
| **Total** | **370.5** | 100% |
| In which | | |
| Agriculture | 0.0 | 0% |
| Production | 53.6 | 14% |
| Energy | 136.4 | 37% |
| Construction | 72.8 | 20% |
| Services | 95.9 | 26% |
| Other** | 11.7 | 3% |

Source: Ministry of Economic Development of Georgia
Note: * - The Department of Statistics launched to survey FDI by sectors from 2007 Q2
** - Property purchased through privatization, which profile is not determined yet

[46] Statistics on FDI by sectors startedto be compiled from 2Q2007.

In terms of nationality of investors, British and American firms lead, followed by Turkish and Azeri enterprises. This structure in large part still reflects the ownership of the BTC consortium. Kazakh firms accounted for 7% of FDI in Georgia, while Russian firms for 6%. Other important home countries of investors are: Norway, Italy and Cyprus (this last one being probably Russian/Georgian/other CIS offshore capital).

**Table 8.4. Countries of origin of foreign investors, 2000-2006**

| | 2000-2006 | |
|---|---|---|
| | **FDI inflows in USD million** | **share** |
| Great Britain | 796 | 18% |
| USA | 693 | 15% |
| Turkey | 400 | 9% |
| Azerbaijan | 388 | 9% |
| Kazakhstan | 305 | 7% |
| Norway | 255 | 6% |
| Russia | 251 | 6% |
| Cyprus | 221 | 5% |
| Italy | 208 | 5% |

Source: Ministry of Economic Development of Georgia

## 8.1. Motives driving foreign investment

The reasons driving foreign direct investors into Georgia may be of various types. One can broadly classify them into those that seek markets, resources, and/or efficiency (Dunning, 1993). In the case of still high barriers to external trade, foreign investors are usually market-driven, aiming at overcoming high costs of trading across borders. However, it is possible that along with economic expansion of host economies and a fall of barriers to trade, investors may be willing to make use of existing resources (like cheap labour) with the outsourcing parts of production processes there.

### Resource-seeking FDI

Resource-seeking investors have been putting capital in the pipeline transport for years. As it is clear from the sectoral distribution of inward FDI in Georgia this motive has been *dominant in the past*, yet probably started to lose its significance in 2006. This type of opportunity is rather of a 'one-off' nature, and is not likely to continue once projects are finished, if one puts aside maintenance-related flows of FDI. There are, however, chances that a new pipeline going from Baku through Supsa to Odessa (and then to Plock in Poland and/or to Germany)

will be constructed. This could create opportunity for another increase in resource-driven FDI. Anyway, any FTA between the EU and Georgia would not seem likely to have any direct impact on investment in the pipeline transportation.

If labour is cheap and its productivity is high and/or quickly growing, we can expect conditions for major growth in labour-intensive FDI. Georgian labour is indeed cheap (see Table 8.5) and labour code is fairly liberal. However, labour productivity is relatively low. The productivity of Georgian labour seems to be even lower than that of the Armenian workers (see IMF 2007a: 8, when comparing GDP per employee). The situation is due to low skills and low productivity of Georgian agricultural workers (56% of employees), with many of them being subsistence farmers. On the other hand, productivity in manufacturing (industry accounts for 7% of employees) seems to be growing in 2000-2006 (Tokmazishvili and Archvadze 2007: 51-52). Similarly, productivity in 2006 is higher than in 2000 in financial intermediation, real estate and in mining (Tokmazishvili and Archvadze 2007: 51-52). However, these seem to be the only sectors that registered increase in productivity in recent years (Tokmazishvili and Archvadze 2007: 51-52). In general, labour productivity seems to be improving in manufacturing and some service sectors only, which – taken together – account for the minor share of Georgian labour force. It means that gains from investment in labour-intensive industries and services are for the moment limited to certain sectors only and there are no prospects that the situation will change soon in this regard.

Skills may have been improving, although it is not certain. Secondary and tertiary school enrolment ratios increased in 2005 when compared to 2000, probably signalling higher skills of at least the younger workers. These higher skills can translate into higher labour productivity soon. However, the number of students per teacher in the secondary schools increased in the same period (according to World Bank data on education). So it is not clear whether the quality of "average" education in Georgia has been increasing as well. It is also not clear whether education is matched by the needs of the labour market, since we were not able to find the relevant data. Generally, we cannot state with the significant degree of confidence that cheap Georgian labour and rising labour productivity are a very important advantage when locating investment there. Simple FTA with the EU will not change the prospects in this regard. Deep FTA+ (addressing also approximation of regulations and practice on technical and sanitary and phyto-sanitary standards with these of the EU, functioning of customs, regulations concerning some service sectors, competition policy, public procurement; all

already listed in the EU-Georgia Action Plan[47]) will, however, increase chances for this labour-seeking motive, by creating conditions for sustainable increases in productivity and gradual improvement of skills of the Georgian workers. However, this would be rather mid- to long-term attainment.

The third "resource" that may be exploited in the future is connected with the geographical location of Georgia and with the opportunities that may arise in the transport and commercial infrastructure. Georgia has access to the Black Sea through the Kolkhida lowland in the West and spreads over 500 km to the East. The country may serve as an important transport and commercial hub linking Southern and Eastern Europe with the Middle East and Central Asia. While it would be best if all three countries of the Caucasus could integrate together, in the present situation Georgia has the privileged position of having normal bilateral relations with both - Armenia and Azerbaijan, as well as Turkey, and so it has special opportunities to develop as a service sector hub of the region.

**Market-seeking FDI**

Although recently Georgia freed its import regime (see earlier parts of this report), the tariff protection was causing a barrier up to that time. But even in tariff-protection free Georgia, other barriers to trade continue to exist. Georgia has poor road and railway infrastructures, and new construction requires massive funding. Two of its border regions of Abkhazia and South Ossetia have uncertain status. All these factors elevate costs of trade, make deliveries lengthy, and cause the barriers to trade to be still of significant size (see Appendix 5 Table 4). We expect this motive to lose its relative importance with respect to the tradables soon and stay important for the non-tradable sectors in Georgia.

*Tradables*. We expect the market-seeking motive with the relation to the tradable sector to decrease in the foreseeable future, following recent elimination of Georgian import tariffs for the majority of goods. This is for the reason that lower protection combined with uncertain expectations about domestic business environment make imports from more developed regions economically more profitable.[48] The motive will stay important only for the sectors where other costs of trade (like transport costs or sector-specific regulations) will stay high. This can be the case of some food products. For this reason, FTA with the EU will have a

[47] See also parts 8.3 and 8.4 for the description of the Deep free trade scenario and how the effect that originates in harmonisation works through prices of goods and services.
[48] As compared to starting economic activity in Georgia.

negligible additional impact. Even the Deep FTA will not make a noticeable reduction in the market-seeking motive of foreign investors in Georgia, since Georgian regulators already accept the EU technical standards.[49] The newly agreed FTA between Georgia and Turkey may however raise the prospect of outsourcing investment from Turkey in Georgia, given the combination of geographic proximity and the very low wages in Georgia.

*Non-tradables*. The market-seeking behaviour of investment has been evident in FDI inflows into the traditional non-tradable sectors to date. Investment in telecoms, energy generation and distribution, and real estate have been predominantly driven by the will to capture domestic market/and or use possibilities created by sale of state property. In the close future a few opportunities for foreign investors will soon open in the hydro-power generation. Foreign investors will most likely continue to secure access to the Georgian market in the non-tradable sectors. Simple EU-Georgia FTA will not change the outlook in this regard. However a Deep FTA[50] may enhance this motive, by creating more business-friendly environment in Georgia.

## Efficiency-seeking FDI

It seems that for the moment, there is little scope for efficiency-seeking foreign investors in Georgia. Partly it is due to the country's geographical location and to the natural and "infrastructure" barriers to trade outlined above. Transport costs are high and will stay high for some time. Therefore, there is limited scope for just-in-time deliveries and effectively integrated production processes with those located elsewhere. Turkey, given its proximity and recently concluded FTA with Georgia, is the most plausible source for FDI of this type. In addition to weaknesses in the rule of law within Georgia, there are the still unresolved conflicts affecting all three countries of the South Caucasus, which makes investors cautious about expanding businesses there. Therefore, it is hardly possible that the whole Southern Caucasus will soon transform itself into an integrated regional economy, which could exploit economies of scale and scope.

[49] And will not make a difference for investors from other countries.

[50] Addressing also or building on the provisions on services, on the right of establishment and company law, taxation, competition policy etc. of the EU-Georgia Action Plan

## 8.2. Black Sea regional integration and future FDI flows

The previous section of this chapter mentioned that the Black Sea regional economic integration may create additional incentives to invest in Georgia. This section examines such possibility in greater detail, recalling the experience of the early years of CEFTA.

### Experience of CEFTA

CEFTA – the Central European Free Trade Agreement – was signed in December 1992 and was designed to re-build economic integration between Poland, Hungary and Czechoslovakia (and later the Czech Republic and Slovakia) and to revive trade between these countries after it had collapsed with the dissolution of the Council for Mutual Economic Assistance (COMECON), an economic organisation made up of several communist countries.[51] The elimination of tariffs for industrial goods and reduction of tariffs for agricultural products in the first half of the 1990s within the CEFTA had no significant immediate impact on bilateral trade flows. In general, trade flows among the early CEFTA members started to grow intensively only a decade later when accession to the EU was imminent, and the multilateral trade agreement was widely viewed as disappointing in terms of an immediate boost to trade.

However, the effects of the early years of CEFTA's functioning were not limited to trade in goods. The regional trade agreement brought other indirect gains as early as the 1990s. For example, it facilitated inflows of foreign direct investment (FDI) from developed economies (Dangerfield, 2004). These FDIs have had many positive effects in terms of increasing production and modernisation of technologies in the CEECs. In the case of smaller countries, like Hungary or the Czech Republic, FDI has been primarily export-oriented with foreign investors often targeting the regional CEE markets (but the EU was at the beginning the most important export market). With a free trade area in place, producers have been able to serve all CEE markets from a single location. Damijan et al. (2006) document the importance of structural reforms and FDIs that - combined with improved market access – are a major factor explaining the remarkable export performance of CEECs. Moreover, the existence of the CEFTA allowed for the development of vertical production chains, with plants located in different CEE countries. The development of the automotive industry in the region is a good example. These investments were behind the boost in intra-CEE trade in the 2000s. However these

[51] Later on, Balkan states joined CEFTA, and from 2007 geographical coverage of CEFTA has been ex-Yugoslavia (except Slovenia) plus Albania and Moldova.

developments were crucially favoured by geographic proximity to main producers in Germany and France and to the credible prospect of early EU membership.

### Possible gains from Black Sea integration to Georgia

There are no comparable prospects for Georgia, but the matrix of bilateral free trade agreements in the Black Sea region and with the EU could be largely completed over a medium-term period, with the main exception of the EU-Russia relationship for which the prospect of free trade is most uncertain. In addition the Black Sea Synergy programme of the EU could see in due course a wide-ranging improvement in infrastructures and other business conditions for trade and investment. This would be especially the case if the model of Deep FTA+ with the EU advanced across much of the region.

Anyway, if this set of FTAs starts to operate efficiently, it can lead to increase of production and modernisation of technologies. When located in a relatively smaller country (like Georgia), FDI can be export-oriented, with producers being able to serve a larger regional market from a single location. Similarly, FDI can create intra-regional linkages and production chains supporting export to the EU.

The natural candidates for the relatively close regional partners are first of all Ukraine, Russia, Turkey, Armenia, Azerbaijan and the new EU Member States of the Black Sea – Bulgaria and Romania. Russia and Ukraine are expected to follow sooner or later the regulations on technical standards that are similar to the EU ones. Turkey has already progressed a lot in aligning its technical regulations with those of the EU. Sharing the same rules on technical standards can further facilitate trade relations.

### Further factors in the regional context:

*Cumulation of origin of goods produced in the region and the EU*. Additional gains could be achieved if the origin of goods exported either to the EU or to Turkey or to the countries covered by the European Neighbourhood Policy could be "cumulated". That is, if material from say Georgia used to produce an Armenian good, could be treated as of Pan-European origin while exporting either to the EU or to the ENP/Black Sea countries. This is to say that inclusion of non-Paneuromed ENP countries in the Paneuromediterranean system of cumulation of origin would create additional incentive to consider Georgia as a host country for the development of business activities.

*Infrastructure improvements*. The construction of new railways connecting Baku, Tbilisi and Kars in Turkey should further be of value in this connection.[52] Any productive initiative within TRACECA should also indirectly support investment flows into Georgia.

*Agricultural trade*. Regional integration of the Southern Caucasus and Black Sea countries would be more beneficial (also in terms of FDI) if agricultural markets were not protected.

*Gains take time to materialise*. However one should not have overly optimistic expectations. It is possible that even if FDI inflows continue to increase year by year, their result on boosting export to the region or to the EU can be seen with a lag. A lowering of trade barriers among relatively poor partners with similar comparative advantages may result in little immediate gains (little chances for modern intra-industry trade).

## 8.3. Perspectives for spillovers from FDI in Georgia

It is well known that FDI can generate important spillover benefits into the domestic economy. These spillovers are most likely to originate:

- due to the cooperation with local domestically-owned firms (when foreign-owned technologically superior firms buy local supplies and make a supplier acquire new technologies), and/or
- due to higher competition (thus forcing local firms to invest more and be more productive), and/or
- due to the outflow of efficient managers from foreign to domestic firms.

Such spillover effects can make locally-owned firms more productive due to the presence and/or cooperation with foreign-owned enterprises. And higher productivity leads to higher economic growth (with the same labour and capital input). Here, we try to assess whether we can see the possibilities of such spillovers from FDI in Georgia. Because of the low initial overall FDI stock in Georgia and the lack of data, and also for the fact that we try to foresee the future, this section is speculative in nature.

There is evidence that these types of spillovers have been significant in the new EU Member States in the 1990s. The most relevant examples may be those of

[52] Although the railway going through Armenia would be of higher value to the whole region.

Romania and of Lithuania (see Javorcik and Spartaneu 2006, Altomonte and Pennings 2006, Smazynska-Javorcik 2004). Are then any chances for the existence of these types of spillovers in Georgia?

Looking at the sectoral distribution of FDI, one can think of services as the main sector that may generate spillovers in Georgia. This is for the reason that for the spillovers to take place, there must be established foreign presence. Also, personnel have to learn some universal on the job skills, in order to be able to use them elsewhere. On the top of it, use of ICT equipment is correlated with higher productivity, and highly productive sectors are more likely to generate technological spillovers. Hence we can expect spillovers to originate in sectors that are intensive ICT-users. Therefore the spillovers are most likely to originate in communication, hotels and services or financial intermediation.

One may imagine a flow of local managers from the major pipeline projects to some other industries, and more generally from the surge of new investment since 2006.

Looking at the change in Georgian human capital the signs are positive. Skills of the workers employed by the foreign firms in Georgia have probably improved (see the earlier section on resource-seeking FDIs). On the top of it, average earnings in foreign-owned firms are roughly double the earnings in the domestically-owned firms (see Table 8.5), probably indicating employment of more productive workers doing more sophisticated tasks.

**Table 8.5. Average monthly earnings in Georgia in euro, 2006-2007**

| | state-owned enterprises | private domestically-owned firms | foreign-owned firms |
|---|---|---|---|
| 2006 | 105.5 | 123.8 | 240.4 |
| 1H2007 | 126.7 | 148.5 | 279.7 |

Source: State Department for Statistics of Georgia http://www.statistics.ge (wages in GEL) and National Bank of Georgia www.nbg.gov.ge (GEL/EUR exchange rates)

Expected educational reforms should increase overall human capital in Georgia further, thus raising country-wide absorption capacities and increasing chances for positive spillover effects. However, we cannot be sure on that issue, since the educational reform can also worsen rather than alleviate job mismatching problems, similarly as has happened in other CIS countries, e.g. by producing too many graduates in business studies and not enough in engineering.

Summing up, we can be moderately optimistic about the fact that conditions for the transfer of managerial knowledge from foreign-owned firms exist in Georgia, although they are limited to certain sectors only at the moment.

However, there is no evidence yet of workers leaving foreign-owned firms and then being employed in domestically-owned enterprises. Neither there are signs of customer-supplier linkages, of the type that may generate positive spillover effects. Few representatives of foreign-owned firms that we interviewed do not buy supplies for their production in Georgia. When asked about reasons, they point to low quality of Georgian-made products, constrained capacities of local factories and irregular deliveries. We even heard extreme examples of foreign-owned wineries being unable to buy locally neither corks, nor bottles, nor labels. It is worth noting that eventual spillovers are also constrained by the current unwillingness of Georgian authorities to implement modern regulations on technical standards on the domestic market. Imposing higher technical requirements on domestic production will most likely lead to the improvement of products quality and better organisation of production processes.[53]

Deep FTA will help in this regard, through additional impulse to trade and by creating conditions for spillovers in manufacturing. Moreover, the possibility for spillover effects increases greatly with the regional integration. However, at the moment, only non-tradable sector seems to develop quickly due to FDI, and there is little chance for knowledge spillovers on the scale seen in the current new EU Member States.

## 8.4. Potential FDI in Georgia

We will now proceed with a numeric estimation of the impact potential FTA between the EU and Georgia might have on FDI inflows into Georgia. There have been numerous studies which analysed an impact of a free trade agreement on the level of inward foreign direct investment. The most widely studied areas (and corresponding agreements) are North America (NAFTA) and Europe (EU). There is a widespread agreement that FTAs are conducive to foreign direct investment as outsider multinational firms take advantage of the increased market size of the area (Globerman and Shapiro 1999, Buckley et al. 2001). Furthermore, third party countries may be drawn to invest into FTA members with lower effective production cost to optimise their production in the region, i.e. shift it to locations with lower cost of production (Buckley et al. 2001, Dunning 1997, Eden 2002).

In the CIS/CEE context the research of inward FDI had rarely analysed a direct impact of an FTA on FDI. We were able to track down just one econometric study

[53] Although it will also impose additional cost on meeting these standards on all local producers.

conducted by Brenton and Manchin (2002), who investigated an impact of an EU-Russia FTA on FDI inflows into Russia using the Economic Freedom Index as a benchmark. The authors see an FTA between Russia and the EU as an enabler of 'locking-in of economic reforms and achieving a higher degree of liberalisation than would otherwise be possible'. Based on this logic, the authors make an estimate of the impact of a corresponding enhancement of reform (as measured by the Economic Freedom Index) on FDI into Russia using a gravity model of FDI into the CEECs. The impact is believed to be similar to the one a Deep FTA+ would have had. This study employs a comparable approach to estimate how a Deep FTA+ between the EU and Georgia will affect FDI inflows into Georgia.

The prospect of a Deep FTA+ between the EU and Georgia may be viewed by potential investors as reducing country risk. Firstly, because it can be seen as an external validation of progress in the reform process, and secondly, because it signals higher macro-economic, institutional, legal and political stability. Therefore, in our econometric work, we relate the impact of a Deep FTA+ (on FDI) to the country's transition progress. Consequently, and following Brenton and Marchin (2002), we employ a transition progress index (TPI), which is published by the EBRD, to estimate an impact of a Deep FTA+ on FDI inflows to Georgia.

We anticipate the Deep FTA+ to have a stimulating effect on FDI inflows into the country. An increased market size of the area will encourage international investors to invest in Georgia following the Deep FTA+ as well as Georgian low production cost will attract investors seeking lower cost locations. Also, the enhanced economic growth and trade within the integrated region following a Deep FTA+ provide a demand stimulant to FDI (see earlier sections of this chapter for details).

A gravity model is employed to estimate the effects under investigation. The model was estimated for 10 Eastern European countries being FDI recipients and 31 OECD donor countries. Please refer to the Appendix 6 for a detailed description of the model. The FDI model employs the following explanatory variables: donor and recipient GDP, geographic distance between them, corresponding populations, labour cost, the host country's indebtedness, a degree of openness of its economy, EU membership, WTO membership and host country's progress in transition (TPI). The dependent variable in our analysis is FDI inflows. Both FDI inflows and stocks have been successfully used as dependent variables in the earlier analysis of FDI determinants (Bevan and Estrin, 2002; Carstensen and Tourbal 2004, Janicki and Wunnawa 2004, and Kaditi, 2006). FDI per capita is not normally used as a dependent variable in this analysis, as there are no economic models which would explain this type of flows.

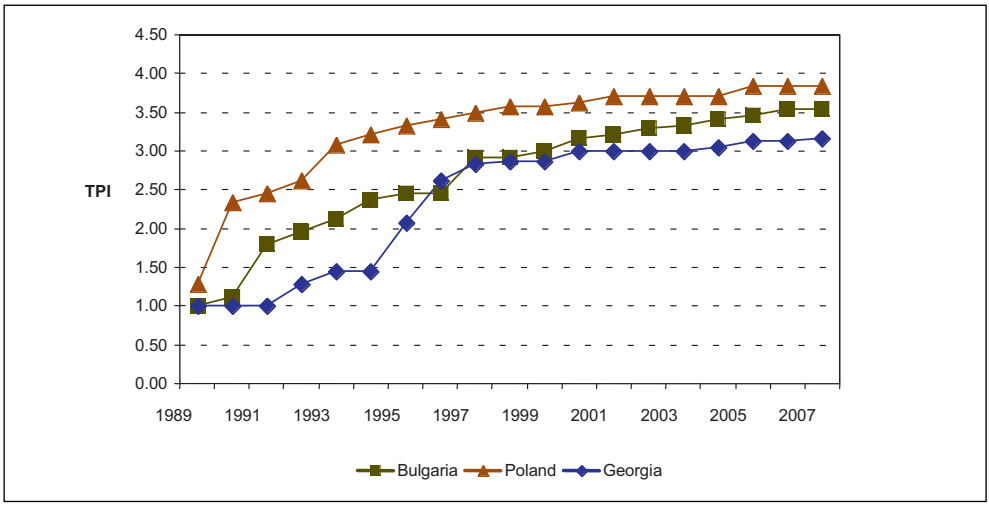
For the purposes of our analysis, the EBRD transition progress index (TPI) is the most important variable in the model as it will be used later on to make forecasts regarding FDI inflows. The TPI index is calculated as an average score of different EBRD transition indicators which are published annually in the EBRD Transition Report. Transition indicators are developed by the EBRD to track progress of its member countries in transition to a market economy. Progress is assessed by the EBRD country economists against the standards of industrialised market economies.

The assessment is carried out on a scale of 1 to 4+ (4.33) with 1 being assigned to countries which made no or little transition from a rigid centrally planned economy. The following eight areas are included: large scale privatization, small scale privatization, governance and enterprise restructuring, price liberalization, trade and foreign exchange system, competition policy, banking reform and interest rate liberalization, and securities markets and non-bank financial institutions.

We show the evolution of the TPI since its introduction in 1989 until the current period (2007) in Figure 8.1 All countries (except Hungary and Poland) were assigned TPI values of 1 in 1989. Hungary and Poland obtained slightly higher assessments of 1.33 and 1.29 respectively. Yet, the progress in transition varied among the CEE countries. The current new Member States (NMS) have significantly advanced in their transition by the year 1993, which was reflected in the TPI values, which went beyond the value of 3 for the majority of them. However, the progress in transition was much more sluggish for the post-Soviet countries. They made a comparable advancement in their transition to the market economy only a decade later in 2003-2004 as is reflected in the TPI values. At the moment, the majority of NMS are finalising their transition to free market economies as is indicated by the TPI values, which are close to 4 for the majority of them. At the same time Georgia (similar to other ex-USSR republics) was assigned the value of 3.17 only in 2007.

Georgia has made a considerable leap in its transition during 1995-1998 when its TPI went from 1.46 to 2.87 in 3 years. However, the country did not advance much after the year 2000 (when the Georgia TPI hit the value of 3). The progress was very slow-paced over the past 7 years, which is not highly surprising as it takes more time and effort to implement more advanced reforms than the basic ones. Therefore we expect that it still will take a number of years for Georgia to approach the level of NMS in its transition efforts.

**Figure 8.1. Transition Progress Index (TPI): Evolution**




Source: EBRD Transition Reports - various issues.

The results of our model are consistent with the conclusions of other studies analysing determinants of FDI in transition/developing countries (Bevan and Estrin, 2002; Carstensen and Tourbal (2004)). In line with previous research we find the gravity factors (GDP of home and host countries, and distance between the two countries) to have a significant effect on FDI flows. We also find the level of the domestic debt, degree of country's openness and labour costs to affect significantly FDI flows (Bevan and Estrin, 2002; Carstensen and Tourbal 2004, Janicki and Wunnawa 2004, and Kaditi, 2006). The impact of the EBRD transition progress index (which is our key variable of interest) is significant and positive, which is in line with our expectations.

Our model produced estimates which are similar to the estimates received by comparable studies (see for example Brenton and Manchin 2002). According to our model, one percent increase in the value of the transition progress index (TPI) brings in 3.89 percent increase in the amount of FDI inflows into Georgia. This is in line with Brenton and Manchin's (2002) estimate as well as with Bevan and Estrin's (2002) estimate of the impact of a country credit rating on FDI into the CEEC (gravity models similar to the one used in this analysis were employed by both studies). Other studies, i.e. Janicki and Wunnawa (2004) and Carstensen and Tourbal (2004) report somewhat higher estimates of the impact of country risk on FDI in the CEEC, which is explained by a different scale on which country risk index is measured.

As was stated above, the impact of a Deep FTA+ on FDI flows into Georgia is approximated by the impact of a significant improvement in its transition progress (assuming it will approach the level of the CEE countries). Accordingly, we estimate a change in FDI inflows to Georgia considering its progress in transition improving by 5%, 10%, and 15%. Correspondingly, an increase by 5% in the Georgia's TPI (from 3.13 to 3.29) brings the level of transition progress in Georgia to the level slightly above that of Armenia, whereas an increase of 10% (from 3.13 to 3.44) corresponds to Georgia being perceived by international investors nearly as advanced in transition as Bulgaria (still on a low side of it). The largest improvement considered in this study is 15% (TPI value of 3.60). It sets Georgia's progress in transition slightly above (this time) the level of Bulgaria, which is still significantly below the level of the other NMS (Poland, Czech Republic and Hungary). Please see Table 8.6 for corresponding values of the EBRD Transition Progress Index.

**Table 8.6. Transition Progress Index, EBRD, 2000-2006**

| Country | 2000 | 2003 | 2006 |
|---|---|---|---|
| Armenia | 2.75 | 3.04 | 3.21 |
| Bulgaria | 3.17 | 3.42 | 3.54 |
| Czech Republic | 3.67 | 3.75 | 3.87 |
| Georgia | 3 | 3 | 3.13 |
| Hungary | 3.87 | 3.87 | 4 |
| Kazakhstan | 2.87 | 2.96 | 3.04 |
| Poland | 3.62 | 3.71 | 3.83 |
| Russia | 2.67 | 3 | 3.08 |
| Slovakia | 3.5 | 3.67 | 3.83 |
| Ukraine | 2.67 | 2.87 | 3.04 |

Source: EBRD Transition Report

Consequently, we estimate the changes in FDI inflows into Georgia using 3 different scenarios, which correspond to the Georgian TPI increasing by 5%, 10% and 15% respectively. Using the estimated equation, we calculate the impact (a change) in the dependent variable (FDI flows) as a result of changes in our key independent variable – TPI index. As our model is estimated in logarithms, we then interpret the estimated coefficients as elasticities and estimate the percentage changes in the dependent variable (FDI flows). Our calculations show that the amount of potential FDI inflows into Georgia will increase by 21%, 45% and 72% respectively or that annual FDI flows into Georgia will increase from USD 450mn (in 2005) to USD 544mn, 652mn and 775mn corresponding to 5%, 10%, and 15% improvement in its progress in transition (see Table 8.7).

This is, of course, a lower bound estimate for FDI as it does not include potential changes in other variables (which have a sizeable impact also), like, for example,

GDP, GDP per capita etc. For instance, our estimates are below the actual amount of FDI inflows into Georgia in 2006 (which stood at USD 1,190 million), which was more than 160% increase on the amount of FDI flows into Georgia year-on-year. It was an exceptional year for Georgia and we do not expect this dynamics to persist (for example, FDI inflows dropped by 11% in 2005), hence our estimates offer a medium projection which is likely to be true on average.

**Table 8.7. Estimated changes to FDI flows to Georgia**

| TPI change | % increase in FDI flows to Georgia | Estimated FDI flows, USD mn |
|---|---|---|
| 5% | 21 | 544 |
| 10% | 45 | 652 |
| 15% | 72 | 775 |

Source: own calculations.

Finally, we have calculated the impact of the Deep EU-Georgia FTA+ on FDI stock in Georgia until the year 2020. Having taken the estimated annual increases in FDI inflows according to our three scenarios, we have estimated that FDI stock will increase from USD 2,320mn in 2005 to USD 10,272 mn, 11,136mn and 12,120mn in 2020 or 443%, 480% and 552% increase of the current value (please see Table 8.8). The calculations are based on an assumption of Georgian transition progress being gradual over the next 15 years (2005-2020) that corresponds to a gradual increase in FDI inflows starting from their current level (i.e. 2005, USD 450mn) to their estimated levels according to our 3 scenarios (Table 8.7), i.e. USD 544mn, 652mn and 775mn in the year 2020. We assume a linear annual increase in FDI flows. Again, the numbers represent the lower bound estimate of an increase in FDI stock due to the impact of EU-Georgia Deep FTA+ only (as we do not estimate an impact of changes in other variables, e.g. GDP, GDP per capita etc.).

**Table 8.8. Estimated changes to FDI stock, Georgia, 2020 Assumption 1**

| TPI change | % increase in FDI stock in Georgia | Increase in FDI stock, USD mn |
|---|---|---|
| 5% | 443 | 10,272 |
| 10% | 480 | 11,136 |
| 15% | 522 | 12,120 |

## 8.5. Summary

Up to 2006 FDI inflows to Georgia had been totalling below USD0.5 billion a year. Year 2006 brought a change with FDI inflows of USD1.2 billion. If trends observed for first half of 2007 are sustained, incoming foreign investment in 2007 may be just as high.

At the moment, foreign direct investors into Georgia seem to be primarily resource and market driven. The opportunities in the pipeline transportation sector can soon diminish, and might significantly increase only with the construction of the planned Baku-Supsa-Odessa pipeline (a part of Baku-Supsa-Odessa-Brody). In the very short run we predict that this motive will lose its significance.

Given the level of development of the country, and the fact that barriers to trade will stay important for some time[54], market-seeking motive will most likely be a dominant one for the non-tradable sectors in Georgia, even if an FTA with the EU is signed. The most plausible opportunities for increased FDI are in the service sectors, both for business services if Georgia becomes a regional transport and commercial hub and for tourism. Already the major (unilateral) liberalisation of service sectors and trade in goods is helping here.

A Simple FTA will not create an immediate impetus for foreign investors to use the relatively cheap Georgian labour on a large scale and outsource part of production there, similarly as it has been happening in China, notwithstanding high corruption and transport costs there. It is possible, though, to imagine cases of labour-seeking motives at some point in the future, along with the implementation of the Deep FTA+. Though, at the beginning, efficiency-seeking investment will most likely be limited to certain industries, like for example textiles.

A copy of the experience of CEFTA in terms of boosting FDI into Georgia due to the regional integration is a remote prospect, due to distance from EU markets and the lack of the EU membership perspective. However a maximum extension of the matrix of bilateral FTAs in the Black Sea region (and notable with the EU), as well as other regional economic initiatives envisaged in the EU's Black Sea Synergy initiative will be helpful. Due to foreign investment, processing industries in Georgia can develop their export capacities, similarly as it happened so far in few isolated cases such as food processing (wine, hazelnut, mineral waters/glass production) and textile sector. The Simple FTA would probably have a negligible impact on this. The Deep FTA+ could have a positive impact. However, for maximum benefit even a Deep FTA+ would have to be accompanied by additional initiatives such as major improvement of regional infrastructure, introduction of diagonal cumulation of origins of goods, and deeper trade integration in the region (covering also agricultural goods).

[54] Connected with poor transport infrastructure, problems with South Ossetia and Abkhazia etc. At present they make deliveries lengthy and elevate costs of trading across borders.

We can be moderately optimistic about the fact that conditions for the transfer of managerial knowledge from foreign-owned firms exist in Georgia, although they are limited to certain sectors only at the moment. However the transfer of knowledge from the FDI has not taken place yet. There is no evidence of workers leaving foreign-owned firms and then being employed in domestically-owned enterprises. Neither there are signs of customer-supplier linkages, of the type that may generate positive spillover effects. Only deep regional integration resulting from a Deep FTA will help in this regard, through additional impulse to trade and by creating requirements for technical standards in manufacturing.

Potential inward FDI to Georgia following the Deep free trade agreement with the EU could be substantially higher than the current flows. As a result, FDI stock in Georgia might increase from USD 2,320mn in 2005 even up to USD 11,136mn in 2020. However, this five-fold increase is feasible under the condition that Georgia succeeds in its transition reforms and moves towards the level of Bulgaria. Hence the domestic reforms should have the most significant impact on Georgia's progress in transition and, consequently, on FDI inflows. Therefore, a Deep EU-Georgia FTA should be regarded as a complement to domestic reforms, not a substitute. The major effort remains to be done by Georgia itself.

# 9. CGE Model and Simulations

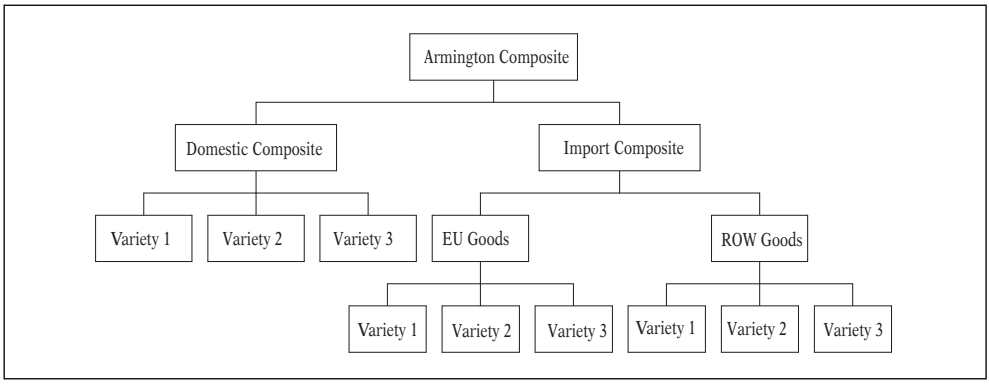
## 9.1. CGE Model

The model employed in this study is a standard static computable general equilibrium model. It includes several price-wedge distortions such as factor taxes in production, value-added taxes, import tariffs and export subsidies. Factor taxes in production and value-added taxes remain unchanged across simulations. Production involves combination of intermediate inputs and primary factors (capital, skilled and unskilled labour). We assume a Constant Elasticity of Substitution (CES) function over primary factors and a Leontief production function combining intermediate inputs with factors of production composite. Primary factors are mobile across sectors within a region, but immobile internationally. Each region has a government, whose revenue is held constant at the benchmark level and a single representative consumer. The trade balance is also held constant in counterfactual simulations.

Demand for final goods arises from a Cobb-Douglas utility function. The demand structure is illustrated in Figure 9.1 Within each region, final and intermediate demands are composed of the same Armington aggregate of domestic and imported varieties. The composite supply is a nested CES function, where consumers first allocate their expenditures among domestic and imported varieties and then choose among imported varieties. In the imperfect competition case firm varieties enter at the bottom of the CES function. This approach allows for the differentiation in preferences for home and imported goods.

A detailed description of the model equations, calibration and parameters employed is provided in the Appendix 7 CGE model equations. It is built on the basis of the MRT – Multiregional Trade Model – by Harrison, Rutherford and Tarr

**Figure 9.1. Demand structure in the IRTS scenario – firm level product differentiation within an Armington aggregate**




Source: HRT (1996a).

(HRT) implemented in their evaluation of the impact of the completion of the Single Market (HRT, 1996b), but has been modified in several ways to fit this analysis. Similar analysis has been recently applied in two feasibility studies for Russia and Ukraine prepared for the European Commission (Dabrowski, Emerson, Maliszewska Eds. (2007) and Ecorys and CASE-Ukraine (2007)) and earlier in the analysis of the Eastern EU Enlargement (Maliszewska, 2003a, 2003b) and Albanian Integration with the EU (Maliszewska and Kolesnichenko, 2004).

A social accounting matrix (SAM) for Georgia for 2004 was based on Jasper Jensen's and David Tarr's submission to the GTAP (Global Trade Analysis Project) data base[55]. The data for all other regions is based on GTAP7 pre-release 3 data base. The GTAP database includes the national and regional input-output structures, bilateral trade flows, final demands pattern and government intervention benchmarked to 2004. The Georgian SAM has been imposed on the GTAP data using a code developed by Thomas Rutherford (www.mpsge.com/gtap6)[56]. The benchmark data includes Georgia, Armenia, Azerbaijan, Russia, Ukraine, and remaining CIS countries, EU27, Turkey and the Rest of the World (ROW). It includes 33 sectors out of which 11 are subject to increasing returns to scale (IRTS) in the imperfect competition scenarios[57].

[55] The submission by Jaspers Jensen and David Tarr was part of the ENEPO project coordinated by CASE and financed by the European Commission (FP6 STREP).

[56] The original SAM for Georgia was not introduced correctly into the pre-release GTAP data, which is still in the testing stage. The Armenian and Azeri data submitted along with the Georgian data used in the present study was introduced properly. Other adjustments have been made to the GTAP data to update tariff data to 2004 levels.

[57] These are food, beverages and tobacco; textiles and wearing apparel; leather; paper products, publishing; petroleum and coal products; chemical products, rubber, plastic; mineral products, metal and metal products; transport equipment; machinery and equipment; other manufacturing products.

We apply the CGE model to study the implications of the trade liberalisation in respectively Georgia (unilateral significant tariff liberalisation of trade in goods along with the recognition of foreign product standards) and the EU (granting Georgia GSP+ under its new GSP scheme) that took place between 2004 and 2006 (baseline scenario), Simple and Deep FTAs scenarios. Before studying the implications of various versions of an FTA we need to study the effects of trade liberalisation that took place over 2004-2006 period. The changes due to tariff and other trade related policies are already taking place and will require between 5-10 years to take their full impact on the Georgian economy. Without modelling of these policy changes we would be wrongly attributing their impact to the implications of FTAs. The **Simple FTA** scenario involves scrapping the tariffs in the EU27-Georgia trade with the exception of agricultural products where tariffs are only halved. Recent experience of the EU's FTAs with Mediterranean countries and the new Turkey-Georgia FTA indicate that agriculture may not be completely liberalized. Looking at the Turkey-Georgia FTA we see that some products have been completely liberalized, but some subject to 50% or 100% tariff cuts with however the constraint of tariff quotas. Here we take a simplifying assumption of a 50% average tariff cut on agricultural and food products. The level of aggregation of the model (determined by the initial data set) does not allow for a more detailed dissaggregation of agricultural and food sectors. However, we run also separate simulations with full liberalization of all tariff lines (**Simple FTA BIS**). Deep FTAs assume various degrees of changes in the domestic policy and business environment affecting trade and investment in Georgia. An **FTA+** combines a Simple FTA with a consolidation of the domestic reforms that took place over the recent years in a binding agreement. The FTA+ could consolidate measures such as unilateral recognition of EU and international product standards and facilitation of customs procedures. Furthering the level of integration via a **Deep FTA** would involve a more complete elimination of barriers to trade and investment throughout various sectors of the economy. This would also result in a more extensive commitment to the reform of domestic policies in the direction of EU standards in Georgia. Finally, the comprehensive set of reforms resulting from the Deep FTA along with more wide-ranging flanking measures e.g. on competition and corruption could lead to a re-branding of Georgia as a favourable investment location. This is our scenario **Deep FTA+** where we assume that Georgia would achieve a notable reduction in the perceived risk premium on investment, reflecting a sustained re-branding of Georgia as a favorable and safe place to invest.

## 9.2. Tariffs

Trade protection of Georgia has been described in more detail in chapter 4. Here we only present the tariffs according to the model classification. Since Georgia is a member of the CIS FTA tariffs between Georgia and the CIS countries are assumed to be zero. Hence Table 9.1 below provides tariffs only in trade with the EU27, Turkey and the ROW. The newly signed FTA between Georgia and Turkey has not been taken into account here. The 2004 data originates from GTAP and is consistent with the country submission to WITS. The 2006 tariff data has been provided by the Georgian authorities. The tariffs applied in this study are trade weighted based on the 6-digit HS imports/exports data from the UN Comtrade data

**Table 9.1. Georgian tariffs on imports from the EU27, Turkey and the Rest of the World (ROW) according to the CGE model classification (in %)**

| | EU27 | | | Turkey | | ROW | |
|---|---|---|---|---|---|---|---|
| | 2004 | 2006 | Simple FTA | 2004 | 2006 | 2004 | 2006 |
| Grains, fruits, vegetables, crops nec | 11.9 | 3.7 | 1.8 | 12.0 | 11.0 | 11.8 | 6.3 |
| Livestock | 10.8 | 11.6 | 5.8 | 0.0 | 10.7 | 10.6 | 4.4 |
| Forestry | 11.2 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 |
| Fishing | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 | 0.0 |
| Coal | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 |
| Gas | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 |
| Mining and quarrying | 12.0 | 3.4 | 0.0 | 12.0 | 11.9 | 11.9 | 9.3 |
| Food products, beverages and tobacco | 12.0 | 5.4 | 2.7 | 12.0 | 6.0 | 11.8 | 6.2 |
| Textiles and textile goods | 12.0 | 0.0 | 0.0 | 11.9 | 0.0 | 11.7 | 0.0 |
| Leather products | 11.9 | 0.0 | 0.0 | 12.0 | 0.0 | 11.8 | 0.0 |
| Wood products | 12.0 | 0.0 | 0.0 | 12.0 | 0.0 | 11.3 | 0.0 |
| Paper products, publishing | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 |
| Petroleum, coal products | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 |
| Chemical, rubber, plastic products | 8.8 | 0.0 | 0.0 | 11.7 | 0.0 | 11.3 | 0.0 |
| Mineral products nec | 11.9 | 3.1 | 0.0 | 11.9 | 3.3 | 10.9 | 4.1 |
| Metals and metal products | 11.5 | 0.0 | 0.0 | 11.6 | 0.0 | 11.7 | 0.0 |
| Transport equipment | 5.6 | 0.0 | 0.0 | 9.1 | 0.0 | 9.5 | 0.0 |
| Machinery and electronic equipment | 5.5 | 0.0 | 0.0 | 5.6 | 0.0 | 5.3 | 0.0 |
| Manufactures nec | 11.9 | 0.0 | 0.0 | 12.0 | 0.0 | 11.8 | 0.00 |

Source: GTAP, WITS and own calculations.

base. Similarly to take into account the impact of the granting of the GSP+ status, EU27 import tariffs on exports from Georgia are zero in 2006.

## 9.3. Non-tariff barriers

One of the studies ordered by the European Commission before completion of the Single Market looked at the perception of European Community producers as to the importance of barriers to be removed by the formation of the Single Market. It showed that the elimination of physical frontiers, costs and delays, harmonisation of national standards and regulations, and government procurement were the most important barriers to trade before 1992. Similar conclusions were reached after a survey of barriers to exports to the EU faced by the Ukrainian exporters (see Jakubiak et. al. 2006). Elimination or lessening of these impediments to trade will also likely bring major benefits to Georgia especially if it gains improved access to the Single Market thanks to the creation of a Deep FTA. In modelling of a Deep FTA we focus on reduction in border costs and delays, as well as reduction in costs of compliance with varying national standards and technical regulations. In addition we also study the impact of a reduction of barriers to foreign providers of services.

### 9.3.1. Border costs

One of the most observable barriers to trade is due to the existence of borders and customs formalities, which involve delays and various kinds of administrative costs. At the moment all goods from Georgia exported to the EU and vice versa are stopped at the EU border for customs clearance. In the CGE exercise border costs are modelled as additional purchases of a domestic transportation good, which includes shipping, handling and warehousing for customs purchases.

As discussed in chapter 5.2 the corruption and delays at the border have been dramatically reduced over the past few years. Also the administrative costs have gone down significantly. The survey conducted in Georgia in the late 2007 (chapter 6) covered only a limited number of sectors, but its results also confirm that the export-import procedures and their costs are not high. However, the survey results do not allow us to compare these costs over time. Hence we refer to the "Cost of Doing Business" World Bank report, which allows for the comparison of those costs across time and across countries.

**Table 9.2. Border costs in Georgia and Ukraine in 2004 and 2006**

| | Georgia | | Georgia/Ukraine | | Ukraine | |
|---|---|---|---|---|---|---|
| | 2004 | 2006 | 2004 | 2006 | 2004 | 2006 |
| Documents for export (number) | 9 | 8 | 1.50 | 1.33 | 6 | 6 |
| Time for export (days) | 54 | 12 | 1.74 | 0.39 | 31 | 31 |
| Cost to export (US$ per container)* | 1370 | 1105 | 1.31 | 1.06 | 1045 | 1045 |
| Documents for import (number) | 15 | 7 | 1.50 | 0.70 | 10 | 10 |
| Time for import (days) | 52 | 14 | 1.33 | 0.36 | 39 | 39 |
| Cost to import (US$ per container)* | 1370 | 1105 | 1.29 | 1.04 | 1065 | 1065 |

Source: WB Costs of Doing Business report 2006 and 2008.

Note: The reports for 2006 and 2008 cover data for Jan 2005 and Jan 2007 used to represent here the status quo in 2004 and 2006.

* Cost measures the fees levied on a 20-foot container in U.S. dollars. All the fees associated with completing the procedures to export or import the goods are included, such as costs for documents, administrative fees for customs clearance and technical control, terminal handling charges and inland transport. The cost measure does not include tariffs or trade taxes.

For the purpose of the CGE modelling, it is assumed that benchmark border costs in Georgia are roughly 30% higher than those for Ukraine. This is based on the comparison of border costs per shipment from Table 9.2. Ukrainian border costs are approximated by the costs of customs clearance faced by the Ukrainian exporters to the EU in 2006 (Jakubiak et al 2006). These costs amounted on average to 7% of the value of exports, hence the 2004 benchmark border costs in Georgia are assumed to be equal to 9.1% of the value of exports. In 2006 scenario these costs go down by 20% again based on the comparison of the cost of shipment in Table 8.2. The Simple FTA is assumed to reduce those costs by a further 5%. The argument behind this rather modest reduction is that already the majority of industrial tariffs in trade with the EU have been eliminated; hence the additional elimination of red tape or corruption as a result of complete elimination of tariffs on industrial products is likely to be quite small. In a Deep FTA these costs are assumed to be reduced by 50%, which is assumed to reflect a long-term improvement in customs and transit procedures.

### 9.3.2. Standards costs

The European Community has been concerned with the elimination of the technical barriers to trade since its creation. However, the major effort of elimination of barriers to trade imposed by differing national regulations and standards was undertaken with the creation of the Single Market. The Single

Market measures consist of 2,556 different mandated standards. This number rises to more than 20,000 when voluntary standards are considered.

The differences in technical regulations and standards, which vary between domestic and the EU markets, require producers to manufacture or package goods in forms, which are different than for their domestic markets. Standardisation costs therefore increase the cost of production for exports and they are modeled as additional value added in each sector where trade takes place. This approach ignores the fixed cost elements of implementation of new standards. However, these are mostly one-off investments and their magnitude is not likely to be significant.

In the survey mentioned above, CASE and CASE-UA investigated NTBs faced by Ukrainian exporters to the EU (Jakubiak et al 2006). Among others, respondents (over 500 companies) were asked to assess costs associated with meeting EU technical regulations and the duplication of efforts related to compliance with both national and the EU standards (existing for the majority of surveyed firms).

As discussed in chapter 5.1, in early 2006 Georgia recognized mandatory standards and technical regulations which are being applied worldwide and, in particular, by main Georgian trade partners, such as EU, OECD and CIS countries. Hence the domestic producers are entitled to produce according to EU and OECD member states' technical regulations and CIS GOSTs. This must have led to some cost reduction for domestic firms willing to export to the EU, as now they do not need to modify their production to satisfy differing domestic and EU technical regulations, they might produce to EU regulations and sell these goods also on the domestic market. Hence we assume that in 2006 the standards costs have gone down by 10% as a result of this new legislation as compared to the status quo in 2004. However, there are two strong arguments that make us believe that the standards costs are still significantly higher in Georgia than in Ukraine and were so in 2004 as well. First of all, in the survey conducted as part of this study we were able to obtain very little information regarding the costs of meeting the EU product characteristics requirements, the costs of packaging, labelling and marketing requirements, product testing and meeting any other technical requirements. The reasons were twofold: the companies were either producing much unsophisticated products not covered by technical regulations or in the majority of cases the importing EU company made sure that all necessary tests have been concluded and the technical requirements have been met. This suggests that the costs of compliance with technical requirements are very high if the vast majority of domestic firms do not even get involved in this process. This is supported by the

information gathered during our visit to Georgia as discussed in chapter 5.1. There are no conformity assessment centres established in Georgia that could issue certificates of compliance recognized by the EU. This imposes significant costs on firms willing to export to the EU, which must pay for the services of accreditation centres based in the EU or in other countries.

Given that we were not able to obtain data on standards costs for Georgia we are relying on Ukrainian estimates. However, due to reasons discussed above we assume that in 2004 these costs were 30% higher in Georgia than they were in Ukraine. Costs of meeting EU standards for Georgian producers are given in Table 93. In many of those sectors Georgia does not have any exports to the EU. There might be several reasons for this e.g. Georgia may not be producing particular products, the quality of domestic production is insufficient or simply the barriers to exports are too high. However, in all those cases the assumptions on NTBs need to be established; hence the reliance on the Ukrainian data.

**Table 9.3. Costs of compliance with the EU technical barriers in 2004 as a share of exports to the EU (in %)**

| | 2004 | 2006 | Simple FTA | Deep FTA |
|---|---|---|---|---|
| Grains, fruits, vegetables, crops nec | 18.2 | 16.4 | 16.4 | 9.1 |
| Livestock | 18.2 | 16.4 | 16.4 | 9.1 |
| Forestry | 9.1 | 8.2 | 8.2 | 4.6 |
| Fishing | 9.1 | 8.2 | 8.2 | 4.6 |
| Coal | 0.0 | 0.0 | 0.0 | 0.0 |
| Oil | 0.0 | 0.0 | 0.0 | 0.0 |
| Gas | 0.0 | 0.0 | 0.0 | 0.0 |
| Mining and quarrying | 0.0 | 0.0 | 0.0 | 0.0 |
| Food products, beverages and tobacco | 13.5 | 12.2 | 12.2 | 6.8 |
| Textiles and textile goods | 29.8 | 26.8 | 26.8 | 14.9 |
| Leather products | 6.9 | 6.2 | 6.2 | 3.4 |
| Wood products | 27.2 | 24.5 | 24.5 | 13.6 |
| Paper products, publishing | 19.5 | 17.6 | 17.6 | 9.8 |
| Petroleum, coal products | 13.0 | 11.7 | 11.7 | 6.5 |
| Chemical, rubber, plastic products | 7.2 | 6.4 | 6.4 | 3.6 |
| Mineral products nec | 38.1 | 34.3 | 34.3 | 19.0 |
| Metals and metal products | 8.3 | 7.5 | 7.5 | 4.2 |
| Transport equipment | 16.0 | 14.4 | 14.4 | 8.0 |
| Machinery and electronic equipment | 13.0 | 11.7 | 11.7 | 6.5 |
| Manufactures nec | 19.9 | 17.9 | 17.9 | 9.9 |

Source: own calculations and assumptions based on survey described in Jakubiak et al (2006)
Note: * - simple average

The reasons why we expect the costs of compliance with technical regulations to decrease following a Deep FTA is greater availability of conformity assessment centres in Georgia, which would result in lower costs of testing and compliance,

better availability of information and greater cooperation between the EU and Georgian firms that comes with increased integration. Hence we make a rough assumption that the standards costs decrease by 50% in a Deep FTA. The experience of the new EU members and EU firms following the formation of the Single Market indicates that these costs have indeed gone down.

Our assumptions so far applied to Georgian exports to the EU. We do not know of similar estimates for the other export destinations for the Georgian products and in any case the impact of a Georgia-EU FTA on the costs of complying with regulations of other importing partners is not clear. Hence in the simulations we assume that these costs apply only to exports to the EU. Any harmonization of legislation with the EU, wider availability of conformity assessment centres and with that lower prices of certification that would follow a Deep FTA would lead to a reduction of these costs for Georgian exporters to the EU. On the other hand, for Georgian firms which have been producing only for domestic market, the introduction of EU regulations to be compulsory on the domestic market as well may impose additional investment. A certain part of this investment will be undertaken in the normal course of replacing existing equipment over the coming years. However, in some cases the costs of compliance may be significant. Nevertheless even those firms are likely to benefit from the ability to export to the enlarged EU and wider availability of the assessment centres. Overall, it seems likely that all firms will experience some reduction in standards costs.

### 9.3.3. Barriers to trade in services[58]

We have not conducted any survey on the barriers to trade in services for the purpose of this study. To the best of our knowledge, such estimates exist only for Russia and Ukraine within the CIS countries. Given that Ukraine is also a member of the WTO and embarking on a process of negotiations of an enhanced FTA with the EU, we decided to adjust the Ukrainian values to make assumptions for Georgia. We base our estimates on the barriers to foreign direct investment in services estimated by IERPC (2007). The authors estimate tariff equivalents of barriers that discriminate against foreign providers of telecommunication, transport and financial services and we use simple averages of the values for sub-sectors as estimated by the IERPC (2007). The authors used the assessments of the regulatory environment in Ukraine through the implementation of business surveys and other information sources and converting these into an index of restrictiveness in telecommunication, financial sector and transport sectors. Then these indexes

[58] This section is based on the information gathered by Svetlana Taran.

were converted into ad valorem equivalents of the existing restrictions. It should be noted that distinctions were made between barriers faced by specifically foreign investors vs. restrictions incurred by both foreign providers along with domestic firms (through the separate calculations of foreign discriminatory restrictiveness index (applicable only to foreign suppliers) and overall foreign restrictiveness index (applicable to both foreign and domestic producers). In order to adjust Ukrainian values for Georgia we look at the Heritage Foundation indices of investment and financial freedom as presented in Table 9.4. The indices of investment and financial freedom indicate a much more investor-friendly environment in Georgia than in Ukraine. Still, it should be noted that these indices capture the wider definition of investment and financial freedom including regulatory formal restrictions, as well as corruption, contract enforcement, implementation of laws etc., than mere restrictiveness of regulatory environment affecting investment in service sectors.

**Table 9.4. Index of economic freedom, 2008**

| | Rank | Global economic freedom | Investment freedom | Financial freedom |
|---|---|---|---|---|
| Ukraine | 133 | 51.1% | 30% | 50% |
| Armenia | 28 | 70.3% | 70% | 70% |
| Georgia | 32 | 69.2% | 70% | 60% |

Source: The Heritage Foundation, http://www.heritage.org/research/features/index/countries.cfm
Note: Distribution of Global Economic Freedom: 80-100 – free; 70-79.9 – mostly free; 60-69.9 – moderately free; 50-59.9 – mostly unfree; 0-49.9 – repressed.

Based on our own perception of barriers to FDI in service sectors in Georgia and the fact that the foreign penetration in e.g. banking and finance is higher in Georgia than in Ukraine, we assume that the barriers to foreign provision of services are 35% lower in Georgia than in Ukraine. We model those barriers as additional purchases of value added in the amount equal to tariff equivalents by exporters or providers of those services from all regions. Hence we assume that in order to provide financial services (banking, insurance) in Georgia foreign companies face costs higher by 15.6% than local provides. The additional costs in transport sector amount to 10.4% and in communications to 3.9%. In simulations we assume that all foreign providers of services will face an improved access to the Georgian market following a Deep FTA. Even though access to services sectors in Georgia has been liberalized, relatively low penetration of the local market by foreign providers indicates that significant barriers still remain. We assume that in a Deep FTA those barriers would be halved. The above discussion of modelling assumptions has been summarized in the Table 9.5.

**Table 9.5. Summary of modelling assumptions**

| | Benchmark 2004 | Initial liberalization 2006 | Simple FTA | Deep FTA |
|---|---|---|---|---|
| Tariffs | Initial levels as described above | 2006 tariffs | Zero tariffs in trade between Georgia and the EU on industrial products, 50% off tariffs on agricultural and food products | Zero tariffs in trade between Georgia and the EU on industrial products, 50% off tariffs on agricultural and food products |
| Order costs | | 20% off 2004 level | 25% off 2004 level | 50% off 2004 level |
| Standards costs | | 10% off 2004 level | 10% off 2004 level | 50% off 2004 level |
| Barriers to trade in services | | 2004 level | 2004 level | 50% off 2004 level |

Source: The Heritage Foundation, http://www.heritage.org/research/features/index/countries.cfm
Note: Distribution of Global Economic Freedom: 80-100 – free; 70-79.9 – mostly free; 60-69.9 – moderately free; 50-59.9 – mostly unfree; 0-49.9 – repressed.

## 9.4. Implications of the 2006 scenario, Simple and Deep FTAs

In each simulation we can calculate the impact of a given trade policy change assuming constant returns to scale in all sectors, increasing returns to scale in selected sectors, as well as the short run impact (no change in capital stock) and the long run impact (allowing for the adjustment of capital stock in response to a change in return to capital). The calculation of steady state growth effects follows HRT (1996a). In the short run scenarios the price of capital is allowed to vary within each country, while capital stock is held constant. In the steady state scenario capital stock in Georgia is allowed to adjust, while the price of capital is held constant at its benchmark level. This approach assumes that there exists an invariant capital stock equilibrium. It is defined as a set of prices, production and investment levels for which the economy is able to grow at a steady rate with constant relative prices.

This approach provides an upper bound of the potential welfare gains as it ignores the adjustment costs and foregone consumption necessary to increase investment. For sufficiently high discount rates the costs of forgone consumption could overturn the benefits of capital accumulation. Although we measure welfare as equivalent variation as a share of GDP, it has to be born in mind that incorporation of the cost of the investment required to build up the capital stock

may substantially reduce the estimates of welfare gains cited below. On the other hand our approach does not incorporate the potential gains due to productivity improvements or endogenous growth theory "learning by doing" effects.

Table 9.6 displays major results of the CGE simulations. Apart from welfare changes (equivalent variation as a share of GDP), we also present changes in wages of skilled and unskilled workers and changes in capital stock in the long run scenario. Since we believe that increasing returns to scale are prevalent in several industrial sectors, we only report results of the IRTS scenarios. However, all other estimations are available from the author on request. The results of simulations for output, price changes, exports and imports are presented in the Appendix 8 CGE Model Results[59]. When analysing the results of Simple or Deep FTAs it has to be borne in mind that the benchmark for all simulations is 2004, hence the results for Simple and Deep FTAs also include the impact of the initial trade liberalisation in 2006. The effects of the 2006 liberalization will take several years to fully materialize. Therefore to look at the additional welfare gains from a Simple FTA beyond the impact of the 2006 liberalisation, one needs to subtract welfare

**Table 9.6. Welfare, and factor returns results of the CGE simulations**

| | **2006** | **Simple FTA** | **Simple FTA BIS** | **FTA+** | **Deep FTA** | **DEEP FTA+** |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Welfare (% change ) | | | | | | |
| Russia | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 |
| Ukraine | -0.023 | -0.024 | -0.025 | -0.024 | -0.026 | -0.024 |
| Armenia | -0.019 | -0.021 | -0.023 | -0.017 | -0.006 | 0.002 |
| Azerbaijan | -0.111 | -0.112 | -0.113 | -0.107 | -0.109 | -0.097 |
| **Georgia** | **0.973** | **1.085** | **1.007** | **3.352** | **2.736** | **7.509** |
| Turkey | 0.027 | 0.028 | 0.027 | 0.029 | 0.032 | 0.036 |
| EU27 | 0.007 | 0.007 | 0.008 | 0.008 | 0.006 | 0.007 |
| CIS | -0.003 | -0.003 | -0.003 | -0.003 | -0.002 | -0.001 |
| ROW | 0.006 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 |
| GDP (% change) | | | | | | |
| Russia | 0.057 | 0.057 | 0.057 | 0.057 | 0.057 | 0.057 |
| Ukraine | 0.151 | 0.149 | 0.148 | 0.151 | 0.148 | 0.149 |
| Armenia | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.025 |
| Azerbaijan | -0.082 | -0.090 | -0.090 | -0.082 | -0.082 | -0.075 |
| **Georgia** | **1.056** | **1.170** | **1.101** | **3.442** | **2.822** | **7.595** |
| Turkey | 0.120 | 0.121 | 0.120 | 0.122 | 0.124 | 0.129 |
| EU27 | 0.037 | 0.037 | 0.038 | 0.038 | 0.036 | 0.037 |
| CIS | -0.003 | -0.003 | -0.003 | -0.003 | -0.001 | 0.000 |
| ROW | 0.018 | 0.018 | 0.019 | 0.019 | 0.018 | 0.018 |

Source: own calculations.

[59] The appendix includes only detailed results for Georgia as the impact on other countries is zero or negligible. However, full set of results along with the short run simulations is available from the author on request.

**Table 9.6. cd**

| | 2006 | Simple FTA | Simple FTA BIS | FTA+ | Deep FTA | DEEP FTA+ |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Wages of unskilled workers (% change) | | | | | | |
| Russia | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.001 |
| Ukraine | -0.024 | -0.026 | -0.027 | -0.025 | -0.027 | -0.026 |
| Armenia | -0.039 | -0.043 | -0.047 | -0.041 | -0.011 | -0.006 |
| Azerbaijan | -0.109 | -0.11 | -0.112 | -0.106 | -0.094 | -0.086 |
| **Georgia** | **2.857** | **3.033** | **3.019** | **5.109** | **4.881** | **9.269** |
| Turkey | 0.021 | 0.021 | 0.02 | 0.022 | 0.023 | 0.027 |
| EU27 | 0.005 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 |
| CIS | -0.004 | -0.003 | -0.003 | -0.003 | -0.001 | 0.000 |
| ROW | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| Wages of skilled workers (% change) | | | | | | |
| Russia | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | 0.000 |
| Ukraine | -0.014 | -0.015 | -0.016 | -0.015 | -0.016 | -0.014 |
| Armenia | -0.009 | -0.01 | -0.01 | 0.001 | -0.013 | 0.010 |
| Azerbaijan | -0.105 | -0.105 | -0.105 | -0.101 | -0.085 | -0.078 |
| **Georgia** | **2.369** | **2.542** | **2.529** | **4.445** | **3.945** | **7.917** |
| Turkey | 0.018 | 0.018 | 0.018 | 0.019 | 0.02 | 0.023 |
| EU27 | 0.005 | 0.005 | 0.006 | 0.006 | 0.005 | 0.005 |
| CIS | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROW | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.004 |
| Total exports (% change) | | | | | | |
| Russia | 0.00 | 0.001 | 0.001 | 0.002 | 0.001 | 0.003 |
| Ukraine | -0.038 | 0.039 | -0.041 | -0.037 | -0.046 | -0.041 |
| Armenia | 0.002 | -0.008 | 0.001 | 0.08 | -0.175 | -0.001 |
| Azerbaijan | -0.538 | -0.542 | -0.544 | -0.521 | -0.5 | -0.455 |
| **Georgia** | **14.669** | **16.004** | **16.659** | **19.186** | **21.088** | **27.968** |
| Turkey | 0.026 | 0.027 | 0.028 | 0.03 | 0.03 | 0.037 |
| EU27 | 0.011 | 0.012 | 0.013 | 0.013 | 0.012 | 0.014 |
| CIS | 0.002 | 0.003 | 0.004 | 0.006 | 0.001 | 0.008 |
| ROW | 0.009 | 0.009 | 0.009 | 0.01 | 0.007 | 0.009 |
| Total imports (% change) | | | | | | |
| Russia | -0.006 | -0.007 | -0.007 | -0.006 | -0.006 | -0.004 |
| Ukraine | -0.049 | 0.043 | -0.044 | -0.041 | -0.046 | -0.041 |
| Armenia | -0.099 | -0.068 | -0.062 | -0.014 | -0.179 | -0.073 |
| Azerbaijan | -0.597 | -0.221 | -0.222 | -0.213 | -0.225 | -0.208 |
| **Georgia** | **5.635** | **4.538** | **4.826** | **6.383** | **8.954** | **13.004** |
| Turkey | 0.052 | 0.049 | 0.049 | 0.053 | 0.053 | 0.062 |
| EU27 | 0.011 | 0.013 | 0.014 | 0.013 | 0.012 | 0.014 |
| CIS | -0.004 | -0.003 | -0.002 | 0 | -0.006 | 0 |
| ROW | 0.013 | 0.013 | 0.013 | 0.014 | 0.012 | 0.013 |
| Capital stock (% change) | | | | | | |
| Georgia | 0.871 | 0.982 | 0.835 | 6.704 | 3.706 | 15.967 |

Source: own calculations.

implications in column (1) from the result in column (2) and similarly for the benefits of a Deep FTA one needs to subtract welfare impact in column (1) from welfare implications in column (5) etc. These net effects are presented in Table 1 of the Appendix 8 CGE Model Results – Georgia.

### 9.4.1. 2006 Liberalization

Our results indicate that in the long-run the liberalisation of 2006 will lead to welfare gains of about 1% of the Georgian GDP. The impact on the EU27, ROW and Turkey is positive, but negligible. The impact on the CIS countries is negative due to the erosion of the margin of preference enjoyed by the CIS, but also negligible. Following trade liberalisation Georgia experiences welfare gains, because its tariffs are being reduced by a large margin in the majority of sectors and so there are efficiency gains to be reaped. With cheaper import goods domestic prices fall in several sectors, notably in wearing apparel, leather, wood, metal and metal products (see Appendix 8 CGE Model Results). The changes are directly proportional to changes in the Georgian tariffs. A significant fall in prices of imports leads to an increase of imports and crowding out of domestic production by imports in sectors with the highest reduction of import protection. Output in those sectors falls or increases slightly, depending on the foreign demand. Increased competition on a domestic market coupled with cheaper intermediate inputs reduces the prices of most manufacturing goods in Georgia. Lower prices raise demand for their products abroad and lead to production and exports expansion. Output of several sectors such as metal and metal products, mining and quarrying, transport expands. Sectors that expand are overall more unskilled-labour intensive as wages of unskilled workers grow at a slightly faster pace than those of skilled workers (2.9% vs. 2.4% relative to the benchmark 2004 level).

When interpreting the output results one has to keep in mind that the overall employment is held constant in simulations, hence decreases in production of some sectors are compensated by increases in production in other sectors as skilled and unskilled workers shift between sectors. The changes in output are only indicative of the mechanisms at work and should not be treated as a forecast. Similarly, the trade balance is held fixed in the simulations hence an increase in total exports is accompanied by a compensating increase in total imports. The direction of changes in exports and imports by sector is however a good indication of the likely implications of trade policy changes.

### 9.4.2. Simple and Deep FTA scenarios

In the case of a **Simple FTA** the additional welfare gains from the removal of remaining industrial tariffs and halving of remaining agricultural tariffs in the EU-Georgia trade rises to 1.09%, i.e. only 0.11% more than that being achieved by the 2006 liberalisation (column (2) – column (1) in Table 9.6 or column 2 in Table 1 in

Appendix 8 CGE Model Results – Georgia). This is not surprising given that in 2006 Georgian tariffs are almost all zero and Georgia enjoys free access to the EU market. The welfare changes for other regions are negligible. The changes in wages are slightly higher, and again unskilled workers gain relatively more.

Column 3 in Table 9.6 presents results for a **Simple FTA BIS** with full liberalisation of agricultural and food products. However, the results are very similar to the Simple FTA. The Simple FTA scenario assumes already a 50% reduction on tariffs on agro-food products; hence the additional benefits from the removal of the remaining tariffs are not a significant policy change. The trade weighted post-Simple FTA EU tariffs on Georgian major agricultural exports are zero and hence a Simple FTA BIS does not lead to any improvement in the access of Georgian exports to the EU market. On the Georgian side, the only sector where the post- Simple FTA tariffs are quite high i.e. 5.8% (see Table 9.1) is livestock, which constituted less than 1% of Georgian imports from the EU in the benchmark 2004. Another noticeable improvement in the access of EU products to the Georgian market is for food, beverages and tobacco where barriers decrease from post-Simple FTA level of 2.7% to zero. Despite low tariffs in this sector, the impact of their reduction is significant for two reasons i.e. Georgia is a net-importer of food products and imported food constituted 35% of domestic consumption in 2004. Therefore this is the major change that impacts on the welfare implications of the Simple FTA BIS scenario as compared to Simple FTA. As tables in the Appendix 8 CGE Model Results – Georgia indicate the domestic production is crowded out by imports and domestic output falls further as compared to Simple FTA. Since we have a single representative consumer in the model, the loss of tariff revenue and a smaller increase in factor rewards outweigh the gains from lower consumer prices and increased efficiency of production. This points out that again tariff barriers are not the major obstacle to the expansion on Georgian exports to the EU, only quality improvements and reductions of non-tariff barriers can lead to significant benefits for the agro-food sector.

An **FTA+** combines a Simple FTA with a consolidation of the domestic reforms that took place in Georgia over the recent years in a binding agreement. The FTA+ could consolidate measures such as unilateral recognition of EU and international product standards and facilitation of customs procedures. The FTA+ could impact on the perception of Georgia as a safe place to invest. These effects are very difficult to quantify, but one way to analyse this kind of implications is to look at a reduction in the cost of capital. This is interpreted as a lowering of risk premium associated with locating the capital in Georgia. A similar approach has been adopted in the

study on the Eastern EU Enlargement (Baldwin, Francois, Portes, 1997) and in the feasibility study for the EU-Ukraine FTA (CEPS, 2006), where a reduction of the price of capital of 10% was assumed. Clearly a deep and comprehensive FTA could result in a strong boost to the investors' confidence in Georgia, but even an FTA+ might to some extent affect the investors' expectations. It is not possible to estimate with certainly the extent to which the investment risk will be affected by an FTA+, but to illustrate its possible consequences we study the implications of a 2.5% reduction in the cost of capital. We designate this scenario as FTA+, since it goes significantly beyond a classic Simple FTA by including some obligations on domestic policy and consolidation of the acceptance of EU standards for imports.

The results the FTA+ scenario are presented in column 4 in Table 9.6. Our results indicate an increase of welfare by 3.35% of GDP or 2.38 percentage points above the 2006 liberalization scenario. This is associated with an increase of wages of skilled workers by 4.45% and 5,11% for unskilled workers. The capital stock increases by 6.70% in response to the lowering of the risk to invest.

There are several reasons why we should expect the elimination of NTBs to be beneficial to Georgia and the EU. The reductions in barriers to trade and transport costs decrease the prices of goods for consumers, as well as prices of intermediates and capital goods for producers. The extent of these gains depends on the amount of trade between the trading partners and the trade creation and trade diversion effects. Apart from increased efficiency of resource allocation, as demand shifts to regions with the lowest cost suppliers, additional gains stem from increased competition. However all gains from trade also involve adjustment costs and may be associated with potentially painful restructuring in Georgia and significant redistribution effects.

Furthering the level of integration via a **Deep FTA** would involve a more complete elimination of barriers to trade and investment. This would result in a more extensive commitment to the reform of domestic policies in the direction of EU standards in Georgia. We operationalize this scenario by looking at the effects of the removal of NTBs such as border and standard costs and barriers to foreign provision of services as defined above. The estimates of the magnitude of those barriers in Georgia are not perfect, yet they provide a useful tool to gain insight into the magnitude and direction of changes in trade, prices and output by sectors. Our results indicate that the impact of a Deep FTA here narrowly defined as only the removal of NTBs would bring significant benefits to Georgia. In the long run the increase in welfare rises to 2.74% of GDP or 1.76 percentage points over the impact of the 2006 reform. The impact of

a Deep FTA on the EU27 is still lower than 0.1% of GDP, but this is to be expected given that the share of Georgia in total EU imports and in total EU exports is less than 1%. The implications for other regions are also negligible.

Finally, the comprehensive set of reforms resulting from the Deep FTA along with more wide-ranging flanking measures e.g. on competition and corruption could lead to a re-branding of Georgia as a favourable investment location. This is our scenario **Deep FTA+** (column 6) where we assume that Georgia would achieve a notable reduction in the perceived risk premium on investment, reflecting a sustained re-branding of Georgia as a favorable and safe place to invest. We illustrate this by assuming a 5% decrease in the price of capital. In this scenario the welfare implications increase to 7.51% of GDP i.e. the net effect of 6.54% over the 2006 liberalization scenario.

Again in the Deep FTA+ scenario output of unskilled labour intensive sectors is growing faster than output of sectors where skilled workers are used more intensively and wages of unskilled workers grow relatively faster (increase by 9.27% compared to 7.92% for wages of skilled workers). This is mainly explained by the expansion of unskilled labour-intensive sectors such as textiles and wearing apparel; metal and metal products; wood and wood products. Increase in real wages stems from a more efficient allocation of resources as tariff and non-tariff barriers are being eliminated. However it is also related to the nature of the experiment. As we allow the capital stock to increase by 15% in response to changes in return to capital following a Deep FTA+ holding total employment fixed, the higher capital to labour ratio leads to an increase in wages. This is coupled with falling prices across the majority of sectors due to lowering of tariffs and several NTBs leading to an even sharper increase in real wages.

The sectoral impacts on prices, output and trade are displayed in the Appendix 8 CGE Model Results – Georgia. Prices fall across majority of sectors with the impact on selected industries now being determined by changes in standards costs, border costs, by changes in relative barriers to foreign providers of transport, financial and communication services and their trade intensity and factor shares intensity. The impact of the liberalisation of the access to services sector seems to be very small. The majority of sectoral output changes seem to be determined by changes in border and standards costs. Output of many sectors increases dramatically e.g. textiles and wearing apparel or metal and metal products. However, the increases of the order of 46-56% are not that impressive given that the base production level was very small (less than 2% of the total value added was

generated in each of those sectors in 2004). Other industries experiencing output growth are wood products; mining and quarrying and chemical, rubber and plastic products. The biggest fall in output is recorded in paper and paper products; leather goods; machinery and equipment and manufactures NEC, food sector. The production of those sectors is replaced by imports.

Trade changes are highly correlated with changes in output. A decrease in domestic production is often associated with an expansion of imports to replace domestic production. Exports increases are highest in sectors where prices fall the most, hence the products become much more competitive on the world markets.

## 9.5. Conclusions

These simulations have presented a series of scenarios for EU-Georgian free trade. They begin with the effects of the **2006 unilateral free trade measures** adopted by Georgia combined with the EU's granting it GSP+ under its new GSP scheme. These effects will however take years still to fully mature. They could be consolidated and completed in a formal FTA with the EU. The **Simple FTA and Simple FTA BIS** scenarios might not add much, since only the remaining agro-food tariffs would be halved or dismantled. However this simulation ignores possible confidence and synergy effects that could come from the binding in of the multiple liberalization and reform measures that Georgia has made in the recent past. These confidence effects can be modeled as reductions in the perceived risk premium attached to investment in Georgia, which noticeably enhances the result. We call this scenario **FTA+**, given that it stands for measures going beyond Simple FTA (i.e. only tariff reductions). The **Deep FTA** scenario also adds significant benefits as a result of a more complete elimination of a comprehensive definition of barriers to trade and investment. And finally we present a variant, which is the closest to the definition of a deep and comprehensive FTA as understood throughout the report which complements the elimination of NTBs with several additional flanking measures related to competition policy, corruption etc. - **Deep FTA+.** This scenario involves a larger reduction of the risk premium associated with a major strengthening of investment climate and improved perceptions of Georgia's business climate, reputation and re-branding along with the significant reduction of NTBs. The Deep FTA+ scenario sees the highest gains for the Georgian economy.

Which of these scenarios will materialize, or over what time horizon, of course cannot be forecast. All depends on the actual content of the agreement signed and

the ability of the Georgian government to take the policy measures that underlie the scenario computations. At the same time it is evident that the ultimate benefits for Georgia of an effectively implemented Deep FTA+ with the EU could be substantial.

# 10. Sectors of importance

This chapter explores the prospects of selected important sectors in Georgia in terms of trade expansion and foreign direct investment (FDI), highlights potential issues and discusses the likely implications of free trade agreements with the EU. Based on a descriptive statistical analysis including production and foreign trade data, it focuses on domestic capacity constraints, domestic and regional policies, and issues not covered under the regulatory convergence and investment climate chapter. The selected sectors are the agro-food sector and energy sectors.

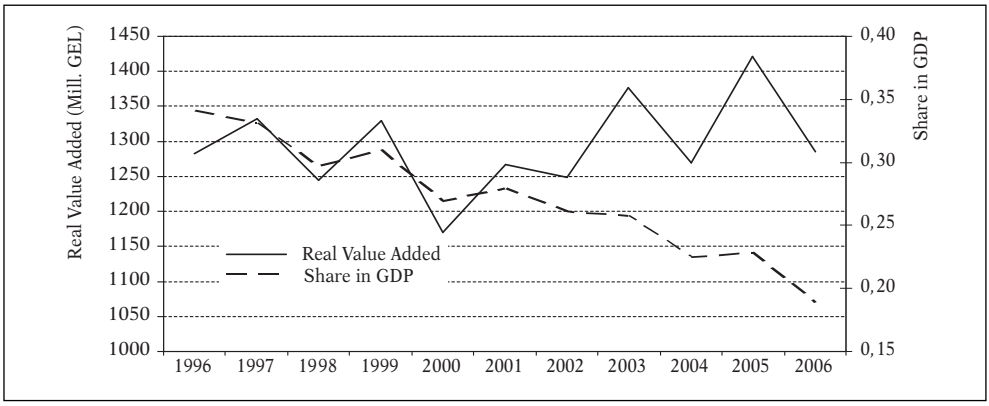
## 10.1. Agro-food sector

### 10.1.1. General Performance and Current Issues

Georgia possesses favourable conditions for the production of a wide range of annual and perennial crops, making agriculture one of the key sectors of the country's economy. However, while the long-term development of the agro-food sector in Georgia remains a potentially attractive undertaking, agriculture is currently experiencing structural difficulties and sectoral growth has been a mixed picture thus far.

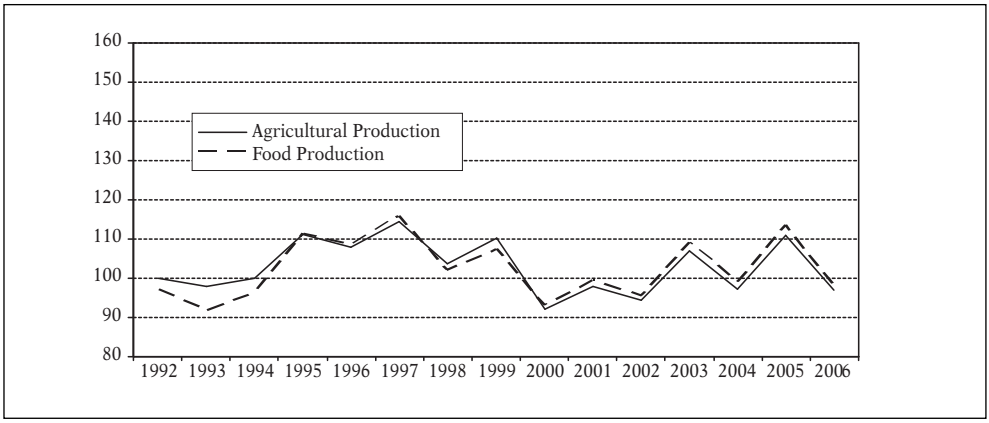
Agriculture is a key sector in Georgia, though its relative importance is declining. Real value added for the sector "Agriculture, Forestry, Fishing" from 1996 to 2006, based on figures from Statistics Georgia, as well as agricultural or food production from 1992 to 2006, based on figures from FAOSTAT, remained steady (Figure 10.1 and Figure 10.2). Meanwhile, the share of real value added in GDP fell from 34.1% in 1996 to 18.8% in 2006 (Figure 10.1).

**Figure 10.1. Real Value Added Agriculture and Share of GDP, Georgia**




Source: Statistics Georgia

**Figure 10.2. Agro-Food Production Indices, Georgia (Base period: 1999-2001)**




Source: FAOSTAT

At the same time, during the last fifteen years, the output structure of the agricultural sector changed significantly. For example, grapes were ranked first in Georgia's food and agricultural production. By 2005, the production of grapes was nearly halved and is now ranked third (Figure 10.3, displaying the commodities ranking from 1 to 6 in 1992). Conversely, the production of cow milk more than doubled.

The main agriculture exports include shelled hazelnuts (21% of total agricultural exports), mineral water (10%), refined sugar (9%), distilled alcoholic beverages (9%), non-alcoholic beverages (6%), and citrus fruits (5%). Among the main imported items are: wheat and wheat flour, sugar, poultry, fish, meat, vegetable oil, milk, butter, and margarines.

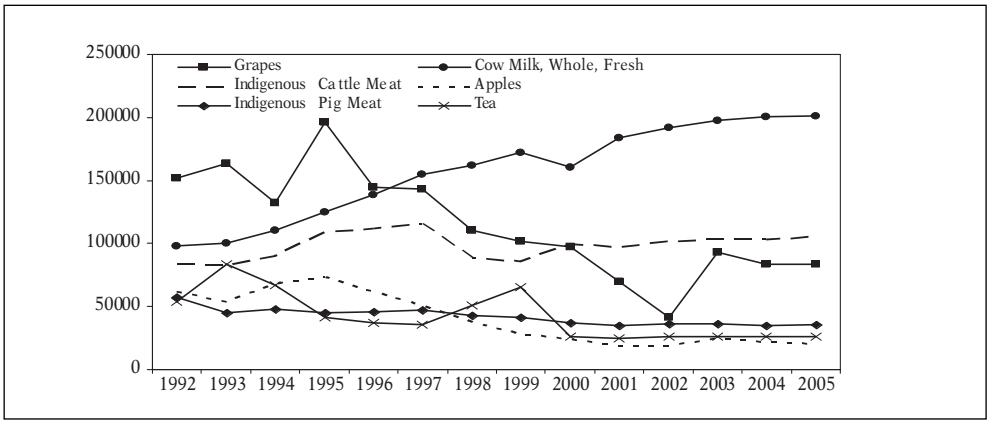
The biggest growth potential for exports is in the citrus, tobacco, and wheat sectors. With substantial investment in technological and infrastructure capacity

building, Georgia's agricultural sector also has significant potential to export soy, cooking oil, corn, nuts, tea, and herbs.

Georgia's agro-food sector is facing the following problems.

1. Traditionally, Russia was Georgia's primary export destination. In early 2006, Russia imposed a ban on Georgian wine and mineral water because, according to the Kremlin, the wine did not meet Russian quality standards[60]. Georgia, however, insists that Russia is playing political power games. Additionally, Georgian wines have been imitated in Russia with mislabelling of cheap Russian wines, which has led to an increase in competitiveness in this sector. Mineral water, citruses, and fruits were also consequently subject to political interference in trade relations between the two countries.

**Figure 10.3. Production of food and agricultural commodities with rank 1 to 6 in 1992 (1000 US$ based on 1999-2001 international prices)**




Source: FAOSTAT

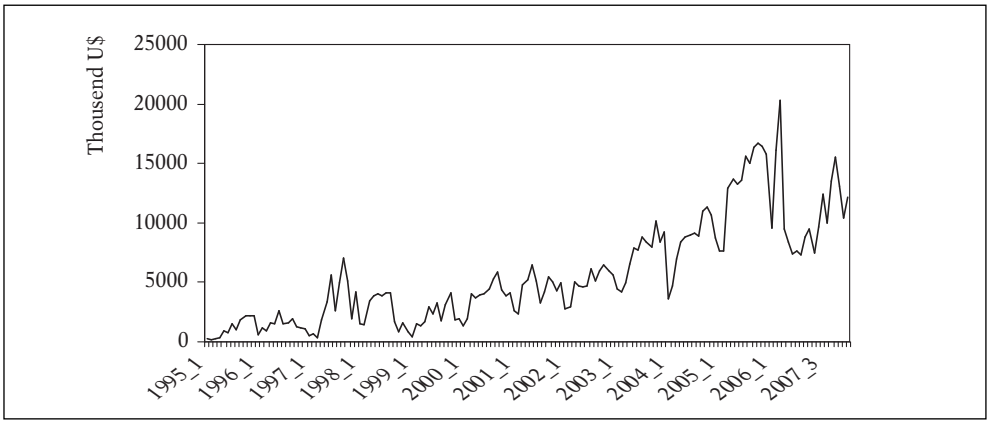
Without Russia as an import market, much of Georgia's wine production is in jeopardy. Prior to the Russian embargo, the industry was producing 63 million bottles of wine on average per year, 95% of which was exported. Current production levels may be down to 20 million bottles per year.

2. Georgia has lost the wine and fruit market in Russia and, has not been able to make major inroads into EU markets due to fierce competition in the EU and the ineffective marketing strategy of Georgian wine producers. After the embargo, Ukraine, Kazakhstan, the USA, and Poland became the main importers of Georgian wine. With regards to the EU, the main exported goods remain hazelnuts.

[60] The recent statements by Russia indicate that these sanctions might be lifted soon.

To evaluate the impact of the Russian embargo imposed in 2006 on Georgia's exports of wine, we look at nominal monthly foreign trade data from January 1995 until September 2007, which is only available for the product group "Beverages, spirits and vinegar". The slump of exports of the goods from this product group after March 2006 is nevertheless obvious. However, improvement has also been recently observed.

**Figure 10.4. Georgian beverage, spirits, and vinegar exports**




Source: FAOSTAT

The challenges that the Georgian wine industry faces today and ways to overcome the consequences of the Russian embargo lie in successful marketing and branding, quality control, and protecting the market from counterfeits. Since the imposition of the embargo, the wine industry has worked aggressively to identify and develop alternative markets, particularly in Eastern Europe. Georgia was equipped with a modern control laboratory for testing wine quality. A certificate issued by the Ministry of Agriculture of Georgia ("Samtresti") guarantees the integrity of products exported to the EU.

3. Georgian agriculture is primarily subsistence agriculture with small market surpluses and low productivity. According to World Bank surveys, approximately 83% of Georgia's rural population is entirely dependent upon their farms for subsistence and they consume approximately 73% of what they produce.[61]

[61] During the Soviet era, agricultural production was hindered through misallocation of land and excessive specialization that did not allow for flexibility in exports. Large farms using plantation-style labor produced most basic crops. After the collapse of the Soviet Union, land was redistributed to individuals, with the stipulation that they farm it. By 1993, over half of cultivated land was in private hand. However, it partially resulted in ownership by those who neither live nor farm the land. It also resulted in the return of subsistence-oriented, small-scale production.

Family holdings account for the majority of the output of plant growing. Only 25.9% of farms have access to agro-technical machinery and the means to use it. In eastern Georgia, the lack of equipment is accentuated by out-of-date irrigation systems unsuitable for the drier climate and poor technical conditions. Other issues stemming from the deterioration of the agriculture system include a lack of access to high-quality fuel and pesticides.

Lack of modern agricultural technology and equipment and infrastructure, outdated drainage systems, underdeveloped livestock feed and seed production, as well as lack of packaging and sorting technologies, are obstacles to production, especially export-oriented. Georgia imports a great deal of agricultural products, to the point where its self-sustainability rate has become dangerously low.[62] At the same time, the share of the agro-food sector in total imports has been declining. In 1995, this share was 42%. By 2006, it decreased to 16%.

4. Another large-scale problem is rural finance. The country's existing financial system is limited, focused on short term trade financing and does not serve the agricultural sector. Thus, both, primary agriculture and the agro-processing sector have serious liquidity constraints due to the tight supply of medium term credit. However, a major coordinated effort is underway, supported by the World Bank, IMF, International Fund for Agricultural Development (IFAD), and bilateral donors to strengthen the banking system's infrastructure. Rural credit unions and other non-bank financial institutions have been formed to address the problem of credit to small-scale farmers (Csaki and Kray, 2005).

5. Lack of strong industry associations inhibits the access of farmers to modern technology, financial resources, the dissemination of best practices, and the ability to influence government policy. This, in turn, hinders export opportunities.

6. At present, the process of land privatisation and liberalisation of land markets is not completed. Delays in land privatisation have stymied incentives for the growth of efficiency of land tenure and the manufacturing of high quality products.

7. The main exported agricultural products in Georgia are subtropical. Two primary regions for such products are near Georgia's Black Sea shore. After the

[62] According to the UN General Assembly adopted resolution in 1974, the minimum level of food security ranges from 80-85%. This means that a country's food security is at risk when more than 15-20% of food products consumed domestically are imported.

conflict in Abkhazia and the resulting separation of Abkhazia from Georgian jurisdiction, the main transportation route to Russian markets through Abkhazia broke down. Also, the eviction of the majority of the population greatly hampered citrus manufacturing in this territory.

8. Institutional reforms in 2004-2006 in Georgia aimed at reducing undue government interference and strengthening market competition were the most important components of a strategy to improve the business-enabling environment and hence economic growth. The World Bank's Doing Business survey named Georgia among the leading reformers in the world in 2006 and 2007. The EBRD 2006 transition indicators show Georgia now roughly in line with the EBRD average.

   This improvement in the business environment contributed to a dramatic increase in private capital inflows. Trade openness became relatively high. Nevertheless, foreign investors avoid the agro-food industry, because the domestic market is small and the larger regional market is not fully accessible. Foreign direct investment in Georgian agriculture is minimal. At present, foreigners have invested in the nut industry (the Italian confectionery company "Ferrero" started operating in Georgia in 2007), wine making (Italy and Russia), and the water-bottling sector (Turkey).

   Foreign investment is critical not only from the point of view of advanced know-how and access to foreign markets, but also as an alternative to medium term bank credit from local banks, which is often unavailable.

   According to the USAID funded AgVantage program, the following investment opportunities are available in the agro-food sector of Georgia: milk processing; individual quick freezing of fresh fruits and vegetables; mandarin orange consolidation, packing and export; commercial production of pedigreed poultry broiler hatching eggs; apple juice concentrate production; and, onion consolidation, storage, and marketing.

9. The Georgian government gives priority to reducing barriers to trade. This is partly a matter of reducing tariffs and non-tariff barriers imposed by the central government, stopping harassment and corruption by officials at the border and those controlling transit routes. At the same time, the elimination of trade restrictions creates problems for industries that were protected from international competitive processes. The agro-food sector is one of them.

10. Customs detection of the flows of pirated and counterfeit goods is weak. The elimination of the phyto-sanitary service in Georgia in 2005 decreased food

safety and gave Russia's sanitary service ammunition to cast doubt over the quality of Georgian vegetables, wine, and mineral water, which led to banning these products. There is a critical need to modernize sanitary and phyto-sanitary services, institute industrial standards, and create international certification laboratories in order to ensure a compatibility with international norms and standards.

### 10.1.2. Relations with the EU

In 2006, 18.5% of the total imports of the EU-25 from Georgia (458 million euro) were agricultural products (DG Trade, 2007[63]). Additionally, 8.5% of the total EU-25 exports to Georgia (688 million euro) were from this sector. Thus, Georgia has a trade surplus in the area of agricultural products with the EU-25. Georgia's agricultural exports to the EU-25 were concentrated on a few products. The export of fresh and dried hazelnuts (shelled and peeled) amounted to 37.7 million euro in 2006 (44% of total agricultural exports), followed by waters (mineral and aerated, with added sugar, sweetener or flavour,) at 27.5 million euro (32%). Pure mineral water, wine, apple juice and fruit preparations had a share between 3 and 4%. Shares of hazelnuts and sweet beverages are rather stable since 2001. In contrast, the agricultural exports of EU-25 to Georgia are much more diversified. In 2006, no product group had a share greater than 9.5% in total agricultural export. Butter had a share of 9.5%, followed by spirits obtained by distilling grape wine or grape marc (7.7%), sausages and similar products (5.8%), cane or beet sugar, chemically pure sucrose (5.8%) and cigarettes (5.4%).

There is also important foreign direct investment. For example, in the wine and distilled alcohol industry, joint stock company "Georgian Wine and Spirits" was formed in 1994 with the participation of the Dutch Royal Cooymans, an affiliated company of the Pernod Ricard Group, an international liquor producer. Other foreign-owned affiliates include the Italian-owned Badagoni wine company, Iberia Refreshments, JSC (Pepsi Cola bottlers Georgia), and Nestle Georgia & Armenia. The Italian company Ferrero bought land for hazelnuts orchards and intends to build two factories for processing nuts. The high shares of hazelnuts and sweet beverages in Georgia's exports to the EU-25 countries can partially be explained by the engagement of foreign-owned firms. This type of foreign investment is needed in other parts of the agriculture sector to bring agro-food production out of its rut.

[63] Based on raw data from Eurostat, DG Trade processed these figures for its publications concerning EU-Georgian trade relations only for the EU-25 countries.

### 10.1.3. Potential Impact of an FTA

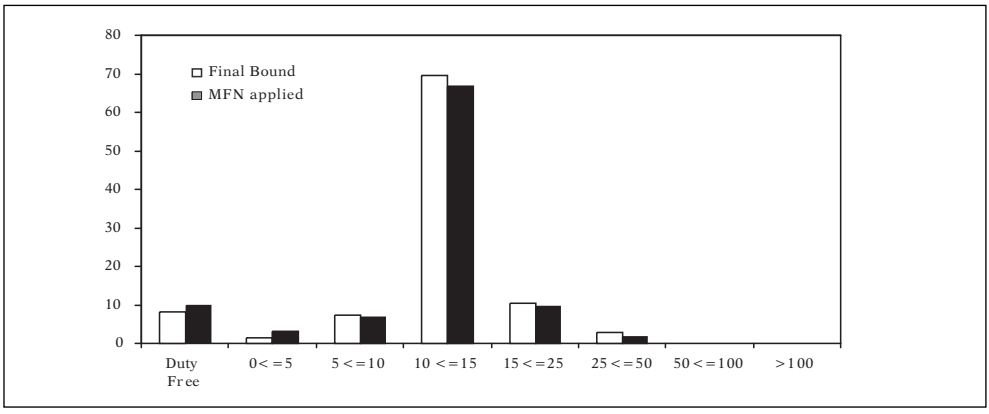
Georgia is already a member of the WTO and it can be expected that a Simple FTA with the EU will not have a large effect on the agro-food sector, because – due to the resulting commitments – Georgia has already rather low tariff rates on agricultural products (Figure 10.5). The binding coverage for agricultural products is 100% and the final bound duties as well as the most favoured nation (MFN) applied duties are between 10 and 15 % for nearly 70% of agricultural import values.[64]

Table 10.1 shows that there are some lower final bounds duties for some agricultural products, but averages are – with the exception of beverages and tobacco – in this corridor, or even lower like e.g. for oilseeds, fats & oils, cotton and fish. MFN applied duties are on average similar to final bound duties. The only exception is beverages & tobacco.

Vice versa, the very few remaining import tariffs on the EU side are not the main hampering factor for e.g. the Georgian wine exports to the EU market, but the recognition of Georgian wines, non-tariff requirements, lack of resources and skills for marketing and different preferences of the EU consumers in comparison with those of traditional markets (mainly the CIS).

Only in case of a Deep FTA, which would lead to the adoption of EU regulations and quality standards, the export potential of Georgian agro-food products could

**Figure 10.5. Tariff lines and import values (in %) for agricultural products for Georgia**




Source: WTO

[64] According to the WTO the binding coverage is defined as the share of HS six-digit subheadings containing at least one bound tariff line.

**Table 10.1. Tariffs by product groups**

| Product groups | Final bound duties | | | | MFN applied duties | | |
|---|---|---|---|---|---|---|---|
| | Average | Duty free in % | Max. | Binding in % | Average | Duty free in % | Max. |
| Animal products | 11.8 | 1.2 | 12 | 100 | 11.8 | 1.2 | 12 |
| Diary products | 12.1 | 0 | 25 | 100 | 12.1 | 0 | 25 |
| Fruit, vegetables, plants | 13.4 | 0 | 30 | 100 | 13.2 | 0 | 30 |
| Coffee, tea | 12.3 | 0 | 20 | 100 | 12.3 | 0 | 20 |
| Cereals & preparations | 14.5 | 1.2 | 50 | 100 | 14.1 | 1.2 | 25 |
| Oilseeds, fats & oils | 3.6 | 67.1 | 12 | 100 | 3.1 | 69.7 | 12 |
| Sugars & confectionery | 11.6 | 0 | 12 | 100 | 11.1 | 0 | 12 |
| Beverages & tobacco | 46.9 | 0 | 496 | 100 | 23.4 | 0 | 30 |
| Cotton | 9.0 | 0 | 12 | 100 | 9.0 | 0 | 12 |
| Other agricultural Products | 10.6 | 2.0 | 15 | 100 | 9.9 | 6.0 | 15 |
| Fish & fish products | 0.3 | 97.2 | 12 | 100 | 0.3 | 97.2 | 12 |

Source: WTO.

improve and allow some products to capture larger market shares within the EU. These are, however, highly competitive markets (as with wine) with several well-established players in a lot of EU Member States. Here, Georgia clearly has to find a market niche in the low to medium price segment. Furthermore, it has to be asked whether there is actually the capacity on the side of the Georgian authorities and businesses to implement a Deep FTA.

Two things are especially important for Georgia to get a larger share of European agriculture and food market – foreign firms have to come to Georgian agriculture and food safety certification system has to satisfy EU regulations. Successful Georgian exports demonstrate these conditions. A large part of Georgian exports to the EU are carried out by foreign firms – wine and hazelnuts providing examples. These exporters rely on special food safety certification arrangements and not on dysfunctional general SPS certification system. A Deep FTA and Deep FTA+ could only create more favourable conditions for this to happen but it will be up to the private sector to take or pass these opportunities.

## 10.2. Energy

### 10.2.1. General Performance and Current Issues

Georgia is not abundant in energy resources, other than hydropower, which is the only potential export sector. Therefore, the country depends on foreign fuel supply. In the first fifteen years following independence, 85% of all energy was imported. The country experienced an energy shortage as power generation

decreased in both the hydro and thermal sectors. The energy deficit was caused mostly by poor technical conditions in power stations and corrosion of the gas distribution network. Political corruption and diversion of supplies also played a major part in the lack of energy during that time. Energy dependence became an especially serious problem because of rising political tensions with Russia, which led to a price hike by Gazprom in 2007. Georgia's other suppliers, primarily of gasoline and diesel fuel, include Bulgaria, Romania, Greece, Azerbaijan, and Turkmenistan. Georgia has been seeking to further diversify its suppliers and reduce its dependence on Russia. In early 2007, it began to receive gas from the Shah Deniz field, the largest in Azerbaijan, in hopes of becoming independent of politically unstable Gazprom gas flows. Georgia expected gas imports of 250 million cubic meters from the field in 2007.

Aside from acting as a destination for energy, Georgia has also used pipelines as a key element in it economic growth strategy and has begun to position itself as a provider of energy security to Europe. One country that is a promising market for Georgian pipeline logistics is Turkey, where energy demand increases by 7% on an annual basis (Gorst, 2007).

The most recently available data from the International Energy Agency (IEA) shows that for 2005, the total primary energy supply of Georgia was 3.21 millions of tons of oil equivalent (mtoe), where 1.27 mtoe stemmed from domestic energy production and net imports amounted to 1.94 mtoe. Furthermore, electricity consumption was 7.48 terawatt hours (TWh).

More recent data were published by Galt & Taggart, a Georgian-Ukrainian investment bank, suggesting that the consumption of electricity increased in 2006 to 8.3 TWh and the forecast for 2007 was 8.6 TWh (Table 10.2). 94% of the consumption in 2006 was provided by local production. The remainder was imported from Russia, Azerbaijan, Armenia and Turkey. However, Georgia currently does export electricity to Turkey during the summer months. The report further states that the Georgian government has undertaken effective restructuring of the electricity sector, including upgrades to high-voltage lines.

Currently, total installed generator capacity (thermal and hydropower) is approximately 4,800 MW, but a significant portion of this capacity is not in operable condition.[65] The total hydroelectric capacity is 2,843 MW spread between

[65] The following four paragraphs are based primarily on Galt & Taggart (2007).

**Table 10.2. Energy balance of Georgia, TWh**

| Product groups | Final bound duties | | | | MFN applied duties | | |
|---|---|---|---|---|---|---|---|
| | Average | Duty free in % | Max. | Binding in % | Average | Duty free in % | Max. |
| Animal products | 11.8 | 1.2 | 12 | 100 | 11.8 | 1.2 | 12 |
| Diary products | 12.1 | 0 | 25 | 100 | 12.1 | 0 | 25 |
| Fruit, vegetables, plants | 13.4 | 0 | 30 | 100 | 13.2 | 0 | 30 |
| Coffee, tea | 12.3 | 0 | 20 | 100 | 12.3 | 0 | 20 |
| Cereals & preparations | 14.5 | 1.2 | 50 | 100 | 14.1 | 1.2 | 25 |
| Oilseeds, fats & oils | 3.6 | 67.1 | 12 | 100 | 3.1 | 69.7 | 12 |
| Sugars & confectionery | 11.6 | 0 | 12 | 100 | 11.1 | 0 | 12 |
| Beverages & tobacco | 46.9 | 0 | 496 | 100 | 23.4 | 0 | 30 |
| Cotton | 9.0 | 0 | 12 | 100 | 9.0 | 0 | 12 |
| Other agricultural Products | 10.6 | 2.0 | 15 | 100 | 9.9 | 6.0 | 15 |
| Fish & fish products | 0.3 | 97.2 | 12 | 100 | 0.3 | 97.2 | 12 |

Source: Galt & Taggart (2007)

14 large scale and about 80 plants with less than 10 MW capacity each. In recent years, electricity has been generated almost entirely by hydropower plants (81.4% on average since 2000). The medium and large hydropower plants have a capacity of 5.6 TWh, while the three large natural gas fired thermal power plants have a operating capacity of 2.2 TWh. Due to aging equipment needing overhaul or replacement and a shortage of fuel supplies, the thermal power plants only operate at approximately 40% of their capacity. Furthermore, with the quadrupling of Russian gas prices to Georgia since 2005 to 235 per 1000 $m^3$, thermal generation in Georgia is becoming more and more unprofitable and is being replaced by cheaper hydro generation.

Serious rehabilitation of the sector began in 2004-2005, after the Rose Revolution brought a new, anti-corruption political movement to power. Substantial funds were invested to improve the reliability of the Georgian energy system. The recent renovations have made it possible to increase the generating capacity of hydro and thermal plants. The completion of a pipeline connecting Georgia to Azerbaijan and Iran also allowed for an increase in energy consumption by more than 30% from 2004-2005. Electricity production increased by 387 million KWh from 2005-2006, and electricity imports decreased by 611 million KWh during the same period (Georgian National Energy Regulatory Commission, 2006).

According to the Georgian Deputy Minister of Energy, George Abdushelishvili (project team interview on 16 October 2007), in 2007 the energy situation improved to the point where Georgia could potentially become a net exporter of energy, primarily electricity. Estimated capacity of electricity production on large and

medium-sized rivers was projected to be 136 million KWh in 2006 (Natural Gas Strategy for Georgia, 2006).

Currently, Georgia is facing the following key challenges to growth in the energy sector:

1. The energy system has suffered from unsustainable debts. The Georgian authorities have made progress in improving payment collections, reduced quasi-fiscal losses in the sector, and supported tariff policies at cost-recovery levels; however progress has not been sufficient.
2. Lack of finance remains a problem. Capital investment is needed to commercialize the sector.
3. The Georgian government has already begun to privatize energy generation and energy distribution, but the gas pipelines and high voltage network transmission lines remain under state ownership. With electricity distribution companies in Georgia under new management, technical and commercial losses in the system have been reduced considerably. However, further privatisation steps are necessary.
4. Bank financing for many branches of the energy sector are insufficient, as banks still view the sector as too risky.
5. Energy efficiency has to be improved further (2003 17.6% of the total energy consumption) and the use of renewable energy sources has to be increased. Though the share of hydropower is already very high, the use of other renewable energy sources (e.g. wind power) should be encouraged.
6. Also it seems that some problems of the energy sector are linked with Georgian national energy regulatory commission (GNERC), which does not operate in a very transparent way.
7. The Georgian authorities prepared the Energy Sector Strategic Action Plan for 2005–08, which is being implemented and updated periodically, but there are no long-term strategy and energy demand forecasts needed to formulate long-term energy policy.
8. The EBRD has invested almost $50 million to improve the Inguri hydropower plant (ERBD, 2007), which is located on the Abkhaz-Georgian ceasefire line and is operated jointly. This rehabilitation was co-financed with a grant by the EU. The Inguri hydro power plant produces 71% of the total electricity production supplied in Georgia. However the conflict with the separatist Abkhazia regime creates risks for trade and revenue distribution.
9. Georgia's comparative advantage lies in its geographical location: a transportation corridor connecting Europe and Asia goes through its territory. It is vitally important that Georgia exploits this advantage.
   The following oil and gas pipelines traverse Georgia:

- Russia-Georgia-Armenia gas pipeline - 5.8 bcm/year
- Shah-Deniz gas pipeline (BTE) - 6.6 bcm/year
- The Iran-Azerbaijan-Georgia (IAG) gas pipeline – 3.5 bcm/year
- Baku-Supsa oil pipeline – 5.75 mt/year;
- Baku-Tbilisi-Ceyhan (BTC) oil pipeline – 50 mt/year

There are discussions of other pipelines to carry Caspian basin energy resources through Georgia. For example, Georgia and the Ukraine have proposed a gas pipeline from the Caspian region to Ukraine and further to Poland ("White Stream" or also known as Georgia-Ukraine-EU (GUEU) gas pipeline). This pipeline would branch off from the South Caucasus Pipeline near Tbilisi and run for approximately 100 km via Georgia to Supsa at the Black Sea. From there a 650 km long offshore section on the seabed of the Black Sea will run to Crimea near Feodosia in Ukraine. This offshore section will be linked to Ukraine's transit system by a 200 km long onshore section. An alternative plan proposes to prolong the offshore pipeline to Romania. This proposal has met with interest by the EU, which is looking at alternative routes through the Black Sea. The EU will finance under TEN-E a feasibility study on "White Stream", which should start in February 2008 and end in October 2008. There is also a proposed oil pipeline for this same route, but it would essentially build from the existing Baku-Supsa route rather than entail new construction.

Some of the projected pipelines through Georgia may not materialize for many reasons. One of them is that Russia has strong political ties to Kazakhstan, which may prevent the further development of the Caucuses routes. Also, heavyweights within the EU, such as France and Germany, may choose to deal with Russia on the oil import issue, rather than Ukraine and several new EU members that prefer the Caspian Sea-South Caucasus-Odessa-Brody-Gdansk route.

Natural gas from Shah Deniz has been flowing to Georgia since early 2007, allowing the country to cut its reliance on Russian gas imports from 100% to around 50%. Georgia's reliance on Russian gas may be reduced up to 20% this year. Georgia may even be able to eliminate its need for Russian gas as a result of the expansion by Azerigaz of a pipeline that connects Azerbaijan with Georgia.

In addition to receiving energy resources, Georgia benefits from pipeline transit fees. For example, tariff revenues from the BTC amount to $50 million USD annually. The transit revenues from BTE and BTC are estimated at 0.6% of GDP in 2007, and they may rise to about 1% of GDP by 2010.

10. Georgia has developed oil terminals at the Kulavi and Batumi seaports. The Batumi and Poti ports processed 14.0 mln. tons of crude oil in 2005. Georgia has opportunities to build new oil terminals and refineries on the Black Sea that will enhance oil transit capacities from Central Asia and attract foreign investments. High voltage lines connecting Georgia to Russia, Armenia, Azerbaijan and Turkey provide opportunities for electric energy trade if generating capacity is increased.

### 10.2.2. Relations with the EU

Since Georgia still has large hydropower potential capacities, there remains much room for European foreign direct investment in this area – far beyond current investment, since the continued Georgian domestic demand growth for electricity will be accompanied by strong foreign demand, particularly from Turkey – the primary foreign consumer of Georgian electricity – where electricity consumption has been growing by annually 7 % for the last 15 years and end tariffs are among the highest in Europe.

There is no doubt that the EU places top priority on achieving its energy security and is interested in the alternative gas and oil supplies. This strategy means adding new pipelines to the existing ones and transit of energy to the EU through "multiple pipelines". There are number of projects of gas transit from Central Asia to Europe. However, most of them are under the control of the Russian state-owned company Gazprom. The Caspian Sea, via Georgia, is the only route that is free from Russian control. Therefore is the already mentioned "White Stream" project also of high interest for the EU, which is e.g. reflected in a feasibility study under TEN-E (cf. section 10.2.1). Furthermore, there are two other Commission sponsored feasibility studies looking at a Southern Corridor for gas imports to the EU which are of direct relevance to Georgia. The first study entitled Study on the Trans-Caspian Gas Pipeline from Kazakhstan to Azerbaijan, examines infrastructure issues (assessment of rehabilitation needs for the existing pipeline infrastructure to feed a TCP), environmental aspects (preliminary impact assessment), and various financing options to build a Trans-Caspian Gas Pipeline. The second study is entitled "Feasibility Study of a Trans-Caspian - Black Sea Gas Corridor" and which is investigating the feasibility of a gas transit corridor from Kazakhstan and possibly, Turkmenistan across the Caspian Sea to Azerbaijan and Georgia and then through the Black Sea region to the EU. Investing in this route would support multiple pipelines that would strengthen EU energy security.

The so called "Nabucco" pipeline project – as part of the EU energy foreign policy – also falls in the area of the diversification of energy suppliers. Since 2002, there are plans for a new gas pipeline connecting the Caspian region (Azerbaijan/Iran if political conditions permit), Central Asia (Turkmenistan, Uzbekistan and Kazakhstan) and the Middle East (Egypt) via Turkey, Bulgaria, Romania, Hungary with Austria and further with the Central and Western European gas markets. The projected pipeline length is approximately 3,300 km, starting at the Georgian/Turkish and/or Iranian/Turkish border and leading to Baumgarten in Austria. The projected start of gas transportation is 2013. Initiator of the project is the Austrian OMV AG. In addition to OMV Gas International GMBH further owners are MOL from Hungary, Transgaz S.A. from Romania, Bulgargaz Holding EAD from Bulgaria and BOTAÞ Petroleum Pipeline Corporation from Turkey (each with 20% at the Nabucco Gas Pipeline International GmbH). In February 2008, German RWE became the sixth partner. Other partners could join the consortium. Interested firms are Gaz de France, Total and Eon Ruhrgas.

In spring 2006, the Nabucco project entered the stage of EU energy policy. At that time, the European Council asked the Commission for recommendations for a future energy foreign policy. One year later, the Council agreed on the European Energy Action Plan with the three goals of security of supply, efficiency and environmental compatibility, in which the strategic importance of the Nabucco project for the European energy supply is emphasized. Nabucco is characterized as one of several "preferential projects of European interest" for a future common energy foreign policy.

However, Russia and Gazprom have not sat on their hands and initiated an alternative Russian-Italian gas pipeline project, the "South Stream", which will run on the seabed of the Black Sea and will link as a start the Russian seaport Novorossijsk with the Bulgarian city Varna. On 22 November 2007 Gazprom and the Italian ENI signed in the Kremlin an agreement for a feasibility study in the presence of the Russian president Vladimir Putin and the Italian prime minister Romano Prodi. At 18 January 2008 Bulgaria also agreed to that pipeline project and a corresponding agreement was signed during a visit of Vladimir Putin in Sofia. Furthermore, on 25 January 2008 Serbia joined the project.

Nevertheless, Georgia's importance is limited. It is merely a transit state, far less 'strategic' than Ukraine, for example, as the volumes of gas being supplied to Europe via Georgia compared to gas supplied to Europe via Ukraine are far smaller - the difference is that the EU is making a political issue out of it, since gas coming

into the EU via Ukraine is Russian, whereas gas coming to EU via Georgia would be non-Russian (Azeri, potentially Turkmen and Kazakh in the future). The push for non-Russian gas supplies in the EU is making this a political issue and thus there is more 'strategic importance' being placed on this.

Currently, Georgia imports gas from Russia. This threatens its energy security and creates tense political relations with Russia, mainly due to the fact that Russia is not interested in losing control over the revenues from Caspian energy. In early 2006, the Georgian government announced that it was considering selling its main local network of gas pipelines to Gazprom, which connects Russia to Armenia via Georgia. It was meant to give Gazprom economic influence in the region. But the deal was not completed because the Americans disrupted negotiations. Just after the failure of the deal, Russia announced an embargo on wine and mineral water and closed railway and airway connections with Georgia.

Due to the Russia's dominant position, the EU's active role in helping Georgia in its relations with Russia may be important. Toward this end, Georgia's foreign policy is decidedly pro-Western. It (as well as its neighbours) ratified in 2005[7] the Energy Charter Treaty (ECT) and was accepted as an observer in the Energy Community, as established by the Energy Community Treaty of 1 July 2006, at the Ministerial meeting held in Belgrade on 17 December 2007.

The general objective of the Energy Community is to create a stable regulatory and market framework, the main instrument of which is to implement key parts of the EU legislation (the electricity and gas directives and regulations, key environmental directives, in particular the Environmental impact assessment directive, key directives on renewable and biofuels and the main principles of EU competition policy). It would therefore help Georgia to create the legal framework for an integrated energy market with the EU in both the electricity and natural gas sectors, strengthen national institutional capacities, adapt legislation and regulation to EU norms, avoid discrimination on tariffs from energy suppliers, and improve the utilization of supply and production capacities of electricity.

The ECT treaty has good rules on investment protection as well as transit and dispute settlement. For trade and transports the principles of the GATT were stipulated. However Russia has refused to ratify the Energy Charter Treaty (although it has signed it), and also refused meaningful negotiations over a draft 'Transit Protocol', which would give additional provisions on access to pipelines for transit.

The energy sector is also prominently taken into account in the ENP Action Plan for Georgia in the prioriy area 8 "Transport and Energy" as well as in the "General Objectives and Actions". Besides the objectives and actions concerning "Energy policy convergence towards EU energy policy objectives", "Gradual convergence towards the principles of the EU internal electricity and gas markets" and "Progress regarding energy networks" there are also clear objectives and actions with regard to the "Progress on energy efficiency and the use of renewable energy sources", namely:

- Take steps to develop an action plan including a financial plan for improving energy efficiency and enhancing the use of renewable energy;
- Adopt legislation addressing energy efficiency and renewable energy. Currently the Georgian government is developing with the assistance of USAID and GEPLAC two new pieces of legislation on renewable energy and energy efficiency. The aim is to finalise them by July 2008;
- Reinforce the institutions dealing with energy efficiency and renewable energy sources;
- Implement a set of measures in this area.
- One concrete measure is e.g. the implementation of the Energy Efficiency Centre (EEC) Georgia.

### 10.2.3. Potential Impact of an FTA

Since new developments in the Georgian energy sector are considered by the Georgian government as a success story, it cannot be expected that a Simple FTA will stimulate in the short run any further improvement in the functioning of this sector. Some limited positive impact, especially with regard to the attraction of European foreign investors, can perhaps be expected in the longer term perspective with a Deep FTA+, assuming that improved trade relations and the branding of an FTA with the EU generally enhances the confidence of foreign investors. A Deep FTA+ could have, at least in the medium term, a potential for bringing a more significant change to the sector, assuming it would entail changes in the legal and regulatory framework and particularly in its implementation.

In general, the Georgian energy sector depends primarily on strategic pipeline decisions, and not on an FTA. An exception may be the hydropower sector.

## 10.3. Summary

Neither for the agro-food sector nor for the energy sector can it be expected that a Simple FTA/Simple FTA BIS will have a large impact. With regard to the agro-food sector, a Deep FTA only might matter if it increases the incentives to adopt EU regulations and quality standards to a larger extent than the already existing measures (GSP/GSP+, PCA and ENP Action Plan). With regard to the service sector, the EU has a strategic interest to diversify its energy supply and particularly with regard to gas to find alternatives to deliveries from Russia. In a comprehensive EU energy foreign policy Georgia might play – at least as a transit country – an important role. Thus the impact of a Deep FTA depends on its ability to facilitate the integration in such a policy with measures which are beyond those already implemented e.g. in the Energy Charter Treaty, the Energy Community Treaty and the ENP Action Plan.

# 11. Conclusions

1. The preceding chapters of this report have examined in some detail key aspects of the Georgian economy and its regulatory environment and possibilities of its integration with the EU. Below we summarize our major conclusions and policy recommendations with regard to a range of scenarios, ranging from simple free trade to very deep and comprehensive free trade between the EU and Georgia. We start with two variants of a simple free trade agreement (FTA) assuming the elimination of tariffs and quantitative restrictions in the bilateral trade between Georgia and the EU. The first **Simple FTA** scenario assumes full liberalization of trade in industrial products and halving of tariffs and elimination of all quantitative restrictions on agricultural and food products on Georgian exports to the EU and vice versa. The second **Simple FTA BIS** scenario assumes full elimination of tariffs and quantitative restrictions on all products in the bilateral trade between Georgia and the EU. Further, we look at three Deep FTAs. The Deep FTAs assume various degrees of changes in the domestic policy and business environment affecting trade and investment in Georgia. An **FTA+** combines a Simple FTA with a consolidation of the domestic reforms that took place over the recent years in a binding agreement. The FTA+ could consolidate measures such as unilateral recognition of EU and international product standards and facilitation of customs procedures. Furthering the level of integration via a **Deep FTA** would involve a further more complete elimination of barriers to trade and investment throughout various sectors of the economy. This would also result in a more extensive commitment to the reform of domestic policies in the direction of EU standards in Georgia. Finally, the comprehensive set of reforms resulting from the Deep FTA along with more wide-ranging flanking measures e.g. on competition and corruption could lead to a re-branding of Georgia as a favourable investment location. This is our scenario **Deep FTA+** where we assume that Georgia would achieve a notable reduction in the perceived risk premium on investment.

2. Georgia would appear to have a great potential for generating further growth in GDP through the redeployment of labour into more productive activities, as indicated by the extent of both unemployment and underemployment in agriculture. Figures for growth in industrial output for recent years suggest that there is substantial scope for industry to drive GDP growth in future years on the basis of such a redeployment. The full exploitation of this potential would require significant flanking measures relating primarily to reliability of the general rule of law, and levels of corruption and efficiency in courts, government departments, and in the governance of private-sector organizations along the lines set out in the ENP EU/Georgia Action Plan.
3. Our 'Sussex Framework' based analysis suggests that the tariff liberalization achieved so far by Georgia should be expected to increase Georgia's trade with its main partners, as well as to induce some welfare-increasing trade re-orientation from CIS supply sources towards non-CIS partners. The risks of welfare-decreasing trade diversion from the Simple EU-Georgia FTA as a result of shallow integration are also low for both Georgia and the EU. From Georgia's perspective, the most substantial welfare gains could arise from deeper integration, with a greater level of Georgia's regulatory and institutional approximation with the EU acquis, i.e through a deep and comprehensive FTA. Therefore, the continuation of the profound economic reforms in accordance with the ENP Action Plan and best practice is of primary importance for Georgia. Although the diversity of Georgia's exports to the EU is limited, it is broader than some of its neighbours, suggesting a range of economic activities where existing exporting firms could expand their activity and where new firms can see the advantages of entering the export sector.
4. Survey results indicate that Georgian firms do not feel much burden resulting from NTBs in European markets; however this perception might be misleading. Firstly, Georgian exports to the EU include mostly mineral and raw materials that satisfy EU regulations with little difficulty. There are just two agricultural products exported to the EU – wine and hazelnuts, which have special (and rather easy to comply with) arrangements for SPS conformity certification. Secondly, manufacturing products are often produced under special arrangements similar to the outward processing scheme. Under such arrangements, the Georgian firms provide production services rather than the finished product. European partners take care of most of the logistical issues and required certifications. The major reason why the average Georgian company does not export to the EU is because it cannot offer an attractive product meeting quality and safety standards of the European market. A Deep

FTA could provide stronger incentives for upgrading of product quality and safety standards by respectively ensuring better access to the EU market and by introducing binding changes to domestic legislation.

5. Analysing the institutional capacity to implement a Deep FTA with the EU we note that the human resources of the Government bodies are uneven in terms of education, qualifications, and international experience. The majority of staff has limited understanding of European regulations, international practices, and foreign languages. In a Deep FTA, flanking measures will probably go along the path outlined in the PCA and ENP Action Plan, so the implementation of Georgia's commitments taken under the PCA and ENP Action Plan could serve as a guide of the Government capability to implement a more challenging agreement. As recent experience shows, Georgia has been progressing in legal harmonization with the EU. However, implementation of statutory laws and obligations remains a problem in many areas, as was stressed in this report. Laws on the books and obligation under the PCA and ENP Action Plan did not stop Georgia from effectively scrapping the enforcement of SPS measures and product standards until the time when the markets demonstrate the need for such institutions and export capacity develop. Therefore, implementation of the flanking measures would be seriously influenced by the stance of the Georgian Government on the practical economic policies of the day.
6. In terms of the likely impact of a Deep FTA+ on foreign direct investment flows, we conclude that even though the years 2006-2007 brought significant increase in FDI inflows to Georgia, FDI has been primarily resource and market driven. The opportunities in the pipeline transportation sector may soon diminish. Meanwhile, market-seeking motive will most likely be a dominant one for the non-tradable sectors in Georgia. The most plausible new sectors for increased FDI are in the service sectors, both for business services if Georgia becomes a regional transport and commercial hub and for tourism. In addition it is possible to envisage the emergence of labour-seeking motives for FDI, starting perhaps with investments from neighbouring Turkey in view of their recently agreed FTA.
7. We also anticipate that potential inward FDI to Georgia resulting from deepening of the trade relationship with the EU would be substantially higher than the current flows. Some simulations suggest that the FDI stock in Georgia could increase up to five-fold until 2020, but this has to be considered a rather optimistic figure, since it assumes that Georgia succeeds in its transition reforms to the extent of approaching the current level proxied by the case of Bulgaria, which, it must be acknowledged, has been boosted by the incentives of EU accession which are not available for Georgia.

8. Looking at the possible impact of an FTA on the service sectors, we conclude that Georgia has already gone beyond the content of a Simple FTA, given the important structural reforms achieved in recent years. Deeper free trade could, in contrast, have a much more substantial impact, and could help to transform some sub-sectors. An effective Deep FTA would need far-reaching flanking measures, some of which may be difficult to incorporate into a trade agreement. Many of these important flanking measures – strengthening the rule of law, improving the general business climate, combating corruption and reinforcing the authority of competition policy, are listed under the priorities of the EU/Georgia Action Plan. In this context a Deep FTA could therefore be seen as complementary to continued implementation of the Action Plan.
9. For the agro-food sector, it is well known that the most important constraints on trade are not tariffs but product standards and regulations. With regard to the agro-food sector, a Deep FTA is more likely to be significant if it increases the incentives to adopt EU regulations and quality standards to a larger extent than the already existing measures (GSP/GSP+, PCA and ENP Action Plan).
10. With regard to the energy sector, the EU has a strategic interest to diversify its energy supply and particularly with regard to gas to find alternatives to deliveries from Russia. In a comprehensive EU energy foreign policy Georgia might play – at least as a transit country – an important role. The content of a Deep FTA in this sector could for example see Georgia aiming to accede to the Energy Community Treaty, completing its existing participation in the Energy Charter Treaty.
11. Our analysis using a CGE model indicates that the welfare gains for Georgia from its unilateral tariff liberalisation of trade in goods along with the recognition of foreign product standards that took place in 2006 combined with the EU's granting it GSP+ under its new GSP scheme are likely to amount to around 1% of GDP. Since following the above liberalization of 2006 Georgia has unilaterally eliminated most of its tariffs and already enjoys largely tariff-free access to the EU market, an EU-Georgia Simple FTA/Simple FTA BIS would bring very small additional welfare effects to Georgia. Our assessment is that further gains from an FTA+ which could lock-in Georgia's reforms would lead to a boost in investors' confidence and a lowering of the risk to invest in Georgia. Our results indicate that possible additional welfare gains of the FTA+ could amount to 2.4% of GDP.
12. Furthering the level of integration via a Deep FTA would involve a more complete elimination of barriers to trade and investment. This would result in a more extensive commitment to the reform of domestic policies in the direction

of EU standards. The additional welfare gains from elimination of selected NTBs could amount to 1.7% of GDP. Additional flanking measures on competition and corruption could lead to a reduction of the risk premium on investment, which would work as an additional mechanism for boosting both investment and GDP growth as a whole – this is the Deep FTA+ scenario. If this was to occur, from our model simulations, we envisage the possibility of economic gains from a Deep FTA+ reaching as much as 6.5% of GDP (on the top of the ones reached out of the 2006 liberalisation).

13. In conclusion: Overall we conclude that a free trade agreement between Georgia and the EU is feasible, since Georgia has already taken liberalising measures going considerably beyond a classic Simple FTA and on the other hand Georgia benefits from the EU GSP+. We analyze the range of scenarios for deep integration that show the benefits of the various degrees of integration. The final degree of deep integration would be a result of negotiations between Georgia and the EU and is not up to us to anticipate. The greatest benefits would accrue with a Deep FTA+ involving a significant approximation of law along the priorities of the ENP Action Plan for Georgia along with additional flanking measures on e.g. competition and corruption and their effective implementation, which would mean a re-branding of Georgia as a safe and attractive investment location. At the same time, given the current progress with the implementation of the ENP Action Plan, serious questions remain as to both the willingness and institutional capacity of Georgia to undertake further commitments in the regulatory area. We note that the human resources of the Government bodies are uneven in terms of education, qualifications, and international experience. However, this situation could be eased with technical assistance.

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# Appendix 1

# Sussex Framework – Additional Tables

**Appendix 1 Table 1. Top 15 export sectors by export share in 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | % share in total exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 720230 | Ferro-silico-manganese | 1.44% | 76.16 | 8.46% | 525.36 |
| 260300 | Copper ores and concentrates | 6.73% | 56.32 | 8.02% | 31.16 |
| 720449 | Ferrous waste and scrap, iron or steel, other | 0.00% | 0.00 | 5.53% | 39.90 |
| 080222 | Hazelnuts without shells | 0.51% | 42.21 | 5.45% | 520.25 |
| 710813 | Gold in other semi-manufactured forms | 0.00% | 0.00 | 4.88% | 32.95 |
| 310230 | Ammonium nitrate | 5.86% | 291.96 | 4.70% | 342.01 |
| 870323 | Automobiles Of a cylinder capacity exceeding 1 | 0.00% | 0.00 | 4.23% | 2.25 |
| 220421 | Sparkling wine In containers holding 2 l or less | 1.43% | 8.63 | 3.99% | 26.70 |
| 740400 | Copper waste and scrap | 0.00% | 0.00 | 3.04% | 21.20 |
| 220820 | Spirits obtained by distilling grape wine | 0.41% | 7.05 | 2.57% | 81.93 |
| 270900 | Petroleum oils and oils obtained from bituminous minerals, crude | 3.38% | 0.95 | 2.57% | 0.52 |
| 220110 | Mineral waters and aerated waters | 2.46% | 125.83 | 2.42% | 123.95 |
| 220210 | Waters, including mineral waters | 1.94% | 53.43 | 2.32% | 45.90 |
| 880230 | Aeroplanes and other aircraft | 0.00% | 0.00 | 1.90% | 13.27 |
| 170199 | Cane or beet sugar, in solid form | 0.00% | 0.00 | 1.90% | 20.91 |
| **Total** | | **12.08%** | | **61.98%** | |
| **Average** | | | **44.2** | | **121.88** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit.

**Appendix 1 Table 2. Top 15 export sectors by RCA in 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | % share in total exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 720230 | Ferro-silico-manganese | 1.44% | 76.16 | 8.46% | 525.36 |
| 080222 | Hazelnuts without shells | 0.51% | 42.21 | 5.45% | 520.25 |
| 284590 | Other isotopes | 0.17% | 133.27 | 0.47% | 418.52 |
| 080221 | Hazelnuts in shell, fresh or dried | 0.25% | 411.30 | 0.23% | 351.44 |
| 310230 | Ammonium nitrate | 5.86% | 291.96 | 4.70% | 342.01 |
| 252321 | White Portland cement | 0.00% | 0.02 | 0.92% | 263.93 |
| 091040 | Thyme; bay leaves | 0.63% | 808.29 | 0.13% | 245.33 |
| 252390 | Other hydraulic cements | 0.0001% | 0.01 | 0.88% | 214.65 |
| 283711 | Cyanides and cyanide oxides of sodium | 0.77% | 245.17 | 0.38% | 147.36 |
| 440792 | Beech (Fagus spp.) wood | 0.004% | 0.34 | 0.94% | 140.59 |
| 880400 | Parachutes | 0.00% | 0.00 | 0.18% | 129.39 |
| 220110 | Mineral waters and aerated waters | 2.46% | 125.83 | 2.42% | 123.95 |
| 880211 | Helicopters Of an unladen weight | 0.00% | 0.00 | 1.71% | 116.06 |
| 731300 | Barbed wire of iron or steel; twist | 0.00% | 0.00 | 0.14% | 106.30 |
| 870490 | Trucks nes | 0.002% | 0.96 | 0.32% | 104.33 |
| **Total** | | **12.08%** | | **27.33%** | |
| **Average** | | | **142.37** | | **249.96** |

Source: WITS. Note: Georgia's data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit.

**Appendix 1 Table 3. Top 15 export sectors by export share in 1996, HS 6 digit**

| HS code | Description | % share in total exports | RCA | % share in total exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 271000 | Petroleum oils, etc, (excl. crude) | 8.74% | 24.64 | 0.00% | 0.00 |
| 260300 | Copper ores and concentrates | 6.73% | 56.32 | 8.02% | 31.16 |
| 271600 | Electrical energy | 6.60% | 37.81 | 0.23% | 0.82 |
| 310230 | Ammonium nitrate | 5.86% | 291.96 | 4.70% | 342.01 |
| 730410 | Pipes, line, iron or steel, smls | 5.29% | 145.04 | 0.00% | 0.08 |
| 490700 | New stamps; stamp-impressed paper; | 5.06% | 356.71 | 0.00% | 0.19 |
| 090240 | Black tea (fermented) | 4.10% | 297.13 | 0.09% | 20.06 |
| 080520 | Mandarins, clementines, wilkings | 4.04% | 111.79 | 0.25% | 11.37 |
| 270900 | Petroleum oils and oils obtained from bituminous minerals, crude | 3.38% | 0.95 | 2.57% | 0.52 |
| 090220 | Green tea, nes | 2.67% | 982.51 | 0.06% | 29.00 |
| 220110 | Mineral waters and aerated waters | 2.46% | 125.83 | 2.42% | 123.95 |
| 720211 | Ferro-manganese, containing by weig | 2.41% | 322.08 | 0.40% | 56.73 |
| 100190 | Spelt, common wheat and meslin | 2.03% | 5.22 | 0.63% | 3.90 |
| 220210 | Waters (incl. mineral and aerated) | 1.94% | 53.43 | 2.32% | 45.90 |
| 730420 | Casings,tubing&drill pipe,i/st,smls | 1.68% | 31.11 | 0.00% | 0.00 |
| **Total** | | **62.99%** | | **21.70%** | |
| **Average** | | | **189.50** | | **44.38** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit.

**Appendix 1 Table 4. Top 15 export sectors by RCA in 1996, HS 6 digit**

| HS code | Description | % share in total exports | RCA | % share in total exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 090220 | Green tea, nes | 2.67% | 982.51 | 0.06% | 29.00 |
| 091040 | Thyme, bay leaves | 0.63% | 808.29 | 0.13% | 245.33 |
| 283429 | Nitrates of barium; of beryllium | 1.08% | 734.21 | 0.00% | 0.00 |
| 220810 | Compound alcoholic preparations | 0.27% | 616.42 | 0.00% | 0.00 |
| 550610 | Synthetic staple fibres, of nylon | 0.28% | 498.46 | 0.00% | 0.00 |
| 080221 | Hazelnuts in shell, fresh or dried | 0.25% | 411.30 | 0.23% | 351.44 |
| 490700 | New stamps; stamp-impressed paper; | 5.06% | 356.71 | 0.00% | 0.19 |
| 720211 | Ferro-manganese, containing by weig | 2.41% | 322.08 | 0.40% | 56.73 |
| 090240 | Black tea (fermented) | 4.10% | 297.13 | 0.09% | 20.06 |
| 310230 | Ammonium nitrate | 5.86% | 291.96 | 4.70% | 342.01 |
| 283711 | Cyanides and cyanide oxides | 0.77% | 245.17 | 0.38% | 147.36 |
| 440392 | Beech (Fagus spp.) wood in the roug | 0.88% | 176.85 | 0.01% | 4.58 |
| 320642 | Lithopone and other pigments | 0.19% | 146.17 | 0.01% | 12.15 |
| 730410 | Pipes, line, iron or steel, smls | 5.29% | 145.04 | 0.003% | 0.08 |
| 282010 | Manganese dioxide | 0.33% | 143.62 | 0.01% | 5.50 |
| **Total** | | **30.07%** | | **6.03%** | |
| **Average** | | | **411.73** | | **62.67** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit

**Appendix 1 Table 5. Top 15 export sectors by export share in 2006, non-agricultural exports, HS 6 digit**

| HS code | Description | % share in non-agri exports | RCA | % share in non-agri exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 720230 | Ferro-silico-manganese | 2.06% | 98.21 | 11.09% | 643.07 |
| 260300 | Copper ores and concentrates | 9.63% | 72.63 | 10.51% | 38.15 |
| 720449 | Ferrous waste and scrap, iron or st | 0.00% | 0.00 | 7.25% | 48.84 |
| 710813 | Gold in other semi-manufactured forms | 0.00% | 0.00 | 6.39% | 40.33 |
| 310230 | Ammonium nitrate | 8.39% | 376.51 | 6.16% | 418.63 |
| 870323 | Automobiles with reciprocating pist | 0.00% | 0.00 | 5.55% | 2.76 |
| 740400 | Waste and scrap, copper | 0.00% | 0.00 | 3.99% | 25.95 |
| 270900 | Petroleum oils and oils obtained from bituminous minerals, crude | 4.85% | 1.23 | 3.36% | 0.64 |
| 880230 | Aircraft nes of an unladen weight > | 0.00% | 0.00 | 2.49% | 16.24 |
| 880211 | Helicopters of an unladen weight no | 0.00% | 0.00 | 2.23% | 142.06 |
| 760200 | Waste and scrap, aluminium | 0.00% | 0.00 | 1.83% | 18.76 |
| 720429 | Waste and scrap, of alloy steel, othr | 0.00% | 0.00 | 1.63% | 71.45 |
| 440792 | Beech (Fagus spp.) wood | 0.01% | 0.43 | 1.23% | 172.09 |
| 252321 | White portland cement | 0.00% | 0.02 | 1.21% | 323.07 |
| 252390 | Other hydraulic cements | 0.00% | 0.01 | 1.15% | 262.74 |
| **Total** | | **24.94%** | | **66.08%** | |
| **Average** | | | **36.60** | | **148.32** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit

**Appendix 1 Table 6. Top 15 export sectors by RCA in 1996, non-agricultural exports, HS 6 digit**

| HS code | Description | % share in non-agri exports | RCA | % share in non-agri exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 720230 | Ferro-silico-manganese | 2.06% | 98.21 | 11.09% | 643.07 |
| 284590 | Other isotopes | 0.25% | 171.86 | 0.61% | 512.30 |
| 310230 | Ammonium nitrate | 8.39% | 376.51 | 6.16% | 418.63 |
| 252321 | White portland cement | 0.00% | 0.02 | 1.21% | 323.07 |
| 252390 | Other hydraulic cements, etc | 0.00% | 0.01 | 1.15% | 262.74 |
| 283711 | Cyanides and cyanide oxides | 1.10% | 316.17 | 0.50% | 180.38 |
| 440792 | Beech (Fagus spp.) wood | 0.01% | 0.43 | 1.23% | 172.09 |
| 880400 | Parachutes and parts | 0.02% | 7.88 | 0.24% | 158.38 |
| 880211 | Helicopters of an unladen weight | 0.00% | 0.00 | 2.23% | 142.06 |
| 731300 | Wire, barbed, twisted hoop | 0.00% | 0.00 | 0.18% | 130.12 |
| 870490 | Trucks nes | 0.00% | 1.24 | 0.42% | 127.70 |
| 360490 | Signalling flares | 0.00% | 0.00 | 0.11% | 87.79 |
| 720429 | Waste and scrap, of alloy steel | 0.00% | 0.00 | 1.63% | 71.45 |
| 720211 | Ferro-manganese | 3.45% | 415.35 | 0.52% | 69.44 |
| 841210 | Reaction engines nes | 0.04% | 9.62 | 0.24% | 66.54 |
| **Total** | | **15.31%** | | **27.53%** | |
| **Average** | | | **93.15** | | **224.39** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit.

**Appendix 1 Table 7. Top 15 export sectors to the EU27 by export share in 2006, HS 6 digit**

| HS code | Description | % share in GE-EU exports | RCA | % share in GE-EU exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 260300 | Copper ores and concentrates | 41.53% | 3405.21 | 26.87% | 1353.55 |
| 080222 | Hazelnuts without shells | 0.72% | 127.29 | 17.99% | 6012.56 |
| 220210 | Waters, including mineral waters | 0.00% | 0.00 | 8.27% | 85.72 |
| 270900 | Petroleum oils and oils obtained from bituminous minerals, crude | 0.00% | 0.00 | 5.86% | 8.09 |
| 310230 | Ammonium nitrate, whether or not | 8.52% | 493.93 | 5.21% | 462.46 |
| 842911 | Self-propelled bulldozers and angledozers, track laying | 0.00% | 0.00 | 2.29% | 100.69 |
| 720230 | Ferro-silico-manganese | 5.61% | 887.52 | 2.19% | 410.73 |
| 880230 | Aeroplanes and other aircraft | 0.00% | 0.00 | 1.80% | 20.15 |
| 284590 | Other isotopes | 0.07% | 72.98 | 1.69% | 2577.85 |
| 870410 | Dumpers designed for off highway use | 0.00% | 0.00 | 1.59% | 49.05 |
| 842952 | Machinery with a 360° revolving | 0.00% | 0.00 | 1.46% | 9.26 |
| 720421 | Of stainless steel | 0.00% | 0.00 | 1.42% | 12.09 |
| 220421 | Sparkling wine In containers holding 2 l or less | 2.29% | 7.17 | 1.35% | 5.11 |
| 843143 | Parts for boring or sinking machine | 0.00% | 0.00 | 1.31% | 19.19 |
| 200819 | Other nuts and seeds including mixtures | 0.00% | 0.00 | 1.28% | 101.87 |
| **Total** | | **58.74%** | | **80.59%** | |
| **Average** | | | **332.94** | | **748.56** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit

**Appendix 1 Table 8. Top 15 export sectors to the EU27 by RCA in 2006, HS 6 digit**

| HS code | Description | % share in GE-EU exports | RCA | % share in GE-EU exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 080222 | Hazelnuts without shells | 0.72% | 127.29 | 17.99% | 6012.56 |
| 284590 | Other isotopes | 0.07% | 72.98 | 1.69% | 2577.85 |
| 080221 | Hazelnuts in shell, fresh or dried | 0.92% | 1927.54 | 0.61% | 1654.36 |
| 260300 | Copper ores and concentrates | 41.53% | 3405.21 | 26.87% | 1353.55 |
| 310230 | Ammonium nitrate | 8.52% | 493.93 | 5.21% | 462.46 |
| 720230 | Ferro-silico-manganese | 5.61% | 887.52 | 2.19% | 410.73 |
| 260200 | Manganese ores and concentrates | 0.00% | 0.00 | 0.30% | 269.81 |
| 620413 | Women's or girls' suits Of synthetic fibres | 0.37% | 35.24 | 0.47% | 236.94 |
| 842920 | Graders and levellers | 0.00% | 0.00 | 0.42% | 136.72 |
| 120999 | Other seeds, fruit and spores | 2.31% | 1043.51 | 0.32% | 113.37 |
| 200819 | Other nuts and seeds including mixtures | 0.00% | 0.00 | 1.28% | 101.87 |
| 842911 | Self-propelled bulldozers and angledozers, track laying | 0.00% | 0.00 | 2.29% | 100.69 |
| 220210 | Waters, including mineral waters | 0.00% | 0.00 | 8.27% | 85.72 |
| 720219 | Ferro-manganese, nes | 0.00% | 0.00 | 0.17% | 85.67 |
| 110630 | Flour, meal and powder of products of Chapter 8 | 0.00% | 0.00 | 0.15% | 74.98 |
| **Total** | | **60.04%** | | **68.23%** | |
| **Average** | | | **532.88** | | **911.82** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit

**Appendix 1 Table 9. Top 15 export sectors to the EU27 by export share in 1996, HS 6 digit**

| HS code | Description | % share in GE-EU exports | RCA | % share in GE-EU exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 260300 | Copper ores and concentrates | 41.53% | 3405.21 | 26.87% | 1353.55 |
| 271000 | Petroleum oils, etc, (excl. crude) | 14.65% | 52.20 | 0.00% | 0.00 |
| 310230 | Ammonium nitrate | 8.52% | 493.93 | 5.21% | 462.46 |
| 720230 | Ferro-silicon-manganese | 5.61% | 887.52 | 2.19% | 410.73 |
| 283429 | Nitrates of barium; of beryllium; | 4.49% | 2991.65 | 0.00% | 0.00 |
| 391190 | Polysulphides, polysulphones | 3.71% | 26.50 | 0.00% | 0.00 |
| 200970 | Apple juice, unfermented | 3.43% | 93.60 | 0.00% | 0.00 |
| 120999 | Other seeds, fruit and spores | 2.31% | 1043.51 | 0.32% | 113.37 |
| 220421 | Wine (not sparkling); grape | 2.29% | 7.17 | 1.35% | 5.11 |
| 845730 | Multi-station transfer machines | 1.93% | 68.03 | 0.00% | 0.00 |
| 711290 | Waste scrap of precious metal | 1.56% | 224.50 | 0.00% | 0.00 |
| 730410 | Pipes, line, iron or steel, smls | 1.05% | 35.02 | 0.00% | 0.04 |
| 080221 | Hazelnuts in shell, fresh or dried | 0.92% | 1927.54 | 0.61% | 1654.36 |
| 080222 | Hazelnuts without shells | 0.72% | 127.29 | 17.99% | 6012.56 |
| 730791 | Flanges, iron or steel, nes. | 0.52% | 25.34 | 0.00% | 0.00 |
| **Total** | | **93.23%** | | **54.54%** | |
| **Average** | | | **760.60** | | **511.13** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit

**Appendix 1 Table 10. Top 15 export sectors to the EU27 by RCA in 1996, HS 6 digit**

| HS code | Description | % share in GE-EU exports | RCA | % share in GE-EU exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 220810 | Compound alcoholic preparations | 0.04% | 16899.50 | 0.00% | 0.00 |
| 260300 | Copper ores and concentrates | 41.53% | 3405.21 | 26.87% | 1353.55 |
| 283429 | Nitrates of barium; of beryllium; | 4.49% | 2991.65 | 0.00% | 0.00 |
| 080221 | Hazelnuts in shell, fresh or dried | 0.92% | 1927.54 | 0.61% | 1654.36 |
| 120999 | Other seeds, fruit and spores | 2.31% | 1043.51 | 0.32% | 113.37 |
| 720230 | Ferro-silico-manganese | 5.61% | 887.52 | 2.19% | 410.73 |
| 310230 | Ammonium nitrate | 8.52% | 493.93 | 5.21% | 462.46 |
| 711290 | Waste&scrap of precious metal | 1.56% | 224.50 | 0.00% | 0.00 |
| 091040 | Thyme, bay leaves | 0.10% | 179.77 | 0.03% | 53.51 |
| 080120 | Brazil nuts, fresh or dried | 0.06% | 171.20 | 0.00% | 0.00 |
| 080222 | Hazelnuts without shells, fresh or | 0.72% | 127.29 | 17.99% | 6012.56 |
| 200970 | Apple juice, unfermented | 3.43% | 93.60 | 0.00% | 0.00 |
| 845970 | Threading or tapping machines nes | 0.20% | 82.09 | 0.00% | 0.00 |
| 520811 | Unbleached plain cotton weave | 0.26% | 73.97 | 0.00% | 0.00 |
| 500390 | Silk waste, carded or combed | 0.02% | 73.70 | 0.00% | 0.00 |
| **Total** | | **69.75%** | | **53.22%** | |
| **Average** | | | **1911.67** | | **670.70** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit.

**Appendix1 Table 11 Top 15 export sectors to the EU27 by export share in 2006, non-agricultural exports, HS 6 digit**

| HS code | Description | % share in non-agri GE-EU exports | RCA | % share in non-agri GE-EU exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 260300 | Copper ores and concentrates | 47.40% | 3472.15 | 39.80% | 1844.48 |
| 270900 | Petroleum oils and oils obtained from bituminous minerals, crude | 0.00% | 0.00 | 8.68% | 11.02 |
| 310230 | Ammonium nitrate | 9.72% | 503.64 | 7.71% | 630.19 |
| 842911 | Bulldozers and angledozers, crawler | 0.00% | 0.00 | 3.39% | 137.20 |
| 720230 | Ferro-silico-manganese | 6.40% | 904.97 | 3.25% | 559.70 |
| 880230 | Aircraft nes of an unladen weight > | 0.00% | 0.00 | 2.67% | 27.45 |
| 284590 | Other isotopes and their inorganic | 0.09% | 74.42 | 2.50% | 3512.84 |
| 870410 | Dump trucks designed for off-highway | 0.00% | 0.00 | 2.36% | 66.84 |
| 842952 | Shovels and excavators with a 360 | 0.00% | 0.00 | 2.16% | 12.62 |
| 720421 | Waste and scrap, stainless steel | 0.00% | 0.00 | 2.11% | 16.48 |
| 843143 | Parts of boring or sinking machinery | 0.00% | 0.00 | 1.94% | 26.15 |
| 711590 | Articles of precious metal or of me | 0.00% | 0.00 | 1.58% | 60.40 |
| 740400 | Waste and scrap, copper or copper | 0.00% | 0.00 | 0.94% | 5.07 |
| 330590 | Preparations for use on the hair | 0.00% | 0.00 | 0.85% | 12.60 |
| 841229 | Hydraulic power engines & motors nes | 0.00% | 0.00 | 0.83% | 25.61 |
| **Total** | | 63.61% | | **80.76%** | |
| **Average** | | | 330.35 | | **463.24** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit.

**Appendix 1 Table 12. Top 15 export sectors to the EU27 by RCA in 2006, non-agricultural exports, HS 6 digit**

| HS code | Description | % share in non-agri GE-EU exports | RCA | % share in non-agri GE-EU exports | RCA |
|---|---|---|---|---|---|
| | | 1996 | | 2006 | |
| 284590 | Other isotopes and their inorganic | 0.09% | 74.42 | 2.50% | 3512.84 |
| 260300 | Copper ores and concentrates | 47.40% | 3472.15 | 39.80% | 1844.48 |
| 310230 | Ammonium nitrate | 9.72% | 503.64 | 7.71% | 630.19 |
| 720230 | Ferro-silico-manganese | 6.40% | 904.97 | 3.25% | 559.70 |
| 260200 | Manganese ores and concentrates | 0.00% | 0.00 | 0.44% | 367.67 |
| 620413 | Women's or girls' suits of synthetic | 0.42% | 35.94 | 0.70% | 322.87 |
| 842920 | Graders and levellers, self-propellers | 0.00% | 0.00 | 0.62% | 186.30 |
| 842911 | Bulldozers and angledozers, crawler | 0.00% | 0.00 | 3.39% | 137.20 |
| 720219 | Ferro-manganese, nes | 0.00% | 0.00 | 0.25% | 116.74 |
| 870410 | Dump trucks designed for off-highway | 0.00% | 0.00 | 2.36% | 66.84 |
| 842790 | Trucks fitted with lifting or handl | 0.00% | 0.00 | 0.69% | 63.78 |
| 711590 | Articles of precious metal or of me | 0.00% | 0.00 | 1.58% | 60.40 |
| 282090 | Manganese oxides (excl. manganese | 0.00% | 0.00 | 0.04% | 56.35 |
| 440799 | Wood, nes sawn or chipped lengthwis | 0.00% | 0.00 | 0.71% | 47.68 |
| 410221 | Pickled skins of sheep or lambs | 0.00% | 0.00 | 0.03% | 36.62 |
| **Total** | | **64.03%** | | **64.06%** | |
| **Average** | | | **332.74** | | **533.98** |

Source: WITS. Note: data for 2006 – HS 2002 6-digit, for 1996 –HS 1996 6-digit

**Appendix 1 Table 13. Top 15 export sectors of the EU27, 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | HS code | Description | % share in total exports | RCA |
|---|---|---|---|---|---|---|---|
| | **by export share** | | | | **by RCA** | | |
| 271000 | Petroleum oils, etc, (excl. crude) | 3.45% | 0.92 | 070521 | Witloof chicory, fresh or chilled | 0.00% | 2.47 |
| 300490 | Other medicaments of mixed or unmixed | 3.25% | 1.86 | 040640 | Blue-veined cheese | 0.01% | 2.47 |
| 870323 | Motor cars principally designed for the transport of persons with spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1.500 cm³ but <= 3.000 cm³ | 2.23% | 1.19 | 310490 | Mineral or chemical fertilizers | 0.03% | 2.46 |
| 852520 | Transmission apparatus | 2.11% | 1.21 | 120911 | Sugar beet seed | 0.01% | 2.45 |
| 870332 | Motor cars principally designed for the transport of persons with compression-ignition internal combustion piston engine "diesel or semi-diesel" of a cylinder capacity > 1.500 cm³ but <= 2.500 cm³ | 1.92% | 2.11 | 020731 | Fresh or chilled fatty livers | 0.00% | 2.45 |
| 847330 | Parts and accessories of automatic data processing machines or for other machines of heading 8471, n.e.s. | 1.13% | 0.59 | 290260 | Ethyl benzene | 0.00% | 2.43 |
| 870899 | Motor vehicle parts nes | 1.10% | 1.24 | 253020 | Kieserite and epsomite "natural magnesium sulphates" | 0.00% | 2.42 |
| 870324 | Motor cars principally designed for the transport of persons with spark-ignition internal combustion reciprocating piston engine of a cylinder capacity >3000 cm³ | 1.01% | 0.86 | 151000 | Other oils and their fractions | 0.01% | 2.41 |
| 880240 | Aircraft nes of an unladen weight | 0.91% | 1.14 | 220510 | Vermouth and other wine of fresh grape | 0.01% | 2.40 |
| 854211 | Monolithic integrated circuits | 0.79% | 0.42 | 550490 | Artificial staple fibres | 0.02% | 2.40 |
| 270900 | Petroleum oils and oils obtained from bituminous minerals, crude | 0.72% | 0.15 | 220850 | Gin and Geneva | 0.01% | 2.39 |
| 870322 | Motor cars principally designed for the transport of persons with spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1.000 cm³ but <= 1.500 cm³ | 0.68% | 1.45 | 870331 | Motor cars principally designed for the transport of persons with compression-ignition internal combustion piston engine "diesel or semi-diesel" of a cylinder capacity <= 1.500 cm³ | 0.41% | 2.38 |
| 852810 | Television receivers | 0.63% | 0.90 | 250870 | Chamotte or dinas earths | 0.00% | 2.38 |
| 271121 | Natural gas in gaseous state | 0.63% | 0.56 | 530121 | Flax, broken or scotched | 0.01% | 2.37 |
| 847191 | Digital process units | 0.57% | 1.31 | 292141 | Aniline and its salts | 0.02% | 2.37 |
| | **Total** | **21.13%** | | | | **0.54%** | |
| | **Average** | | **1.06** | | | | **2.42** |

Source: WITS

**Appendix1 Table 14 RCA correlation coefficients, HS 6 digit, 2006**

| | Georgia | Armenia | Azerbaijan | Ukraine | Russia | Iran | Turkey |
|---|---|---|---|---|---|---|---|
| Armenia | 0.052 | 1 | | | | | |
| Azerbaijan | 0.094 | -0.004 | 1 | | | | |
| Ukraine | 0.031 | 0.016 | 0.001 | 1 | | | |
| Russia | 0.044 | -0.005 | 0.014 | 0.061 | 1 | | |
| Iran | -0.003 | -0.001 | -0.001 | -0.007 | -0.009 | 1 | |
| Turkey | 0.195 | -0.007 | 0.069 | -0.019 | -0.043 | 0.018 | 1 |
| EU27 | -0.021 | -0.022 | -0.024 | -0.131 | -0.091 | 0.009 | -0.059 |

Source: WITS

# Appendix 2

# Sussex Framework – Additional Tables

**Appendix 2 Table 1. Top 10 Georgia's import and export sectors by main trade partners**

| Georgia top imports | | Georgia top exports | |
|---|---|---|---|
| **HS code** | **%** | **HS code** | **%** |
| ***Armenia*** | | | |
| 25 - Salt; sulphur; earths and stone; plastering materials; lime and cement | **40.1%** | 17 - Sugars and sugar confectionery | **21.7%** |
| 27 - Mineral fuels, mineral oils and products of their distillation | **13.2%** | 10 - Cereals | **16.0%** |
| 9 - Coffee, tea, mate and spices | **9.5%** | 31 - Fertilizers | **12.9%** |
| 39 - Plastics and articles thereof | **5.3%** | 87 - Vehicles other than railway or tramway rolling-stock | **11.1%** |
| 70 - Class and glassware | **4.9%** | 23 - Residues and waste from the food industries; prepared animal fodder | **5.0%** |
| 84 - Nuclear reactors, boilers, machinery and mechanical appliances | **4.4%** | 44 - Wood and articles of wood | **4.9%** |
| 10 - Cereals | **2.1%** | 33 - Essential oils and resinoids; perfumery, cosmetic or toilet preparations | **4.6%** |
| 4 - Dairy produce; birds' eggs; natural honey | **1.7%** | 22 - Beverages, spirits and vinegar | **3.4%** |
| 22 - Beverages, spirits and vinegar | **1.7%** | 30 - Pharmaceutical products | **2.9%** |
| 30 - Pharmaceutical products | 1.6% | 28 - Inorganic chemicals | **1.7%** |
| ***Turkey*** | | | |
| 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **10.6%** | 72 - Iron and steel i. Primary materials, products in granular or powder form | **49.2%** |
| 39 - Plastics and artcles thereof | **10.3%** | 44 - Wood and articles of wood | **8.1%** |
| 85 - Electrical machinery and equipment and parts thereof | **9.4%** | 87 - Vehicles other than railway or tramway rolling-stock | **7.3%** |
| 73 - Articles of iron or steel | **5.7%** | 74 - Copper and articles thereof | **7.2%** |
| 48 - Paper and paperboard; articles of paper pulp, of paper or of paperboard | **5.4%** | 76 - Aluminium and articles thereof | **7.2%** |
| 87 - Vehicles other than railway or tramway rolling-stock | **3.5%** | 62 - Articles of apparel and clothing accessories, not knitted or crocheted | **6.1%** |
| 61 - Articles of apparel and clothing accessories, knitted or crocheted | **3.2%** | 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **3.0%** |
| 34 - Soap, organic surface- active agents, washing preparations | **2.9%** | 26 - Ores, slag and ash | **2.6%** |
| 94 - Furniture | **2.8%** | 70 - Class and glassware | **2.4%** |
| 62 - Articles of apparel and clothing accessories, not knitted or crocheted | **2.7%** | 41 - Raw hides and skins with or without hair (other than furskins) and leather | **1.5%** |

**Appendix 2 Table 1 cd. Top 10 Georgia's import and export sectors by main trade partners**

| Georgia top imports | | Georgia top exports | |
|---|---|---|---|
| **HS code** | **%** | **HS code** | **%** |
| ***Russian Federation*** | | | |
| 27 - Mineral fuels, mineral oils and products of their distillation | **40.8%** | 22 - Beverages, spirits and vinegar | **44.5%** |
| 10 - Cereals | **12.2%** | 72 - Iron and steel i. Primary materials, products in granular or powder form | **30.9%** |
| 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **3.6%** | 8 - Edible fruit and nuts; peel of citrus fruits or melons and watermelons | **7.1%** |
| 11 - Products of the milling industry; malt; starches; inulin; wheat gluten | **3.2%** | 86 - Railway or tramway locomotives, rolling-stock and parts thereof | **5.0%** |
| 85 - Electrical machinery and equipment and parts thereof | **3.1%** | 88 - Aircraft, spacecraft, and parts thereof | **4.4%** |
| 87 - Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof | **2.9%** | 26 - Ores, slag and ash | **1.0%** |
| 24 - Tobacco and manufactured tobacco substitutes | **2.4%** | 85 - Electrical machinery and equipment | **0.9%** |
| 22 - Beverages, spirits and vinegar | **2.3%** | 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **0.8%** |
| 19 - Preparations of cereals, flour, starch or milk; pastrycooks' products | **2.1%** | 87 - Vehicles other than railway or tramway rolling-stock | **0.7%** |
| 18 - Cocoa and cocoa preparations | **2.1%** | 18 - Cocoa and cocoa preparations | **0.6%** |
| ***Azerbaijan*** | | | |
| 27 - Mineral fuels, mineral oils and products of their distillation | **76.6%** | 87 - Vehicles other than railway or tramway rolling-stock | **38.4%** |
| 17 - Sugars and sugar confectionery | **3.8%** | 25 - Salt; sulphur; earths and stone; plastering materials; lime and cement | **31.2%** |
| 39 - Plastics and articles thereof | **1.8%** | 30 - Pharmaceutical products | **5.0%** |
| 61 - Articles of apparel and clothing accessories, knitted or crocheted | **1.5%** | 22 - Beverages, spirits and vinegar | **3.9%** |
| 23 - Residues and waste from the food industries; prepared animal fodder | **1.4%** | 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **3.5%** |
| 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **1.3%** | 90 - Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus | **3.2%** |
| 94 - Furniture | **1.2%** | 17 - Sugars and sugar confectionery | **2.4%** |
| 28 - Inorganic chemicals | **1.0%** | 73 - Articles of iron or steel | **1.7%** |
| 85 - Electrical machinery and equipment | **0.9%** | 27 - Mineral fuels, mineral oils and products of their distillation | **1.6%** |
| 62 - Articles of apparel and clothing accessories, not knitted or crocheted | **0.8%** | 8 - Edible fruit and nuts; peel of citrus fruits or melons and watermelons | **1.6%** |
| ***Ukraine*** | | | |
| 72 - Iron and steel | **15.9%** | 22 - Beverages, spirits and vinegar | **60.7%** |
| 85 - Electrical machinery and equipment and parts thereof | **7.0%** | 72 - Iron and steel i. Primary materials, products in granular or powder form | **22.2%** |
| 87 - Vehicles other than railway or tramway rolling-stock | **6.8%** | 8 - Edible fruit and nuts; peel of citrus fruits or melons and watermelons | **7.6%** |
| 73 - Articles of iron or steel | **6.3%** | 87 - Vehicles other than railway or tramway rolling-stock | **3.3%** |
| 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **4.9%** | 9 - Coffee, tea, mate and spices | **1.7%** |
| 15 - Animal or vegetable fats and oils and their cleavage products | **4.8%** | 7 - Edible vegetables and certain roots and tubers | **1.2%** |
| 24 - Tobacco and manufactured tobacco substitutes | **4.1%** | 27 - Mineral fuels, mineral oils and products of their distillation | **0.4%** |
| 4 - Dairy produce; birds' eggs; natural honey | **3.7%** | 29 - Organic chemicals | **0.4%** |
| 18 - Cocoa and cocoa preparations | **3.7%** | 3 - Fish and crustaceans, molluscs and other aquatic invertebrates | **0.3%** |
| 27 - Mineral fuels, mineral oils and products of their distillation | **3.5%** | 30 - Pharmaceutical products | **0.3%** |

**Appendix 2 Table 1 cd. Top 10 Georgia's import and export sectors by main trade partners**

| Georgia top imports | | Georgia top exports | |
|---|---|---|---|
| **HS code** | **%** | **HS code** | **%** |
| ***The US*** | | | |
| 87 - Vehicles other than railway or tramway rolling-stock | **40.5%** | 72 - Iron and steel i. Primary materials, products in granular or powder form | **52.5%** |
| 85 - Electrical machinery and equipment and parts thereof | **14.5%** | 31 - Fertilizers | **32.3%** |
| 2 - Meat and edible meat offal | **9.2%** | 22 - Beverages, spirits and vinegar | **4.9%** |
| 10 - Cereals | **5.7%** | 90 - Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus | **3.2%** |
| 90 - Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus | **5.1%** | 27 - Mineral fuels, mineral oils and products of their distillation | **2.3%** |
| 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **4.7%** | 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **1.1%** |
| 3 - Fish and crustaceans, molluscs and other aquatic invertebrates | **3.4%** | 20 - Preparations of vegetables, fruit, nuts or other parts of plants | **0.8%** |
| 56 - Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof | **2.1%** | 88 - Aircraft, spacecraft, and parts thereof | **0.6%** |
| 62 - Articles of apparel and clothing accessories, not knitted or crocheted | **1.9%** | 9 - Coffee, tea, mate and spices | **0.6%** |
| 30 - Pharmaceutical products | **1.8%** | 85 - Electrical machinery and equipment | **0.4%** |
| ***Iran*** | | | |
| 27 - Mineral fuels, mineral oils and products of their distillation | **24.5%** | 44 - Wood and articles of wood | **40.4%** |
| 70 - Glass and glassware | **11.6%** | 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **33.4%** |
| 34 - Soap, organic surface- active agents, washing preparations | **9.9%** | 73 - Articles of iron or steel | **11.1%** |
| 39 - Plastics and articles thereof | **8.3%** | 72 - Iron and steel | **7.7%** |
| 63 - Other made-up textile articles; sets; worn clothing and worn textile articles; rags | **6.8%** | 76 - Aluminium and articles thereof | **2.8%** |
| 69 - Ceramic products | **2.8%** | 4 - Dairy produce; birds' eggs; natural honey | **2.1%** |
| 8 - Edible fruit and nuts; peel of citrus fruits or melons and watermelons | **2.7%** | 28 - Inorganic chemicals | **1.2%** |
| 94 - Furniture | **2.5%** | 87 - Vehicles other than railway or tramway rolling-stock | **0.5%** |
| 61 - Articles of apparel and clothing accessories, knitted or crocheted | **2.3%** | 21 - Miscellaneous edible preparations | **0.3%** |
| 73 - Articles of iron or steel | 2.1% | 85 - Electrical machinery and equipment | **0.3%** |
| ***United Arab Emirates*** | | | |
| 85 - Electrical machinery and equipment | **40.4%** | 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **41.6%** |
| 87 - Vehicles other than railway or tramway rolling-stock | **15.9%** | 87 - Vehicles other than railway or tramway rolling-stock | **29.9%** |
| 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **14.5%** | 74 - Copper and articles thereof | **11.3%** |
| 94 - Furniture | **3.5%** | 76 - Aluminium and articles thereof | **7.0%** |
| 69 - Ceramic products | **3.4%** | 44 - Wood and articles of wood | **4.8%** |
| 95 - Toys, games and sports requisites | **2.9%** | 94 - Furniture | **1.5%** |
| 73 - Articles of iron or steel | **1.9%** | 85 - Electrical machinery and equipment | **1.1%** |
| 39 - Plastics and articles thereof | **1.7%** | 72 - Iron and steel | **0.6%** |
| 63 - Other made-up textile articles; sets; worn clothing and worn textile articles; rags | **1.2%** | 78 - Lead and articles thereof | **0.6%** |
| 82 - Tools, implements, cutlery, spoons and forks, of base metals | **1.1%** | 73 - Articles of iron or steel | **0.5%** |

**Appendix 2 Table 1 cd. Top 10 Georgia's import and export sectors by main trade partners**

| Georgia top imports | | Georgia top exports | |
|---|---|---|---|
| **HS code** | **%** | **HS code** | **%** |
| ***Turkmenistan*** | | | |
| 27 - Mineral fuels, mineral oils and products of their distillation | **99.1%** | 88 - Aircraft, spacecraft, and parts thereof | **63.3%** |
| 39 - Plastics and articles thereof | **0.5%** | 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | **10.5%** |
| 28 - Inorganic chemicals | **0.3%** | 89 - Ships, boats and floating structures | **10.5%** |
| 88 - Aircraft, spacecraft, and parts thereof | **0.1%** | 85 - Electrical machinery and equipment | **3.3%** |
| 87 - Vehicles other than railway or tramway rolling-stock | **0.0%** | 73 - Articles of iron or steel | **2.0%** |
| 89 - Ships, boats and floating structures | **0.0%** | 87 - Vehicles other than railway or tramway rolling-stock | **1.8%** |
| 49 - Printed books, newspapers, pictures and other products of the printing industry | **0.0%** | 49 - Printed books, newspapers, pictures and other products of the printing industry | **1.7%** |
| 25 - Salt; sulphur; earths and stone; plastering materials; lime and cement | **0.0%** | 72 - Iron and steel | **1.6%** |
| 42 - Articles of leather | **0.0%** | 40 - Rubber and articles thereof | **1.4%** |
| 36 - Explosives; pyrotechnic products; matches; pyrophoric alloys | **0.0%** | 36 - Explosives; pyrotechnic products; matches; pyrophoric alloys | **1.2%** |

Source: WITS.

# Appendix 3

# Top 15 export sectors of Georgia's main partners: by export share and RCA, 2006

**Appendix 3 Table 1. Top 15 export sectors of Armenia, 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | HS code | Description | % share in total exports | RCA |
|---|---|---|---|---|---|---|---|
| | by export share | | | | by RCA | | |
| 710239 | Diamonds, worked, but not mounted or set (excl. industrial diamonds) | 24.07% | 65.80 | 911180 | Cases for watches of materials other than precious metal | 0.67% | 1338.65 |
| 720270 | Ferromolybdenum | 16.02% | 502.08 | 911110 | Cases for watches of precious metal | 0.56% | 508.30 |
| 260300 | Copper ores and concentrates | 7.39% | 28.71 | 720270 | Ferromolybdenum | 16.02% | 502.08 |
| 220820 | Spirits obtained by distilling grape wine | 7.30% | 232.69 | 400249 | Chloroprene "chlorobutadiene rubber, CR" | 2.45% | 468.46 |
| 740200 | Unrefined copper; copper anodes | 7.24% | 127.03 | 284450 | Spent (irradiated) fuel elements | 0.002% | 245.03 |
| 710813 | Gold, other semi manufactured forms | 3.72% | 25.16 | 220820 | Spirits obtained by distilling grape wine | 7.30% | 232.69 |
| 711319 | Articles of jewellery of precious metal other than silver | 3.44% | 12.77 | 911430 | Dials for clocks or watches | 0.31% | 229.32 |
| 400249 | Chloroprene "chlorobutadiene rubber, CR" | 2.45% | 468.46 | 030629 | Crustaceans, fit for human consumption | 0.39% | 197.33 |
| 271600 | Electrical energy | 1.77% | 6.30 | 810299 | Molybdenum and articles thereof nes | 0.58% | 144.27 |
| 621210 | Brassieres | 1.75% | 26.60 | 740200 | Unrefined copper; copper anodes | 7.24% | 127.03 |
| 252329 | Portland cement | 1.71% | 37.43 | 730590 | Tubes and pipes having circular cross-sections | 0.11% | 105.07 |
| 261390 | Molybdenum ores and concentrates (excl. roasted) | 1.63% | 62.07 | 710239 | Diamonds, worked, but not mounted or set (excl. industrial diamonds) | 24.07% | 65.80 |
| 710231 | Non-industrial diamonds unworked or simply sawn | 1.23% | 3.51 | 570190 | Carpets and other textile floor coverings, of textile materials | 0.09% | 63.17 |
| 911180 | Cases for watches of materials other than precious metal | 0.67% | 1338.65 | 261390 | Molybdenum ores and concentrates (excl. roasted) | 1.63% | 62.07 |
| 810299 | Molybdenum and articles thereof nes | 0.58% | 144.27 | 720291 | Ferro-titanium and ferro-silico-titanium | 0.32% | 57.33 |
| | **Total** | **80.97%** | | | | **61.7%** | |
| | **Average** | | **205.44** | | | | **289.77** |

Source: WITS

**Appendix 3 Table 2. Top 15 export sectors of Azerbaijan, 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | HS code | Description | % share in total exports | RCA |
|---|---|---|---|---|---|---|---|
| | by export share | | | | by RCA | | |
| **270900** | Petroleum oils and oils obtained from bituminous minerals, crude | 60.51% | 12.2 | **151221** | Crude cotton-seed oil | 0.02% | 238.5 |
| **271000** | Petroleum oils, etc, (excl. crude); | 23.67% | 6.3 | **860620** | Railway cars, insulated or refrigerators | 0.02% | 99.5 |
| **281820** | Aluminium oxide, other than artific | 2.44% | 26.7 | **121110** | Liquorice roots, of a kind used | 0.02% | 82.5 |
| **760120** | Aluminium unwrought, alloyed | 1.11% | 5.5 | **382320** | Naphthenic acids, their water-insol | 0.02% | 76.1 |
| **390110** | Polyethylene having a specific grav | 0.93% | 5.6 | **080222** | Hazlenuts without shells, fresh | 0.69% | 65.8 |
| **080222** | Hazelnuts without shells | 0.69% | 65.8 | **121291** | Sugar beet, fresh or dried | 0.02% | 57.7 |
| **520100** | Cotton, not carded or combed | 0.61% | 8.8 | **230610** | Oil-cake and other solid residues o | 0.02% | 48.4 |
| **890590** | Floating docks and vessels | 0.58% | 27.7 | **090230** | Black tea (fermented) | 0.28% | 47.9 |
| **890190** | Cargo vessels nes and other vessels | 0.53% | 1.7 | **151529** | Maize (corn) oil (excl. crude) | 0.13% | 37.0 |
| **170199** | Cane or beet sugar, in solid form, | 0.49% | 5.4 | **230230** | Brans, sharps and other residues | 0.10% | 34.6 |
| **081090** | Other fruit, fresh, nes | 0.46% | 22.4 | **290512** | Propan-1-ol (propyl alcohol) | 0.26% | 29.6 |
| **151620** | Vegetable fats and oils | 0.41% | 16.1 | **890590** | Floating docks and vessels | 0.58% | 27.7 |
| **391190** | Polysulphides, polysulphones | 0.35% | 6.3 | **841382** | Liquid elevators | 0.04% | 27.4 |
| **080810** | Apples, fresh | 0.30% | 7.7 | **281820** | Aluminium oxide, other than artific | 2.44% | 26.7 |
| **271600** | Electrical energy | 0.30% | 1.1 | **081090** | Other fruit, fresh, nes | 0.46% | 22.4 |
| | **Total** | **93.40%** | | | | **5.08%** | |
| | **Average** | | **14.6** | | | | **61.5** |

Source: WITS

**Appendix 3 Table 3. Top 15 export sectors of Russia, 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | HS code | Description | % share in total exports | RCA |
|---|---|---|---|---|---|---|---|
| | by export share | | | | by RCA | | |
| **270900** | Petroleum oils and oils obtained from bituminous minerals, crude | 35.06% | 7.1 | **251020** | "Ground natural calcium phosphates, " | 0.06% | 25.7 |
| **271000** | "Petroleum oils, etc, (excl. crude) | 16.04% | 4.3 | **400231** | Isobutene-isoprene (butyl) rubber | 0.11% | 23.1 |
| **271121** | Natural gas in gaseous state | 15.53% | 13.6 | **400260** | Isoprene rubber | 0.10% | 21.6 |
| **750210** | "Nickel unwrought, not alloyed" | 1.98% | 13.8 | **310540** | Ammonium dihydrogenorthophosphate | 0.15% | 19.9 |
| **760110** | "Aluminium unwrought, not alloyed" | 1.61% | 7.7 | **252400** | Asbestos | 0.05% | 16.9 |
| **270112** | "Bituminous coal, not agglomerated" | 1.42% | 3.5 | **440320** | Untreated coniferous wood | 0.91% | 16.6 |
| **720712** | "Semi-fin prod, iron or n-al steel" | 1.16% | 10.4 | **750220** | "Nickel unwrought, alloyed" | 0.16% | 16.1 |
| **440320** | Untreated coniferous wood | 0.91% | 16.6 | **283030** | Cadmium sulphide | 0.00% | 15.9 |
| **740811** | Wire of refined copper | 0.83% | 5.6 | **310551** | Mineral or chemical fertilizers con | 0.02% | 15.8 |
| **440710** | Coniferous wood sawn or chipped | 0.81% | 3.7 | **720249** | "Ferro-chromium, nes" | 0.08% | 15.1 |
| **760120** | Aluminium unwrought, alloyed | 0.72% | 3.6 | **470411** | Unbleached coniferous chemical wood | 0.00% | 14.9 |
| **710231** | Diamonds non-industrial unworked | 0.62% | 2.5 | **284130** | Sodium dichromate | 0.02% | 14.5 |
| **740311** | Copper cathodes and sections of cat | 0.59% | 1.5 | **722820** | Bars and rods of silico-manganese | 0.04% | 14.0 |
| **720449** | "Ferrous waste and scrap, iron or steel" | 0.57% | 4.1 | **750210** | "Nickel unwrought, not alloyed" | 1.98% | 13.8 |
| **720824** | "Flat rlld prod, i/nas, in coil, hr," | 0.53% | 4.0 | **271121** | Natural gas in gaseous state | 15.53% | 13.6 |
| | **Total** | **78.39%** | | | | **19.22%** | |
| | **Average** | | **6.8** | | | | **17.2** |

Source: WITS

**Appendix3 Table 4 Top 15 export sectors of Turkey, 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | HS code | Description | % share in total exports | RCA |
|---|---|---|---|---|---|---|---|
| | by export share | | | | by RCA | | |
| **721420** | Bars&rods,i/nas,hr,hd or he,cntg in | 7.11% | 68.9 | **080222** | Hazelnuts without shells | 2.05% | 195.43 |
| **610910** | T-shirts, singlets and other vests | 5.45% | 31.9 | **081310** | Dried apricots | 0.42% | 192.11 |
| **852810** | Television receivers including vide | 3.70% | 5.3 | **080420** | Figs, fresh or dried | 0.29% | 141.80 |
| **620462** | Women's or girls' trousers, breeches | 2.67% | 18.3 | **520291** | Garnetted stock of cotton | 0.04% | 139.08 |
| **711319** | Art. of jewellery and pts thereof o | 2.52% | 9.3 | **091040** | Thyme, bay leaves | 0.06% | 102.59 |
| **080222** | Hazelnuts without shells | 2.05% | 195.4 | **252910** | Felspar | 0.19% | 101.66 |
| **620342** | Men's or boys' trousers, breeches | 1.81% | 13.2 | **121230** | Apricot, peach or plum stones | 0.02% | 90.13 |
| **611020** | Jerseys, pullovers, etc, of cotton, | 1.81% | 14.4 | **080620** | Dried grapes | 0.66% | 89.08 |
| **680291** | Worked monumental/building stone nes | 1.40% | 79.4 | **551110** | Yarn, with >=85% synthetic staple | 0.10% | 80.68 |
| **611592** | Hosiery and footwear, of cotton | 1.34% | 43.6 | **620891** | Women's or girls' dressing gowns | 0.33% | 80.06 |
| **630260** | Toilet linen and kitchen linen, of | 1.29% | 35.1 | **680291** | Worked monumental/building stone nes | 1.40% | 79.40 |
| **610990** | T-shirts, singlets, etc, of other t | 1.17% | 18.1 | **251511** | Marble and travertine crude or rough | 0.37% | 74.03 |
| **240110** | Tobacco, not stemmed/stripped | 1.12% | 64.1 | **120791** | Poppy seeds | 0.09% | 71.67 |
| **570330** | Tufted floor coverings of man-made | 1.04% | 44.6 | **630539** | Sacks and bags, used for packing | 0.54% | 69.78 |
| **710812** | Gold in unwrought forms non-monetary | 1.01% | 3.4 | **721420** | Bars&rods,i/nas,hr,hd or he,cntg in | 7.11% | 68.89 |
| | **Total** | **35.49%** | | | | **13.68%** | |
| | **Average** | | **43.0** | | | | **105.1** |

Source: WITS

**Appendix 3 Table 5. Top 15 export sectors of Ukraine, 2006, HS 6 digit**

| HS code | Description | % share in total exports | RCA | HS code | Description | % share in total exports* | RCA |
|---|---|---|---|---|---|---|---|
| | by export share | | | | by RCA | | |
| **271000** | "Petroleum oils, etc, (excl. crude);" | 4.39% | 1.2 | **392041** | Plates of polymers of vinyl chl | 0.01% | 281.0 |
| **720712** | "Semi-fin prod,iron or n-al steel,re" | 4.19% | 37.3 | **480522** | Multi-ply paper with only one ou | 0.01% | 277.8 |
| **720711** | "Semi-fin prod,i/nas,rect/sq cross-s" | 4.05% | 65.8 | **151211** | Crude sunflower-seed and safflower | 2.08% | 139.7 |
| **721420** | "Bars&rods,i/nas,hr,hd or he,cntg in" | 3.16% | 30.6 | **720450** | "Remelting scrap ingots, of iron or " | 0.11% | 129.1 |
| **720720** | "Semi-fin prod, iron or non-alloy st" | 2.89% | 71.3 | **721020** | "Flat rlld prod, plated or coated wit" | 0.04% | 128.6 |
| **720842** | "Flat rolled prod, i/nas, not in coi" | 2.80% | 23.4 | **250830** | Fire-clay | 0.29% | 117.4 |
| **151211** | Crude sunflower-seed and safflower | 2.08% | 139.7 | **230630** | Oil-cake and other solid residues | 0.32% | 117.3 |
| **720824** | "Flat rlld prod, i/nas, in coil, hr," | 2.04% | 15.5 | **860610** | "Railway tank cars, not self-propell" | 0.73% | 108.9 |
| **310210** | Urea | 1.97% | 46.3 | **410410** | "Whole bovine skin leather" | 0.15% | 92.1 |
| **721331** | "Bars/rods,i/nas,hr,in irreg wnd coi" | 1.92% | 26.4 | **860699** | Railway cars nes | 0.35% | 79.8 |
| **100190** | "Spelt, common wheat and meslin" | 1.57% | 9.7 | **720230** | Ferro-silico-manganese | 1.25% | 77.8 |
| **730511** | "Pipe,line,i or s,longitudinally sub" | 1.56% | 32.4 | **860630** | "Railway cars, self-discharging, oth" | 0.32% | 75.6 |
| **100300** | Barley | 1.49% | 47.1 | **720720** | "Semi-fin prod, iron or non-alloy st" | 2.89% | 71.3 |
| **720843** | "Flat rlld prod, i/nas, not in coil," | 1.29% | 34.2 | **860692** | "Railway cars, open, with non-removal" | 0.25% | 66.5 |
| **720230** | Ferro-silico-manganese | 1.25% | 77.8 | **720711** | Semi-fin prod,i/nas,rect/sq cross-s | 4.05% | 65.8 |
| | **Total** | **36.64%** | | | | **12.86%** | |
| | **Average** | | **43.9** | | | | **121.9** |

Source: WITS, Note: * excluding exports less than 0.01%.

**Appendix 3 Table 6. Top 15 export sectors of Iran, 2005, HS 6 digit**

| HS code | Description | % share in total exports | RCA | HS code | Description | % share in total exports | RCA |
|---|---|---|---|---|---|---|---|
| | by export share | | | | by RCA | | |
| **270900** | Petroleum oils and oils obtained from bituminous minerals, crude | 83.48% | 16.9 | **091020** | Saffron | 0.16% | 497.8 |
| **080250** | "Pistachio, fresh or dried" | 1.25% | 207.4 | **720610** | Ingots, iron or non-alloy steel | 0.58% | 441.7 |
| **570110** | Carpets and other textile floor cov | 0.80% | 142.8 | **570292** | Non-pile floor coverings of man-made | 0.17% | 223.7 |
| **720610** | "Ingots, iron or non-alloy steel, of" | 0.58% | 441.7 | **080250** | "Pistachio, fresh or dried" | 1.25% | 207.4 |
| **271000** | "Petroleum oils, etc, (excl. crude);" | 0.54% | 0.1 | **293212** | 2-Furaldehyde (furfuraldehyde) | 0.06% | 170.2 |
| **720822** | "Flat rlld prod, i/nas, in coil, hr" | 0.50% | 11.2 | **251120** | Natural barium carbonate (whitherit | 0.00% | 152.0 |
| **271112** | "Propane, liquefied" | 0.45% | 6.8 | **570110** | Carpets and other textile floor cov | 0.80% | 142.8 |
| **270750** | Aromatic hydrocarbon mixtures which | 0.45% | 10.2 | **280200** | "Sulphur, sublimed or precipitated; " | 0.07% | 83.8 |
| **271111** | "Natural gas, liquefied" | 0.44% | 1.4 | **610799** | "Men's or boys' dressing gowns, | 0.01% | 68.6 |
| **760110** | "Aluminium unwrought, not alloyed" | 0.40% | 1.9 | **080410** | "Dates, fresh or dried" | 0.12% | 60.7 |
| **081090** | Other fruit, fresh, nes | 0.38% | 18.4 | **010420** | Live goats | 0.04% | 55.7 |
| **290511** | Methanol (methyl alcohol) | 0.33% | 8.6 | **410512** | "Sheep, lamb skin leather, non-veg. " | 0.11% | 50.4 |
| **271113** | "Butanes, liquefied" | 0.33% | 7.0 | **570299** | Non-pile floor coverings of textile | 0.05% | 46.6 |
| **290220** | Benzene | 0.32% | 6.9 | **570210** | "Kelem, Schumacks, Karamanie and other" | 0.02% | 28.9 |
| **290243** | p-Xylene | 0.26% | 3.8 | **080620** | Dried grapes | 0.20% | 26.6 |
| | **Total** | **90.52%** | | | | **3.63%** | |
| | **Average** | | **59.0** | | | | **150.4** |

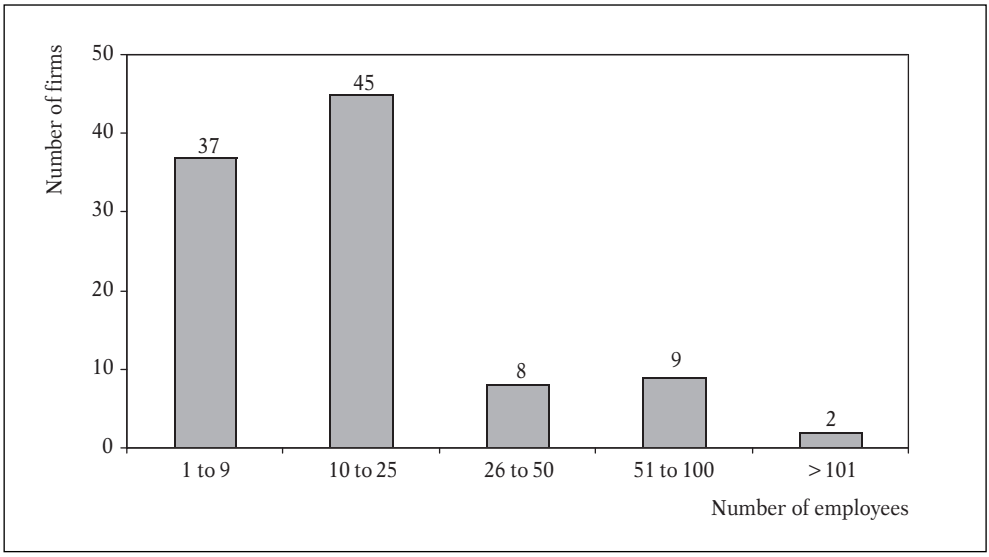
Source: WITS.

# Appendix 4

# Description of the sample and questionnaire

The sample consists of 102 exporting firms. Thereof, 81 firms exported to the EU and the 21 -- at least to CIS countries. Appendix4 Figure 1 shows that the majority of firms in the sample are rather small -- 82 firms have less than 26 employees. Furthermore, all firms are private and fully Georgian-owned.

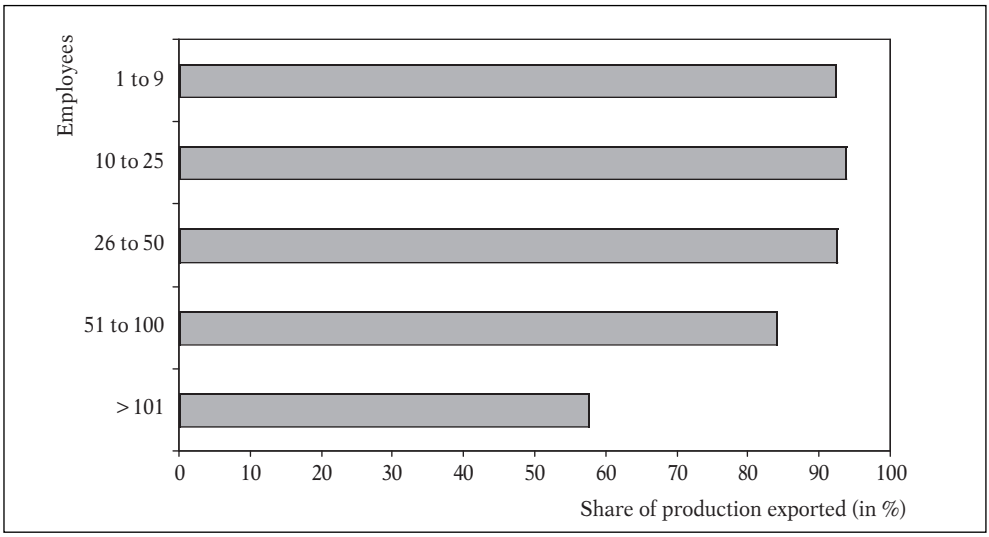
**Appendix 4 Figure 1 Distribution of firms by size**




Source: Survey Results

Most of the surveyed firms have rather high export shares in production. Seventy-eight of them reported an export share of 100 %. The shares seem to vary a little bit with the size of the firms. On average, small firms tend to have a little bit larger export shares (Appendix 4 Figure 2). However, the smaller export shares for firms with more than 101 employees should not be overrated, since here are only two observations available.

**Appendix 4 Figure 2. Distribution of firms by size and share of exports**

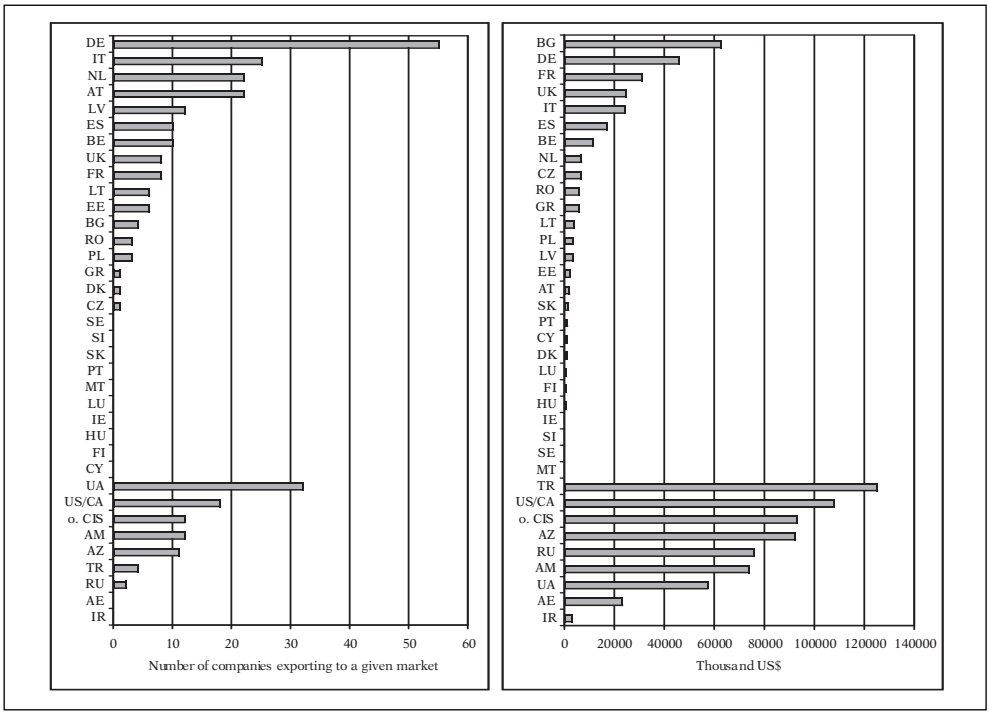



Source: Survey Results

With regard to export destinations of the surveyed firms within the EU, old EU members are clearly dominating. Firms reported 162 export relationships with the EU15 countries, but only 35 export relationships with six out of the twelve new EU members. Germany (54 % of the respondents sell there) is the far most important export destination, followed by Italy (25 %) and Austria as well as the Netherlands (each 22 %). Within the group of new EU members Latvia is reported as export destination by 12 % of the firms. However, taking all three Baltic countries together yields a quota of 24 %.

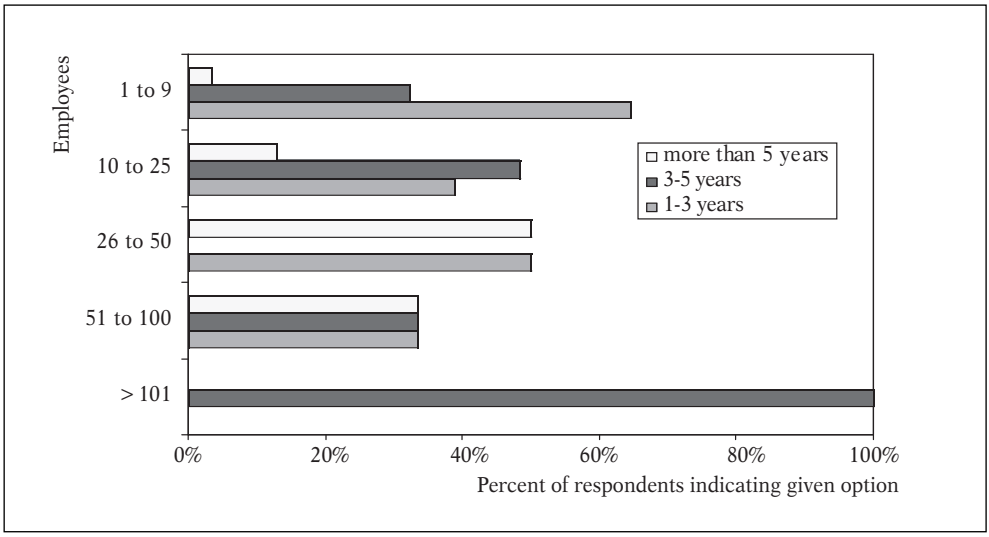
The sample looks quite representative in terms of the geographical distribution of exports. The left panel of Appendix4 Figure 3 shows the export destinations of all surveyed firms, while the right panel contains the geographical distribution of Georgian exports in 2006 according to Statistics Georgia. The visual inspection already reveals that the rankings of EU export partners in both graphs broadly correspond to each other. The rank correlation coefficient (between the rank of a certain EU export destination in the sample and according to Statistics Georgia) is 0.74, which allows us to assume that the sample is at least for the EU countries with regard to the geographical distribution of exports to a large extent representative. With regard to the other export destinations reported by the surveyed firms, the correspondence to the official statistics is not so large: the rank correlation coefficient is only 0.35. However, since only trade to Armenia, Azerbaijan, Russia, Ukraine and other CIS countries is analysed in-depth, the bias might be tenable.

**Appendix 4 Figure 3. Export destinations of surveyed firms vs. geographical distribution of Georgian exports in 2006**




Source: Survey Results, Statistics

**Appendix 4 Figure 4. Duration of trade relations**




Source: Survey Results

Trade relations of the reporting firms with EU countries are in most cases rather young. Asked how long they had been exporting to the EU, 48 % answered one to three years, 38 % between three and five years and only 14 % more than five years. Appendix4 Figure 4 shows that the trade relations of small firms have a particularly short duration. However, for firms with more than 25 employees, the sample size is too small for a reliable comparison of distributions.

**QUESTIONNAIRE**

**INTRODUCTION**

My name is _____ I represent research company _____. Currently, we are conducting an exporter survey. The goal of the study is to evaluate the implications of a possible Free Trade Agreement between the European Union and your country. Our research company conducts the interview at the request of European Union in collaboration with Center for Social and Economic Research (CASE, Poland) and Global Insight, Inc. (USA). The interview is anonymous; the results of the interview will be aggregated and presented to the public. The length of the interview is about 45 minutes. Would you agree to answer the questions?

WHAT IS YOUR POSITION?

Chief Manager/owner . . . . . .
Deputy Chief Manager . . . . . .
Head of export department . . . . . .
Head of sales department . . . . . .
Export manager . . . . . .
Sale manager . . . . . .
Other *PLEASE SPECIFY*. . . . . .

**INFORMATION ON THE COMPANY**

1. What is the ownership of your company? Please, mark one:

   1.1 state-owned ☐
   1.2 private ☐
   1.3 mixed ☐

2. Is there foreign origin capital in the capital founding your company?

   2.1 Yes ☐
   2.2 No (Go to Question 6) ☐
   2.3 Do not know (Go to Question 6) ☐

3. What share of the capital founding your company is the foreign origin capital?

   3.1 Please write down _____ % ☐

4. Is there EU-origin capital in the capital founding your company?

   4.1 Yes ☐
   4.2 No (Go to Question 6) ☐
   4.3 Do not know (Go to Question 6) ☐

5. What share of the capital founding your company comes from the EU?

   5.1 Please write down _____ % ☐

6. Does your company possess any of the following certificates:

| | Yes | No |
|---|---|---|
| | 1 | 2 |
| 6.1 ISO: 9000 | ☐ | ☐ |
| 6.2 ISO: 14000 | ☐ | ☐ |

7. How many employees are working full-time in your company? Please, mark one:

   7.1 1 – 9 ☐
   7.2 10 - 25 ☐
   7.3 26 - 50 ☐
   7.4 51 - 100 ☐
   7.5 101 and more ☐

8.For how long has your company been operating?

8.1 <1 year ☐
8.2 1-2 years ☐
8.3 3-5 years ☐
8.4 6-10 years ☐
8.5 11-15 years ☐
8.6 >15 years ☐
8.7 Do not know ☐

9. What was the turnover of your company in 2006?

9.1 Please, enter in local currency _____ ☐

**INFORMATION ON EXPORT ACTIVITIES**

10. Choose those sectors of economy that your company is in. Please, mark maximum three sectors:

| | | | |
|---|---|---|---|
| 10.1 | A | | Agriculture, hunting and forestry |
| 10.2. | | 01 | Agriculture, hunting and related service activities |
| 10.3. | | 02 | Forestry, logging and related service activities |
| 10.4. | B | | Fishing |
| 10.5. | | 05 | Fishing, aquaculture and service activities incidental to fishing |
| 10.6. | C | | Mining and quarrying |
| 10.7. | | 10 | Mining of coal and lignite; extraction of peat |
| 10.8. | | 11 | Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying |
| 10.9. | | 12 | Mining of uranium and thorium ores |
| 10.10. | | 13 | Mining of metal ores |
| 10.11. | | 14 | Other mining and quarrying |
| 10.12. | D | | Manufacturing |
| 10.13. | | 15 | Manufacture of food products and beverages |
| 10.14. | | 16 | Manufacture of tobacco products |
| 10.15. | | 17 | Manufacture of textiles |
| 10.16. | | 18 | Manufacture of wearing apparel; dressing and dyeing of fur |
| 10.17. | | 19 | Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear |
| 10.18. | | 20 | Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials |
| 10.19. | | 21 | Manufacture of paper and paper products |
| 10.20. | | 22 | Publishing, printing and reproduction of recorded media |
| 10.21. | | 23 | Manufacture of coke, refined petroleum products and nuclear fuel |
| 10.22. | | 24 | Manufacture of chemicals and chemical products |
| 10.23. | | 25 | Manufacture of rubber and plastics products |
| 10.24. | | 26 | metallic mineral products |
| 10.25. | | 27 | Manufacture of basic metals |
| 10.26. | | 28 | Manufacture of fabricated metal products, except machinery and equipment |
| 10.27. | | 29 | Manufacture of machinery and equipment n.e.c. |
| 10.28. | | 30 | Manufacture of office, accounting and computing machinery |
| 10.29. | | 31 | Manufacture of electrical machinery and apparatus n.e.c. |
| 10.30. | | 32 | Manufacture of radio, television and communication equipment and apparatus |
| 10.31. | | 33 | Manufacture of medical, precision and optical instruments, watches and clocks |
| 10.32. | | 34 | Manufacture of motor vehicles, trailers and semi trailers |
| 10.33. | | 35 | Manufacture of other transport equipment |
| 10.34. | | 36 | Manufacture of furniture; manufacturing n.e.c. |
| 10.35. | | 37 | Recycling |
| 10.36. | E | | Electricity, gas and water supply |
| 10.37. | | 40 | Electricity, gas, steam and hot water supply |
| 10.38. | | 41 | Collection, purification and distribution of water |

**INFORMATION ON EXPORT CAPACITY AND CONDITIONS OF THE COMPANY**

11. Please, specify your status:

11.1 current exporter to the EU ☐

11.2 exported to the EU last year but do not export now ☐

12. For how many years have you been exporting your goods to the EU?

12.1 1-3 years ☐

12.2 3-5 years ☐

12.3 more than 5 years ☐

13. Please, specify what percentage of your total sales you exported during last year

13.1 Please write down _____ % ☐

14. What percentage of your total export volume do you send to EU

14.1 Please write down _____ % ☐

15. What percentage of your total export volume do you send to each CIS country:

15.1 Please write down country code (provided in Question 17) _____

15.2 Please write down _____ % ☐

15.3 Please write down country code (provided in Question 17) _____

15.4 Please write down _____ %

15.5 Please write down country code (provided in Question 17) _____

15.6 Please write down _____ %

15.7 Please write down country code (provided in Question 17) _____

15.8 Please write down _____ %

15.9 Pease write down country code (provided in Question 17) _____

15.10 Please write down _____ %

16. Please check the specific countries where you export (exported):

| | EU countries and Turkey |
|---|---|
| 16.1. | ☐ Austria |
| 16.2. | ☐ Belgium |
| 16.3. | ☐ Bulgaria |
| 16.4. | ☐ Cyprus |
| 16.5. | ☐ Czech Republic |
| 16.6. | ☐ Denmark |
| 16.7. | ☐ Estonia |
| 16.8. | ☐ Finland |
| 16.9. | ☐ France |
| 16.10. | ☐ Germany |
| 16.11. | ☐ Greece |
| 16.12. | ☐ Hungary |
| 16.13. | ☐ Ireland |
| 16.14. | ☐ Italy |
| 16.15. | ☐ Latvia |

16.16 ☐ Lithuania
16.17. ☐ Luxembourg
16.18. ☐ Malta
16.19. ☐ Netherlands
16.20. ☐ Poland
16.21. ☐ Portugal
16.22. ☐ Romania
16.23. ☐ Slovakia
16.24. ☐ Slovenia
16.25. ☐ Spain
16.26. ☐ Sweden
16.27. ☐ Turkey
16.28. ☐ United Kingdom

16.29. Non-EU countries
16.30. ☐ Georgia (for the survey in Armenia)
16.31. ☐ Armenia (for the survey in Georgia)
16.32. ☐ Azerbaijan (for the survey in Georgia)
16.33. ☐ Ukraine
16.34. ☐ Russia
16.35. ☐ Other CIS
16.36. ☐ Iran
16.37. ☐ UAE
16.38. ☐ USA and Canada
16.39. ☐ Other (specify) _____

17. Which group of products do you export (exported, plan to export) to the EU market:

| | | | |
|---|---|---|---|
| 17.1 | A | | Agriculture, hunting and forestry |
| 17.2. | | 01 | Agriculture, hunting and related service activities |
| 17.3. | | 02 | Forestry, logging and related service activities |
| 17.4. | B | | Fishing |
| 17.5. | | 05 | Fishing, aquaculture and service activities incidental to fishing |
| 17.6. | C | | Mining and quarrying |
| 17.7. | | 10 | Mining of coal and lignite; extraction of peat |
| 17.8. | | 11 | Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying |
| 17.9. | | 12 | Mining of uranium and thorium ores |
| 17.10. | | 13 | Mining of metal ores |
| 17.11. | | 14 | Other mining and quarrying |
| 17.12. | D | | Manufacturing |
| 17.13. | | 15 | Manufacture of food products and beverages |
| 17.14. | | 16 | Manufacture of tobacco products |
| 17.15. | | 17 | Manufacture of textiles |
| 17.16. | | 18 | Manufacture of wearing apparel; dressing and dyeing of fur |
| 17.17. | | 19 | Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear |
| 17.18. | | 20 | Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials |
| 17.19. | | 21 | Manufacture of paper and paper products |
| 17.20. | | 22 | Publishing, printing and reproduction of recorded media |
| 17.21. | | 23 | Manufacture of coke, refined petroleum products and nuclear fuel |
| 17.22. | | 24 | Manufacture of chemicals and chemical products |
| 17.23. | | 25 | Manufacture of rubber and plastics products |
| 17.24. | | 26 | metallic mineral products |
| 17.25. | | 27 | Manufacture of basic metals |
| 17.26. | | 28 | Manufacture of fabricated metal products, except machinery and equipment |
| 17.27. | | 29 | Manufacture of machinery and equipment n.e.c. |
| 17.28. | | 30 | Manufacture of office, accounting and computing machinery |
| 17.29. | | 31 | Manufacture of electrical machinery and apparatus n.e.c. |
| 17.30. | | 32 | Manufacture of radio, television and communication equipment and apparatus |
| 17.31. | | 33 | Manufacture of medical, precision and optical instruments, watches and clocks |
| 17.32. | | 34 | Manufacture of motor vehicles, trailers and semi trailers |

| | | | |
|---|---|---|---|
| 17.33 | | 35 | Manufacture of other transport equipment |
| 17.34 | | 36 | Manufacture of furniture; manufacturing n.e.c. |
| 17.35 | | 37 | Recycling |
| 17.46 | E | | Electricity, gas and water supply |
| 17.37 | | 40 | Electricity, gas, steam and hot water supply |
| 17.38 | | 41 | Collection, purification and distribution of water |

***RULES OF ORIGINS***

18. Did you obtain a certificate of origin valid on EU market issued by the Chamber of Commerce in the last year?

    18.1 Yes ☐

    18.2 No (Go to Question 24) ☐

    18.3 Do not know/Do not know about this certificate (Go to Question 24) ☐

19. How often do you have to obtain a certificate of origin?

    19.1 Indicate the number of times per year here: _____ ☐

20. Indicate how much on average does a certificate of origin for one delivery cost to your company

    20.1 Indicate the amount in local currency: _____ ☐

21. How important are the costs of obtaining the rules of origin certificate valid in the EU for your company?

    21.1 not at all important ☐

    21.2 somewhat important ☐

    21.3 important ☐

    21.4 very important ☐

22. Did you have any difficulties in obtaining a certificate of origin or/and technical and quality standards certification, such as:

    22.1 time-consuming procedure ☐

    22.2 costly procedure ☐

    22.3 unclear or uncertain regulations ☐

    22.4 other, please specify _____, ☐

    22.5 other, please specify _____, ☐

    22.6 other, please specify _____, ☐

***CUSTOMS PROCEDURES***

23. Indicate the amount (in the local currency) spent in 2006 to pass export customs of your home country? (If answer this question, then skip Q25)

    23.1 Indicate the amount in local currency: _____ ☐

24. Indicate the percent of export value you spent to pass export customs of your home country

    24.1 Indicate the percentage _____ % ☐

25. How many hours/days does your carrier spend at your country's border while exporting products?

    25.1 less than one day (indicate number of hours_____) ☐
    25.2 one day ☐
    25.3 more than one day (indicate the number of days_____) ☐

26. Indicate the amount (in the local currency) spent in 2006 to pass import customs procedures in the EU destination country? (If answer to this question, then skip Q28)

    26.1 Indicate the amount in local currency: _____ ☐

27. Indicate the percent of export value you spent to pass export customs of EU destination country?

    27.1 Indicate the percentage _____ % ☐

28. How many hours/days does your carrier spend at EU border while exporting products?

    28.1 less than one day (indicate number of hours_____) ☐
    28.2 one day ☐
    28.3 more than one day (indicate the number of days_____) ☐

29. What are the main obstacles related to passing import customs procedures in the EU market:

    29.1 time-consuming procedure ☐
    29.2 costly procedure ☐
    29.3 unclear or uncertain regulations ☐
    29.4 other, please specify _____, _____, _____ ☐
    29.5 no problems encountered ☐
    29.6 cannot say ☐

30. Indicate the amount (in the local currency) spent in 2006 to pass import customs procedures in CIS countries? (If export to CIS countries)

30.1 Please write down country code (provided in Question 17) _____
30.2 Indicate the amount in local currency: _____
30.3 Please write down country code (provided in Question 17) _____
30.4 Indicate the amount in local currency: _____
30.5 Please write down country code (provided in Question 17) _____
30.6 Indicate the amount in local currency: _____
30.7 Please write down country code (provided in Question 17) _____
30.8 Indicate the amount in local currency: _____
30.9 Please write down country code (provided in Question 17) _____
30.10 Indicate the amount in local currency: _____

31. Indicate the percentage of export value you spent to pass import customs procedures in CIS countries?

31.1 Please write down country code (provided in Question 17) _____
31.2 Indicate the percentage _____ %
31.3 Please write down country code (provided in Question 17) _____
31.4 Indicate the percentage _____ %
31.5 Please write down country code (provided in Question 17) _____
31.6 Indicate the percentage _____ %
31.7 Please write down country code (provided in Question 17) _____
31.8 Indicate the percentage _____ %
31.9 Please write down country code (provided in Question 17) _____
31.10 Indicate the percentage _____ %

32. How many hours/days does your carrier spend at CIS country border while exporting products?

32.1 Please write down country code (provided in Question 17) _____
32.2 less than one day (indicate number of hours_____)
32.3 one day
32.4 more than one day (indicate the number of days_____)
32.5 Please write down country code (provided in Question 17) _____
32.6 less than one day (indicate number of hours_____)
32.7 one day
32.8 more than one day (indicate the number of days_____)
32.9 Please write down country code (provided in Question 17) _____
32.10 less than one day (indicate number of hours_____)
32.11 one day
32.12 more than one day (indicate the number of days_____)
32.13 Please write down country code (provided in Question 17)
_____
32.14 less than one day (indicate number of hours_____)

32.15 one day

32.16 more than one day (indicate the number of days_____)

32.17 Please write down country code (provided in Question 17)

_____

32.18 less than one day (indicate number of hours_____)

32.19 one day

32.20 more than one day (indicate the number of days_____)

***TECHNICAL REGULATIONS***

33. Must your company meet domestic technical regulations in order to sell in domestic market:

33.1 Yes

33.2 No

33.3 Do not sell in domestic market

33.4 Do not know

34. Must your company meet domestic technical regulations in order to sell in the EU market:

34.1 Yes

34.2 No (Go to Question 57)

34.3 Do not know (Go to Question 57)

35. How expensive is the compliance with the domestic technical regulations compared to foreign technical regulations for your exports? Would you say that they are….?

| Technical regulations | Much less expensive | Less expensive | About the same | More expensive | Much more expensive | Not applicable |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 35.1 performance | | | | | | |
| 35.2 product quality | | | | | | |
| 35.3 testing and certification | | | | | | |
| 35.4 consumer safety | | | | | | |
| 35.5 labeling | | | | | | |
| 35.6 health/environment | | | | | | |

36. What types of EU technical standards are the most burdensome and expensive for your company? Standards which relate to:

| Technical regulations | Not at all important | Somewhat important | Important | Very important | Not applicable |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 36.1 performance | | | | | |
| 36.2 product quality | | | | | |
| 36.3 testing and certification | | | | | |
| 36.4 consumer safety | | | | | |
| 36.5 labeling | | | | | |
| 36.6 health/environment | | | | | |

37. What was the approximate cost of meeting the EU requirements in local currency last year? (If answer this question, skip next question)

| | | 1 | 2 |
|---|---|---|---|
| 37.1 | Product characteristics requirement | | |
| 37.2 | Marking, labeling, and packaging requirements | | |
| 37.3 | Other technical requirements | | |

38. What was the approximate cost of meeting the EU requirements as a percentage of your total sales over the last year?

| | | 1 | 2 |
|---|---|---|---|
| 38.1 | Product characteristics requirement | | |
| 38.2 | Marking, labeling, and packaging requirements | | |
| 38.3 | Other technical requirements | | |

39. How would you evaluate the ease of access to the necessary information?

39.1 easy ☐

39.2 not very easy ☐

39.3 difficult ☐

39.4 information is not available ☐

**TESTING FOR CONFORMITY WITH TECHNICAL REGULATIONS**

40. Are your products tested for conformity with the foreign technical regulations before they are shipped to the EU?

40.1 Yes ☐

40.2 No (Go to Question 57) ☐

40.2 Do not know (Go to Question 57) ☐

41. How important the costs of testing the products for your company?

41.1 not at all important ☐

41.2 somewhat important ☐

41.3 important ☐

41.4 very important ☐

42. Are test results and conformity certificates issued domestically accepted by customs authorities of the EU countries?

42.1 yes ☐

42.2 no ☐

43. Were your products tested for conformity with the EU technical regulations in the destination country over the last year?

43.1 Yes ☐

43.2 No (Go to Question 57) ☐

43.3 Do not know (Go to Question 57) ☐

44. In your opinion, how important are the costs of testing for conformity with the EU technical regulations in the destination country for your company?
    - 44.1 Not at all important ☐
    - 44.2 Somewhat important ☐
    - 44.3 Important ☐
    - 44.4 Very important ☐
    - 44.5 Cannot say ☐

45. If you export to more than one country in the EU do you need to have several product testing?
    - 45.1 Yes ☐
    - 45.2 No ☐

46. What is the cost of product testing (if answer, skip next question)
    - 46.1 Indicate the amount in local currency: _____ ☐

47. What is the cost of product testing as percentage of the last year sales
    - 47.1 Indicate the percentage _____ % ☐

48. If your product meets both domestic and foreign technical requirements, what is the extent of duplication of effort involved in testing for both requirements?
    - 48.1 no duplication ☐
    - 48.2 minor duplication ☐
    - 48.3 significant duplication ☐
    - 48.4 complete duplication (two tests are required) ☐

49. How many days on average does technical regulations conformity inspection usually last upon arrival at EU country?
    - 49.1 1 day of less ☐
    - 49.2 2 to 4 days ☐
    - 49.3 5 to 6 days ☐
    - 49.4 6 to 14 days ☐
    - 49.5 more than 14 days ☐

***SANITARY AND PHYTOSANITARY MEASURES***

***For those who are not working in food sector skip this section***

50. Did your company implement the HACCP system?
    - 50.1 Yes ☐
    - 50.2 No ☐

51. If exporting to the EU, do you encounter sanitary and phytosanitary regulations which are burdensome for the company?
    - 51.1 Yes ☐
    - 51.2 No (If choose this option, skip next question) ☐

52. Indicate which types of regulations you perceive as impediments to your exports
    - 52.1 certification ☐
    - 52.2 quarantine ☐
    - 52.3 other, please specify _____, ☐
    - 52.4 other, please specify _____, ☐
    - 52.5 other, please specify _____, ☐

53. What amount in the local currency was spent in 2006 to ensure compliance with the respective sanitary and phytosanitary EU regulations? (If answer, skip the next question)
    - 53.1 Indicate the amount in local currency: _____ ☐

54. How much was spent in 2006 to ensure compliance with the respective sanitary and phytosanitary as percent of Export value to EU?
    - 54.1 Indicate the percentage _____ % ☐

55. How important the costs of meeting the sanitary and phyto-sanitary regulations in the EU for your company?
    - 55.1 not at all important ☐
    - 55.2 somewhat important ☐
    - 55.3 important ☐
    - 55.4 very important ☐

***OTHER TYPES OF NTBS***

56. Are your company's exports to the EU market subject to one of the measures from the list below?

| | Yes | No |
|---|---|---|
| | 1 | 2 |
| 56.1 Antidumping duties | ☐ | ☐ |
| 56.2 Countervailing duties | ☐ | ☐ |
| 56.3 Other measures affecting price (i.e. minimum import prices, voluntary export price restraints) | ☐ | ☐ |

57. If yes, how would you evaluate the degree of restrictiveness of the above measures for your export activities?

| Technical regulations | not at all restrictive | somewhat restrictive | restrictive | very restrictive | prohibitive |
|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4** | **5** |
| 57.1 Antidumping duties | | | | | |
| 57.2 Countervailing duties | | | | | |
| 57.3 Other measures affecting price | | | | | |

**End of Interview**

# Appendix 5

# Background information on inward FDI in Georgia

**Appendix 5 Table 1. FDI inflows to Georgia and other countries, in USD million, 1997-2005**

| Countries | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|---|---|
| **Economies in transition: Asia** | **3 107** | **3 013** | **2 497** | **1 895** | **3 550** | **4 501** | **6 103** | **8 818** | **4 296** |
| Armenia | 52 | 232 | 135 | 125 | 88 | 144 | 157 | 217 | 220 |
| Azerbaijan | 1 115 | 1 023 | 510 | 130 | 227 | 1 393 | 3 285 | 3 556 | 1 680 |
| ***Georgia*** | ***243*** | ***265*** | ***83*** | ***135*** | ***133*** | ***167*** | ***340*** | ***499*** | ***450*** |
| Kazakhstan | 1 321 | 1 151 | 1 472 | 1 283 | 2 835 | 2 590 | 2 092 | 4 113 | 1 738 |
| Kyrgyzstan | 83 | 109 | 44 | -2 | 5 | 5 | 46 | 175 | 47 |
| Tajikistan | 18 | 30 | 7 | 24 | 9 | 36 | 14 | 272 | 54 |
| Turkmenistan | 108 | 62 | 125 | 126 | 170 | 100 | 100 | -15 | 62 |
| Uzbekistan | 167 | 140 | 121 | 75 | 83 | 65 | 70 | 1 | 45 |
| **Economies in transition: Europe** | **8 994** | **7 639** | **7 974** | **7 167** | **7 978** | **8 410** | **18 089** | **30 760** | **35 383** |
| Albania | 48 | 45 | 41 | 143 | 207 | 135 | 178 | 332 | 260 |
| Belarus | 352 | 203 | 444 | 119 | 96 | 247 | 172 | 164 | 305 |
| Bosnia and Herzegovina | 1 | 67 | 177 | 146 | 119 | 265 | 381 | 606 | 298 |
| Bulgaria | 505 | 537 | 819 | 1 002 | 813 | 905 | 2 097 | 3 443 | 2 223 |
| Croatia | 538 | 935 | 1 464 | 1 085 | 1 338 | 1 213 | 2 133 | 1 262 | 1 695 |
| Macedonia, TFYR | 30 | 128 | 33 | 175 | 442 | 78 | 95 | 157 | 100 |
| Moldova, Republic of | 79 | 76 | 38 | 127 | 102 | 133 | 78 | 154 | 225 |
| Romania | 1 215 | 2 031 | 1 041 | 1 037 | 1 157 | 1 144 | 2 213 | 6 517 | 6 388 |
| Russian Federation | 4 865 | 2 761 | 3 309 | 2 714 | 2 748 | 3 461 | 7 958 | 15 444 | 14 600 |
| Serbia and Montenegro | 740 | 113 | 112 | 25 | 165 | 137 | 1 360 | 966 | 1 481 |
| Ukraine | 623 | 743 | 496 | 595 | 792 | 693 | 1 424 | 1 715 | 7 808 |

Source: UNCTAD

**Appendix 5 Table 2. FDI stock per capita in Georgia and other countries, in USD, 1997-2005**

| Countries | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|---|---|
| **Economies in transition: Asia** | **131** | **173** | **207** | **244** | **292** | **352** | **433** | **554** | **619** |
| Armenia | 43 | 119 | 164 | 205 | 235 | 285 | 337 | 332 | 406 |
| Azerbaijan | 262 | 385 | 446 | 459 | 484 | 651 | 1 045 | 1 468 | 1 661 |
| ***Georgia*** | ***50*** | ***106*** | ***125*** | ***155*** | ***185*** | ***223*** | ***300*** | ***414*** | ***519*** |
| Kazakhstan | 346 | 426 | 529 | 674 | 866 | 1 036 | 1 172 | 1 478 | 1 654 |
| Kyrgyzstan | 58 | 80 | 88 | 90 | 88 | 95 | 96 | 131 | 100 |
| Tajikistan | 13 | 18 | 18 | 22 | 23 | 29 | 31 | 72 | 80 |
| Turkmenistan | 146 | 158 | 184 | 210 | 244 | 262 | 280 | 272 | 281 |
| Uzbekistan | 15 | 21 | 26 | 28 | 31 | 33 | 36 | 35 | 36 |
| **Economies in transition: Europe** | **41** | **53** | **69** | **200** | **296** | **389** | **547** | **701** | **813** |
| Albania | 109 | 124 | 138 | 184 | 251 | 294 | 349 | 453 | 533 |
| Belarus | 50 | 70 | 114 | 130 | 140 | 165 | 192 | 209 | 243 |
| Bosnia and Herzegovina | 2 | 21 | 68 | 105 | 134 | 201 | 298 | 453 | 528 |
| Bulgaria | 129 | 196 | 298 | 282 | 347 | 469 | 796 | 1 183 | 1 184 |
| Croatia | 462 | 422 | 566 | 782 | 959 | 1 523 | 2 274 | 2 776 | 2 750 |
| Macedonia, TFYR | 101 | 165 | 181 | 268 | 454 | 600 | 801 | 877 | 924 |
| Moldova, Republic of | 43 | 57 | 74 | 106 | 131 | 167 | 190 | 232 | 291 |
| Romania | 105 | 198 | 246 | 293 | 347 | 356 | 558 | 945 | 1 101 |
| Russian Federation | 7 | 3 | 5 | 218 | 360 | 485 | 665 | 815 | 920 |
| Serbia and Montenegro | 101 | 112 | 123 | 125 | 141 | 154 | 283 | 376 | 517 |
| Ukraine | 41 | 56 | 66 | 79 | 99 | 123 | 159 | 203 | 367 |

Source: UNCTAD

**Appendix 5 Table 3. FDI inflows in percent of domestic investment in Georgia and other countries, 1997-2005**

| Countries | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|---|---|
| **Economies in transition: Asia** | **24.4** | **24.2** | **21.5** | **17.8** | **29.1** | **34.1** | **37.0** | **39.0** | **14.9** |
| Armenia | 19.5 | 75.7 | 44.6 | 35.4 | 23.4 | 28.8 | 24.4 | 26.9 | 16.2 |
| Azerbaijan | 76.1 | 64.8 | 39.0 | 10.7 | 17.4 | 65.5 | 85.4 | 71.0 | 29.3 |
| ***Georgia*** | ***37.4*** | ***28.7*** | ***11.3*** | ***17.4*** | ***15.2*** | ***20.1*** | ***32.3*** | ***33.6*** | ***24.0*** |
| Kazakhstan | 36.7 | 33.1 | 53.9 | 40.5 | 53.9 | 43.8 | 29.4 | 38.0 | 11.8 |
| Kyrgyzstan | 37.9 | 51.7 | 22.6 | -1.0 | 1.9 | 1.8 | 17.4 | 54.4 | 12.4 |
| Tajikistan | 11.1 | 16.9 | 3.7 | 28.9 | 9.7 | 27.5 | 7.9 | 151.4 | 23.7 |
| Turkmenistan | 9.8 | 4.8 | 8.2 | 8.6 | 11.8 | 8.0 | 7.7 | -1.2 | 3.6 |
| Uzbekistan | 3.2 | 3.1 | 2.6 | 2.3 | 3.2 | 3.0 | 3.3 | 0.0 | 1.6 |
| **Economies in transition: Europe** | **8.4** | **10.1** | **14.5** | **10.2** | **9.0** | **8.6** | **14.2** | **18.0** | **16.4** |
| Albania | 7.9 | 6.5 | 3.9 | 9.8 | 10.9 | 6.3 | 5.9 | 9.2 | 6.6 |
| Belarus | 9.9 | 5.1 | 13.9 | 4.5 | 3.4 | 7.7 | 3.8 | 2.6 | 4.0 |
| Bosnia and Herzegovina | 0.1 | 5.1 | 18.9 | 15.2 | 13.4 | 24.1 | 27.0 | 34.1 | 16.3 |
| Bulgaria | 44.4 | 32.4 | 41.8 | 50.6 | 32.8 | 31.8 | 54.3 | 68.2 | 36.2 |
| Croatia | 11.0 | 18.5 | 31.5 | 27.0 | 30.2 | 21.6 | 26.9 | 13.3 | 16.1 |
| Macedonia, TFYR | 4.7 | 20.5 | 5.4 | 30.0 | 86.5 | 12.4 | 12.2 | 16.4 | 9.7 |
| Moldova, Republic of | 20.5 | 20.2 | 17.5 | 63.7 | 41.1 | 48.9 | 21.3 | 28.0 | 31.7 |
| Romania | 16.3 | 26.5 | 16.5 | 14.8 | 13.9 | 11.7 | 17.4 | 39.9 | 28.0 |
| Russian Federation | 6.6 | 6.3 | 11.7 | 6.2 | 4.7 | 5.6 | 10.0 | 14.3 | 10.5 |
| Serbia and Montenegro | 28.8 | 4.7 | 6.3 | 1.5 | 9.5 | 5.2 | 37.7 | 23.9 | 33.7 |
| Ukraine | 6.3 | 9.1 | 8.2 | 9.7 | 10.6 | 8.5 | 13.8 | 11.7 | 45.2 |

Source: UNCTAD

**Appendix 5 Table 4. Selected indicators of trading across borders in Georgia and other countries, 2007**

| Country | Trading Across Borders | | | | | |
|---|---|---|---|---|---|---|
| | Documents for export (number) | Costs of export procedures in USD | Time for export (days) | Documents for import (number) | Costs of import procedures in USD | Time for import (days) |
| OECD AVERAGE (2007) | 4.5 | 905 | 9.8 | 5.0 | 986 | 10.4 |
| Georgia | 8 | 1,105 | 12 | 7 | 1,105 | 14 |
| Armenia | 7 | 1,165 | 30 | 8 | 1,335 | 24 |
| Moldova | 6 | 1,425 | 32 | 7 | 1,545 | 35 |
| Russian Federation | 8 | 2,050 | 36 | 13 | 2,050 | 36 |
| Ukraine | 6 | 1,045 | 31 | 10 | 1,046 | 39 |
| Turkey | 7 | 865 | 14 | 8 | 1,013 | 15 |
| Bulgaria | 5 | 1,329 | 23 | 7 | 1,377 | 21 |
| Romania | 5 | 1,075 | 12 | 6 | 1,075 | 13 |

Source: World Bank (2007)

# Appendix 6

# The Model of FDI

Regional economic integration is likely to affect the firm's FDI decision. A regionally integrated area may attract more inward FDI for various reasons such as access to a larger market, defensive investments by firms from non-member countries to obtain similar treatment as firms within the area, and gains in economic efficiency.

Dunning's (1993) OLI (Ownership-Location-Internalisation) framework of international production shows the role of location in the overall FDI decision of a firm. According to Dunning, three factors need to be present for firms to engage in FDI: ownership-specific advantages of property rights and intangible assets in multinational enterprise (MNE); internalization incentive advantages, and the presence of locational advantages in a host country. The interaction of the particular FDI motivations and the location-specific advantages provided by a potential host country will thus prove determinant as to where a firm will seek making the investment.

While the first and second are firm-specific determinants of FDI, the third is location-specific and has a crucial influence on a host country's inflows of FDI. If only the first condition is met, firms will rely on exports, licensing or the sale of patents to service a foreign market. In the presence of internalization incentives, e.g. protection from supply disruptions and price hikes, lack of suitable licensee, and economies of common governance FDI becomes the preferred mode of servicing foreign markets, but only if location-specific advantages are present. Within the trinity of conditions for FDI to occur, locational determinants are the only ones that host governments can influence directly (UNCTAD, 1998).

The locational determinants of foreign direct investment (FDI) are an extensively researched area of international business. While scholars have yet to reach a consensus on the significant FDI determinants, a few key variables have been identified. Large market size, strong market growth, abundant natural resources along with cultural and distance proximity are attractive for FDI inflows (Aharoni 1966, Bass, McGregor and Walters 1977, Grosse, Trevino 1996, Basu, Srinivasan 2002, Benassy-Quere, Fontagne, Lahreche-Revil 2003, Blumentritt and Nigh 2002). Another widely cited FDI determinant - labour cost – have not universally been found to be significant. While

Markusen, Zhang (1997), using general equilibrium simulation, showed that wage level is important for small, scarce-labour country, Loree and Guisinger (1995), who studied US investment in 48 countries, found wage rates to be insignificant.

Obviously, market size and labour costs are not the only important FDI determinants; country political and economic risk and/or friendliness of overall business environment are of great concern to foreign investors as well (Basu, Srinivasan, 2002). A number of surveys, conducted among investors (Aharoni (1966), Foster, Alkan (2003), Bass, McGregor and Walters, (1977)), have indicated that sound and stable macroeconomic policy, a positive attitude to foreign investors and supportive institutional environment are important for investment location decisions. In particular, Blumentritt and Nigh (2002), revealed that favourable regulatory practices would facilitate an integration of a subsidiary company into the host country environment.

Another important factor for FDI flows is the level of regional economic cooperation in a particular location. In general it is found to have a positive impact on FDI for several reasons. First, it expands the size of the local market, and therefore makes the region more attractive to FDI. Second, regionalism can promote political stability and permit countries to coordinate their policies Asiedu (2006). Giovanni (2004) also finds the significance of RTAs for cross-border M&A flows. Jaumotte (2004) concluded that market size of regional trade agreement (RTA) has positive impact on the FDI inflow, but countries within the same RTA do not benefit to the same extent as those ones from different RTAs. Countries with relatively higher education and financial stability tend to attract a larger share of the FDI at the expense of other RTA members. This conclusion supports the above mentioned findings on the importance of the institutional environment and macroeconomic stability for foreign direct investment.

A related issue is the impact of a country's engagement in international trade on FDI. The OLI framework suggests that, as trade becomes concentrated in goods produced by firms using knowledge-intensive assets, FDI will gradually substitute trade. On the other hand, if a country is a recipient of largely efficiency-seeking FDI, then it would stimulate flows of imports of intermediate products and exports of final (or more completed products). Therefore, a country's engagement in international trade may have either substitutary or complementary impact on FDI. As a result, exports/imports variables are rarely employed in FDI models. In those cases when they were included, they have been reported to not have a significant impact on FDI (Bevan and Estrin, 2000). Consequently, we decided not to include trade variables in our analysis.

Yet, instead we do employ an indicator of the openness of the economy in our model. It has traditionally been measured as a ratio of exports plus imports to GDP.

Kravis and Lipsey (1982) and Culem (1988) report it to have a significant positive effect on FDI. The degree of a country's openness can affect FDI in multiple ways (some of them are similar to the trade effects). Lower import barriers discourage tariff-jumping FDI but may stimulate vertical FDI by facilitating the imports of inputs and machinery. Lower export barriers tend to stimulate vertical FDI by facilitating the re-export of processed goods, and other (non-tariff-jumping) horizontal FDI by expanding the effective market size and leading to an improved business climate and expectations of better long-term economic growth. So, although it is based on trade data, it is less influenced by imports vs. exports (substitution vs. complementarity) logic and on top to the trade activity in a country, it also reflects the country's general business climate. Although the endogeneity problem – whether openness of the economy causes more FDI or more FDI result in higher engagement in international trade – is in place in this case; we cannot think of a good instrument which could have helped us to resolve this issue, hence we assume that causality runs the former way.

The scholars employed various methods - ranging from straightforward surveying of foreign investors to robust econometric modelling - to explore FDI determinants. Following recent developments in the field, we are employing a gravity model in this analysis (Brainard 1997, Brenton 1998, Benassy-Quere, Fontagne, Lahreche-Revil, 2003 Benassy-Quere, Coupet, Mayer 2005).

The gravity model, which was developed by Linnemann (1966), is widely used in the analysis of bilateral trade. It was applied to the field of FDI analysis by Brainard (1997). He succeeded in matching the company based logic of OLI with general equilibrium trade models. According to OLI, multinational enterprises' choices in serving foreign markets are determined by the trade-off between incremental fixed costs of investing and the costs of exporting. While many of these costs are determined by the traditional factors which were discussed above - economies of scale, relative input costs, intangible assets - the success of the gravity model in explaining bilateral trade flows points strongly to the inclusion of distance variables in FDI equations.

Distance acts as a proxy for transportation costs, or economic barriers to trade. Another aspect of the distance is cultural proximity, which implies cultural and language community. The closer the countries, the more common cultural aspects are available, the easier to conduct business. The proximity is usually measured as a distance between the capital city of the host country and investing country, or a distance between a host country capital and Brussels. Most studies found positive negative correlation between distance and FDI (Bevan and Estrin (2000), Smarzhynska and Wei (2000, 2002), Resmini (2000), Johnson (2006)). However, Campos and Kinoshita found positive relation for distance from Brussels for CIS countries, which may indicate that the geographical proximity to the Western markets also play an important role in attracting FDI. Interestingly, Tondel (2001) revealed a positive

correlation between geographical position and progress in transition. He noted that the most advanced countries in terms of transition are most often geographically closer to Western Europe.

In our study we estimate the following model (it is specified in logarithms):

$$lnFDI_{ij} = \beta_0 + \beta_1 border_{ij} + \beta_2 ln\_dist_{ij} + \beta_3 ln\_gdp_i + \beta_4 ln\_gdp_j + \beta_5 ln\_pop_i + \beta_6 ln\_pop_j + \beta_7 ln\_debt_j + \beta_8 TO_j + \beta_9 ln\ TI_j + \beta_{10} ln\ gdp\_capita_j + \beta_{11} WTO_j + \beta_{12} EU_j$$

where:

$lnFDI_{ij}$ - a natural logarithm of nominal (USD) FDI flows from country i to country j,

$border_{ij}$ - dummy variable, equals 1 if i and j have common border,

$ln\_dist_{ij}$ - a natural logarithm of the distance between the capitals of country i and country j,

$ln\_gdp_i$ - a natural logarithm of the nominal (USD) GDP of countries i and j respectively,

$ln\_pop_i$ - log population of countries i and j respectively,

$ln\_debt_j$ - a natural logarithm of the external debt of country j as a percentage of GNI of country j,

$TO_j$ - the ratio of sum of exports and imports of country j to GNI of country j,

$ln\ TPI_j$ - a natural logarithm of the EBRD Transition Progress Index of country j,

$ln\ gdp\_capita_j$ - a natural logarithm of nominal (USD) GDP per capita in country j,

$WTO_j$ - dummy, equals 1 if a country j (a recipient country) is a member of WTO, and

$EU_j$ - dummy, equals 1 if a country j (a recipient country) have signed the Europe Agreements

As a measure of market size, and consequently economic attractiveness of the location, we use GDP of home and recipient countries. We also employ GDP per capita as another measure of market attractiveness, i.e. purchasing power in the host country.

We have faced a challenge of finding a suitable index of business environment which will cover the countries in the sample plus Georgia and Armenia. After comparing various indicators, it was found that the only suitable index is the EBRD transition indicators which is available at the EBRD website. The EBRD assesses progress in transition through a set of transition indicators. These have been used to track reform developments in all countries of its operations since the beginning of transition. Progress is measured against the standards of industrialised market economies, while recognising that there is neither a "pure" market economy nor a unique end-point for transition.

The measurement scale for the indicators ranges from 1 to 4+ (i.e. 4.33), where 1 represents little or no change from a rigid centrally planned economy and 4+ represents the standards of an industrialised market economy. The reform scores reflect the assessments of EBRD country economists using the criteria described in the methodological notes.

Assessments are made in nine areas: Large scale privatisation, small scale privatisation, governance and enterprise restructuring, price liberalisation, trade and foreign exchange system, competition policy, banking reform and interest rate liberalisation, securities markets and non-bank financial institutions, and infrastructure. For purposes of our research we use an average index of all of the above indicators apart from the infrastructure, we call it Transition Progress Index.

We also control for the level of indebtedness of the host economy, measured as a ratio of the country's external debt to GNI, which is another explanatory/control variable employed in this study. Furthermore, we are analysing an impact of WTO accession on FDI inflows through the inclusion of a dummy variable. Finally, we directly control for the impact an EU membership has had on the FDI inflows in the region by including a corresponding dummy variable. We were not able to gather data on unit labour costs for a number of countries in the sample, so unfortunately, we did not include a labour cost measure in our model.

The sample under consideration includes 31 OECD countries as source countries and 10 transition countries as FDI destinations (Armenia, Bulgaria, Czech Republic, Georgia, Hungary, Kazakhstan, Poland, Russia, Slovakia, and Ukraine). The sample covers years 1995-2003 that yields 819 observations in a panel under examination.

We use random effects model to estimate our model. The Haussman specification test does not reject random effects speciation at the 5% significance level. Table A1 reports the model's estimates. In line with the previous research we report significant effects of distance, GDP, population, progress in transition and indebtedness of the host economy. The distance has a significantly negative effect on FDI flows and, hence, supports the basic logic of the gravity model. Other traditional gravity model factors – GDP of both home and host countries – have significant positive effects on FDI inflows that confirms a hypothesis of the importance of host country's market size for FDI.

In the earlier versions of the model, we have also considered the common language, surfaces of the donor and recipient, and other variables, which appeared to be highly insignificant. Hence, we decided to exclude them as this model is also to be used for forecasting purposes (in this case it is better to have a model which consists of statistically significant variables mostly).

The impact of the level of indebtedness is significantly negative, which is in line with a conventional economic logic. The more indebted an economy is, the poorer perception of the level of economic stability investors have, and, hence, the investment is less likely to happen.

The EBRD transition indicator index has also been found to have a significantly positive effect in our sample. It indicates that countries with more stable business environment are significantly more attractive for foreign investors than less stable countries. The WTO dummy came out insignificant in our analysis – probably WTO membership itself does not affect FDI flows strongly.

Interestingly, the EU dummy did not turn out to be significant in our specification (we have also tried a specification which included only the EU dummy without the WTO one and received similar results). One of possible explanations for this lack of significance is that our sample covers only the years after signing of the Europe agreements, so there is no variation across time (only among countries: members and non-members). Yet, in this case other variables (for example, GDP of countries-recipients) may have stronger power in explaining differences in FDI inflows than the EU association, hence, making the dummy insignificant.

**Appendix 6 Table 1. Estimates of the Gravity Model for FDI inflows into CEE**

| *Independent Variables* | *Dependent Variable Log (FDI)* |
|---|---|
| ***Border*** | 0.763<br>(0.173) |
| ***Log(Distance)*** | -0.298<br>(0.135) |
| ***Log(GDP Source)*** | 1.449***<br>(0.000) |
| ***Log(GDP Recipient)*** | 0.521**<br>(0.023) |
| ***Log (Population Source)*** | -0.984***<br>(0.000) |
| ***Log (Population Recipient)*** | 0.199<br>(0.785) |
| ***Log (Debt)*** | -0.008**<br>(0.045) |
| ***Log(TPI)*** | 3.894***<br>(0.001) |
| ***Trade Openness*** | 0.001<br>(0.973) |
| ***Log(GDP capita)*** | 0.196<br>(0.873) |
| ***WTO (Dummy)*** | -0.402<br>(0.836) |
| ***EU (Dummy)*** | 0.436<br>(0.815) |
| ***Constant Term*** | -40.238***<br>(0.000) |
| ***R-Squared*** | 0.301 |
| ***Number of observations*** | 819 |

*** - significant at 1% level
** - significant at 5% level
* - significant at 10% level

# Appendix 7

# CGE Model Equations

### Model structure

This model is based on the MRT - Multiregional Trade Model - by Harrison, Rutherford and Tarr (HRT) used in their evaluation of the Single Market (HRT, 1994)[67].

### Markets and prices

The following notational conventions are adopted:

i, j – indexes of goods
r, s – indexes of regions
f – primary factors
p – market price index, 1 in the benchmark
$x$ – benchmark value of quantity variable X.

The following market prices are included in the model:

$PC_r$ – price index for final consumption in region r
$PG_r$ - price index for government provision in region r
$PA_{ir}$ – price index for the Armington aggregate of good i in region r, inclusive of all applicable tariffs, border costs and monopolistic markups
$PY_{ir}$ - supply price (marginal cost) of good i from region r, excluding fixed costs associated with the production of goods in industries subject to IRTS
$PF_{ir}$ - price index for factor inputs in sector i, region r
PT - price index for transport services.

### Summary of the equilibrium relationships

Final demand in each region arises from a representative agent, maximising a Cobb-Douglas utility function subject to a budget constraint. Income is composed of returns to primary factors and tax revenue directed to the consumer as a lump sum.

[67] Their code was obtained from Anders Hoffmann with the permission of Thomas Rutherford and our modelling exercise uses large parts of this code. This model in turn is based on the code employed in their evaluation of the Uruguay Round in HRT (1995, 1996a), which is available for public access on Harrison's Web site.

Within each region, final and intermediate demands are composed of the same Armington aggregate of domestic and imported varieties. The composite supply is a nested CES function, where consumers first allocate their expenditures among domestic and imported varieties and in the second level the consumers choose among imported varieties. In the imperfect competition case firm varieties enter at the bottom of the CES function.

There is no distinction between goods produced for domestic market and for exports. Goods are produced with the use of intermediate inputs and primary factors. Primary factors are mobile across sectors, but not across regions. We assume a CES function over primary factors and a Leontief production function for intermediate inputs and factors of production composite. Exports are not differentiated by the country of destination.

All distortions are represented as ad valorem price-wedges. They consists of factor and intermediate input taxes in production, output tax, import tariffs, export subsidies, taxes on government and private consumption.

**Equations**

***Markets***

- Regional output

$$Y_{ir} = \sum_{s} X_{irs} \tag{1}$$

where $Y_{ir}$ is output of good i in region r, $X_{irs}$ is export of good i from region r to s and if r=s, $X_{irs}$ represents domestic sales.

- Regional demand

$$A_{ir} = C_{ir} + \sum_{j} a_{ijr} Y_{jr} + T_{ir} \tag{2}$$

where $A_{ir}$ is total supply (production plus imports), $C_{ir}$ is total final consumption, $a_{ijr}$ is intermediate demand coefficient and $T_{ir}$ is demand for good i in transport costs.

- Value added

$$V_{ir} = a_{ir}^{V} Y_{ir} + f_{ir} N_{ir} \tag{3}$$

where $V_{ir}$ is total sector i value added, $a^V_{ir}$ is value added demand coefficient, $f_{ir}$ is the fixed cost per firm and $N_{ir}$ is the number of firms in IRTS sectors.

• Primary factor markets

$$\overline{\overline{F}}_{fr} = \sum_i a^F_{fir} V_{ir} \tag{4}$$

where $\overline{\overline{F}}_{fr}$ is the endowment of factor f in region r and $a^F_{fir}$ is the price-responsive demand coefficient for factor f in sector i.

• Armington supply

$$A_{ir} = \overline{A}_{ir}\left(\alpha^D_{ir}\left(\frac{X_{irs}}{\overline{\overline{X}}_{irs}}\right)^{\rho_{DM}} + \left(1-\alpha^D_{ir}\right)\left\{\sum_{r\neq s}\theta^M_{irs}\left(\frac{X_{irs}}{\overline{\overline{X}}_{irs}}\right)^{\rho_M}\right\}^{\rho_{DM}/\rho_M}\right)^{1/\rho_{DM}} \tag{5}$$

where $\overline{A}_{ir}$ is the benchmark supply, $\alpha^D_{ir}$ is the value share of domestic supply, $\overline{X}_{irs}$ is benchmark exports of good i from region r to s, $\theta^M_{irs}$ is the benchmark value share of region r exports in region s imports and $\rho_{DM}$ and $\rho_M$ are determined by Armington elasticities of substitution $\sigma_{DM}$ and $\sigma_M$: .

• Value added supply

$$V_{ir} = \overline{V}_{ir}\left\{\sum_f \alpha^F_{fir}\left(\frac{a^F_{fir}}{\overline{a}^F_{fir}}\right)^{\rho^F_{ir}}\right\}^{1/\rho^F_{ir}} \tag{6}$$

where $\overline{V}_{ir}$ is benchmark value-added, $\alpha^F_{fir}$ is the benchmark value share of factor f, $\overline{a}^F_{fir}$ is the benchmark input coefficient and $\rho^F_{ir}$ is determined by the elasticity of substitution.

• Border/transport costs

$$T_{ir} = \begin{cases} \sum_{js}\beta_{jrs}X_{jrs} & i = i_\tau \\ 0 & i \neq i_\tau \end{cases} \tag{7}$$

where $\tau$ is the index of single commodity used for transport services and $\beta_{jrs}$ is the transportation cost coefficient.

• Welfare index

$$W_r = \prod_i\left(\frac{C_{ir}}{\overline{C}_{ir}}\right)^{\alpha_{ir}} \tag{8}$$

where $\overline{C}_{ir}$ is benchmark final demand for good i in region r.

***Profit conditions***

• Value added

$$PV_{ir} = \frac{1+t^{F}_{ir}}{\overline{PV}_{ir}}\left(\sum_{f}\alpha^{F}_{fir}PF^{1-\sigma^{F}_{ir}}_{fr}\right)^{\frac{1}{1-\sigma^{F}_{ir}}} \quad (9)$$

where $f^{F}_{ir}$ is the ad valorem factor tax rate, $\overline{PV}_{ir}$ is the benchmark (tax-inclusive) price.

• Marginal cost

$$PY_{ir} = a^{V}_{ir}PV_{ir} + \sum_{j} a_{jir}PA_{jr} \quad (10)$$

• Armington composite supply price

$$PA_{ir} = \left\{\alpha^{D}_{ir}\left(\frac{PD_{ir}}{\overline{PD}_{ir}}\right)^{1-\sigma_{DM}} + (1-\alpha^{D}_{ir})\left(\frac{PM_{ir}}{\overline{PM}_{ir}}\right)^{1-\sigma_{DM}}\right\}^{\frac{1}{1-\sigma_{DM}}} \quad (11)$$

where $\overline{PA}_{ir} = 1$

$$PD_{ir} = (1+\mu_{irs})PY_{ir} \quad (12)$$

and

$$PM_{ir} = \left\{\sum_{r\neq s}\theta^{M}_{irs}\left[(1+\mu_{irs})(1+\hat{t}_{irs})(PY_{is}+\beta_{irs}PT_{s})\right]^{1-\sigma_{M}}\right\} \quad (13)$$

and

$$PT_{ir} = PA_{i_{\tau}r} \quad (14)$$

where $\mu_{irs}$ is the mark-up on marginal cost on sales of good i from a firm in region r in region s,
$\hat{t}_{irs}$ is the ad valorem tax rate which incorporates import tariffs and export subsidies, $\overline{PD}_{ir}$ is the benchmark supply price for goods from domestic producers, $\overline{PM}_{ir}$ is the benchmark supply price for imports.

• Regional income

Regional income is a sum of factor income, indirect taxes, taxes on intermediate demand, factor tax revenue, public tax revenue, consumption tax revenue, export tax

revenue and tariff revenue net of investment demand, public sector demand and net capital outflows:

$$(15)\quad M_r = \sum_f PF_{fr} F_{fr} + \sum_i t_{ir}^Y PY_{ir} Y_{ir} + \sum_{ij} t_{ijr}^{ID} PY_{ir} Y_{jr} a_{ijr} + \sum_{fi} t_{fir}^F PF_{fr} V$$

$$+ \sum_i t_{ir}^C PC_{if} C_{ir} + \sum_{is} t_{irs}^X PY_{ir} X_{irs} + \sum_{is} t_{irs}^M (PY_{is} X_{isr} (1 + t_{isr}^X) + p^T T$$

$$\sum_i PG_{ir} (1 + t_{ir}^G) G_{ir} - p_n^C CAPFLOW_r$$

• Final demand

Public sector output consists of Cobb-Douglas aggregation of market commodities:

$$(16)\quad G_r = \Gamma_r \prod_i G_{ir}^{\theta_{ir}^G}$$

A representative agent determines demand in each region. He is endowed with primary factors, tax revenue and exogenous capital flows from other regions. He allocates his income to investment (exogenous), public demand (held constant in real terms) and private demand. Private demand is determined by the maximisation of Cobb-Douglas utility function:

$$(17)\quad U_r = \sum_i \theta_{ir}^C \log(C_{ir})$$

Aggregate final demand is then determined by regional expenditures and the unit price of aggregate commodities gross of tax:

$$(18)\quad C_{ir} = \frac{\alpha_{ir}^C E_r}{p_{ir}^C (1 + t_{ir}^C)}$$

where $E_r$ is regional expenditure, which equals income ($M_r$) net of investment and public expenditures.

• Bilateral trade flows

There are two tax margins (import and export tax) and transport costs in the model. Transport costs are proportional to trade. Transport costs are defined by a Cobb-Douglas aggregate of international transport inputs supplied by different countries:

$$(19)\quad \sum_{irs} T_{irs} = \psi_T \prod_{i,r} TD_{ir}^{\theta_{ir}^T}$$

Bilateral trade flows are determined by cost-minimising choice given the *fob* export price of commodity from region r ($PY_{ir}$), the export tax rate ($t_{ir}^{X}$), and the import tariff rate ($t_{ir}^{M}$), where the export tax applies on the *fob* price net of transport margins, while the import tariff applies on a *cif* price.

- Free entry zero-profit condition for monopolistic firms

$$N_{ir} = \frac{\sum_{s}\left[\mu_{irs}(1+\hat{t}_{irs})(PY_{ir}+\beta_{irs}PT_{r})X_{ir}\right]}{PV_{ir}f_{ir}} \tag{20}$$

**Monopolistic competition**

- Goods are distinguished by firm, by region and area of origin (domestic or imported).
- Demands arise from a nested CES function with a supply from firms in a single region at the lowest level of the CES aggregate. At the next level, the firms compete with supplies from other regions from the same area and at the top level consumers choose between goods from different areas. Demand for final composite arises from a Cobb-Douglas utility function.
- Producers compete in quantities based on a Cournot model with fixed conjectural variations. Markups over marginal costs are based on the profit maximisation. There is free entry, so profits in equilibrium are zero. Markup covers the fixed costs, which are fixed at the firm level and as the markup revenue in a region changes, so does the number of firms.
- The model does not incorporate gains from variety, only the rationalisation gains. A reduction in tariffs leads to loss of the market share by domestic firms. Domestic producers reduce the markup on marginal costs, some domestic firms exit, the remaining firms slide down their average cost curves and output per firm increases.

**Algebraic relations**

The equilibrium conditions for each market where there are IRTS are estimated separately. The following notation is adopted:

X – Aggregate demand
Yk – Supply from are k
Sr – Supply from region r
qfr – Supply from firm f in region r

P – Price index for aggregate demand
Pk- Price index for supply from area k
wr – Price index for supply from region r
πfr – Sales price for supply from firm f in region r.

CES aggregators are used to create the composite goods:

(21) $$X = \left[ \sum_k \alpha_k^{1/\sigma} Y_k^{\frac{\sigma-1}{\sigma}} \right]^{\frac{\sigma}{\sigma-1}}$$

(22) $$Y_k = \left[ \sum_{r \in r_k = k} \beta_{rk}^{1/\eta} S_r^{\frac{\eta-1}{\eta}} \right]^{\frac{\eta}{\eta-1}}$$

(23) $$S_r = \left[ \sum_f q_{fr}^{\frac{\varepsilon-1}{\varepsilon}} \right]$$

The associated price indices:

(24) $$P = \left( \sum_k \alpha_k p_k^{1-\sigma} \right)^{\frac{1}{1-\sigma}}$$

(25) $$p_k = \left( \sum_{r \in r_k = k} \beta_{rk} w_r^{1-\eta} \right)^{\frac{1}{1-\eta}}$$

(26) $$w_k = \left( \sum_f \pi_{fr}^{1-\varepsilon} \right)^{\frac{1}{1-\varepsilon}}$$

and associated demand functions:

(27) $$Y_k = \alpha_k \left( \frac{P}{p_k} \right)^{\sigma} X$$

(28) $$S_r = \beta_{rk} \left( \frac{p_k}{w_r} \right)^{\eta} Y_k \qquad \text{for } k = k_r$$

(29) $$q_{fr} = \left( \frac{w_r}{\pi_{fr}} \right)^{\varepsilon} S_r$$

**Behaviour of firms**

The profit of firm f in region r selling into a given market is as follows:

$$\Pi_{fr}(q) = \pi_{fr} q - C_{fr}(q) \tag{30}$$

where C is total cost. First order conditions for profit maximisation may be written as follows:

$$c_{fr} = \pi_{fr}(1 - m_{fr}) \tag{31}$$

in which $c_{fr}$ is the marginal cost of supply and $m_{fr}$ is a markup over marginal cost (on gross basis):

$$m_{fr} = -\frac{1}{e_{fr}} = -\frac{\partial \pi_{fr} q_{fr}}{\partial q_{fr} \pi_{fr}} \tag{32}$$

where $e_{fr}$ is the perceived elasticity of demand. The expression for the elasticity of demand arises from the nested CES structure of demand and depends on the assumed reaction of other producers.

**The perceived elasticity of demand**

Derivation of the perceived elasticity of demand begins with the inverse demand function:

$$\pi_{fr} = \left(\frac{S_r}{q_{fr}}\right)^{\frac{1}{\varepsilon}} w_r \tag{33}$$

Then compute the derivative:

$$\frac{\partial \pi_{fr}}{\partial q_{fr}} = -\frac{1}{\varepsilon}\frac{\pi_{fr}}{q_{fr}} + \frac{1}{\varepsilon}\frac{\pi_{fr}}{S_r}\frac{\partial S_r}{\partial q_{fr}} + \frac{\pi_{fr}}{w_r}\frac{\partial w_r}{\partial q_{fr}} \tag{34}$$

Here, HRT develop further derivations with the simplifying assumption of unitary conjectural variations (Cournot conjectures). The non-unitary conjectures are introduced to reconcile the estimates of the economies of scale in production with the estimates of elasticities of substitution in demand. Under Cournot conjectures:

$$\frac{\partial S_r}{\partial q_{fr}} = \left(\frac{S_r}{q_{fr}}\right)^{\frac{1}{\varepsilon}} \tag{35}$$

and the term $\frac{\partial w_r}{\partial q_{fr}}$ is computed using the chain rule the second time:

(36) $$\frac{\partial w_r}{\partial q_{fr}} = \frac{\partial w_r}{\partial S_r}\frac{\partial S_r}{\partial q_{fr}}$$

Substituting (34) and (35) into (33) we get:

(37) $$\frac{\partial \pi_{fr} q_{fr}}{\partial q_{fr} \pi_{fr}} = -\frac{1}{\varepsilon} + \frac{1}{\varepsilon}\frac{q_{fr}}{S_r}\left(\frac{S_r}{q_{fr}}\right)^{\frac{1}{\varepsilon}} + \frac{q_{fr}}{w_r}\left(\frac{S_r}{q_{fr}}\right)^{\frac{1}{\varepsilon}}\frac{\partial w_r}{\partial S_r}$$

Then using (32):

(38) $$\left(\frac{S_r}{q_{fr}}\right)^{\frac{1}{\varepsilon}} = \frac{\pi_{fr}}{w_r}$$

make the substitution to obtain:

(39) $$\frac{1}{e_{fr}} = -\frac{1}{\varepsilon} + \frac{1}{\varepsilon}\frac{\pi_{fr} q_{fr}}{w_r S_r} + \frac{\partial w_r}{\partial S_r}\frac{S_r}{w_r}\frac{\pi_{fr} q_{fr}}{w_r S_r}$$

Applying the same steps at the next level we get an analogous expression:

(40) $$\frac{\partial w_r S_r}{\partial S_r w_r} = -\frac{1}{\eta} + \frac{1}{\eta}\frac{w_r S_r}{p_k Y_k} + \frac{\partial p_k}{\partial Y_k}\frac{Y_k}{p_k}\frac{w_r S_r}{p_k Y_k}$$

Applying the same operations again at the highest level of the CES, given that the demand elasticity for the aggregate X is unity, we get:

(41) $$\frac{\partial p_k Y_k}{\partial Y_k p_k} = -\frac{1}{\sigma} + \frac{1}{\sigma}\frac{p_k Y_k}{PX} + \frac{p_k Y_k}{PX}$$

When equations (39)-(41) are assembled, we obtain an expression for the optimal Cournot markup as follows:

(42) $$m_{fr} = \frac{1}{\varepsilon} + \left(\frac{1}{\eta} - \frac{1}{\varepsilon}\right)\frac{1}{N_{fr}} + \left(\frac{1}{\sigma} - \frac{1}{\eta}\right)\frac{\theta^Y_{fk}}{N_{fr}} + \left(1 - \frac{1}{\sigma}\right)\frac{\theta^X_k \theta^Y_{rk}}{N_{fr}}$$

where the share of supply from region *r* in the supply from area *k* is denoted as:

(43) $$\theta^Y_{rk} = \frac{w_r S_r}{p_k Y_k} \qquad \text{for } k = k_r$$

and the supply from area *k* in total supply of a given good is denoted as:

(44) $$\theta^X_k = \frac{p_k Y_k}{PX}$$

In our model we assumed that products of different firms are imperfect substitutes in demand. The elasticity of demand depends on the country of origin. There are three

elasticities of substitution associated with the nested CES structure of demand discussed earlier:

$\sigma_{DD}$ – elasticity of substitution between varieties supplied by domestic firms
$\sigma_{MM}$ – elasticity of substitution between products of any two foreign suppliers
$\sigma_{DM}$ – elasticity of substitution between domestic and imported varieties.

We assume that domestically produced goods are more easily substitutable among themselves than products from different countries and that $\sigma_{DD}$ is 15. In addition imported goods are assumed to be better substitutes to each other than domestic and foreign goods. The elasticity of substitution between imported goods is assumed to be equal 10, while domestic and foreign goods enter the demand function with the elasticity of substitution of 5. These are priors used by HRT (1994).

Further let $\theta_{rs}$ denote the market share of region r firms in region s. Then we can apply equation (42) to represent the optimal markup applied in the domestic market and in the foreign markets:

$$\tilde{m}_{rs} = \begin{cases} \dfrac{1}{\sigma_{DD}} + \left(\dfrac{1}{\sigma_{DM}} - \dfrac{1}{\sigma_{DD}}\right)\dfrac{1}{N_r} + \left(1 - \dfrac{1}{\sigma_{DM}}\right)\dfrac{\theta_{rr}}{N_r} & r = s \\ \dfrac{1}{\sigma_{MM}} + \left(\dfrac{1}{\sigma_{DM}} - \dfrac{1}{\sigma_{MM}}\right)\dfrac{\theta_{rs}}{N_r\theta_s^M} + \left(1 - \dfrac{1}{\sigma_{DM}}\right)\dfrac{\theta_{rs}}{N_r} & r \neq s \end{cases} \tag{45}$$

These are the optimal markups expressed as a function of elasticities of substitution, market shares, $\theta^M_r$ the market share of imports in region r and $N_r$ the number of firms producing in the region r.

**Estimation of the equilibrium conditions in ITRS sectors**

This paper adopts a simplification by estimating the equilibrium conditions in IRTS industries for each commodity in separate models. Demands and supplies for all regions are included into these calculations, but factor markets, intersectoral linkages and income effects are ignored. In each iteration of the IRTS models, regional demand functions are calibrated to the most recently estimated equilibrium conditions of the general model including all GE interactions. Given constant marginal cost, sales prices are determined by the markup equations.

The single commodity models are estimated as follows. The markup pricing equation (45) is specified given the benchmark elasticities of substitution, the number of firms and an adjustment parameter, the conjectural variation. First, the values of elasticities of substitution at all nests of the CES function, as well as the number of firms and therefore their market shares are specified. Further, the value of production at consumer prices at the benchmark combined with the estimates of the cost

disadvantage ratio taken from the literature (see next section), determine the value of fixed costs, i.e. $FC_{ir} = CDR_{ir}YC_{ir}$. Given the assumption of zero profits, the markup over marginal cost generates the revenue equal exactly to the fixed costs. This condition appears as a constraint in a non-linear least squares calculation.

The objective in the estimation is to calibrate the conjectural variations, which are as close as possible to one. This value is consistent with pure Cournot-Nash behaviour of players. Therefore a sequence of least-squares problems is solved for each commodity subject to IRTS. These problems look for implicit numbers of firms ($N_r$) which results in calibrated conjectural variations ($CV_{rs}$) which are as close as possible to 1. This looks as follows:

$$\min_{CV^i_{rs},N_{ir}} \sum_{rs} (CV^i_{rs} - 1)^2 \tag{46}$$

subject to:

$$\begin{aligned} & FC_{ir} = \sum_{rs} X^i_{rs} M^G(CV^i_{rs}, N_{ir}, \sigma, \theta) \\ & 0 \le N_{ir} \le 100 \\ & CV^i_{rs} \ge 0 \end{aligned} \tag{47}$$

where $M^G$ is a markup equation, i.e. equation (45), and $X^i_{rs}$ represents sales of i from region r in region s.

Therefore, the conjectural variations act as parameters, which allow reconciliation of the benchmark data with the estimates of the elasticities of substitution and CDR taken from the literature. In the majority of sectors calibrated conjectural variations are less than 1 indicating a more competitive behaviour than predicted by the Cournot model.

For sectors, where the assumption of free entry and zero profits in the benchmark, given values of the elasticity of substitution, is consistent with pure Cournot-Nash type behaviour, a second calculation is performed. It looks for the number of firms as small as possible subject to the consistency of conjectures with the Cournot behaviour.

$$\min_{r} N_{ir} \tag{48}$$

subject to:

$$\begin{aligned} & FC_{ir} = \sum_{rs} X^i_{rs} M^G(CV^i_{rs}, N_{ir}, \sigma, \theta) \\ & 0 \le N_{ir} \le 100 \\ & CV^i_{rs} = 1 \end{aligned} \tag{49}$$

**Calibrating the Cost Disadvantage Ratio**

The calibration of the cost disadvantage ratio (CDR) in IRTS sectors is based on the assumption of constant marginal cost. The total cost function is specified as follows:

(50) $$c = f + mq$$

where f is fixed cost, m is constant marginal cost and q denotes the output level. Average cost function looks as follows:

(51) $$ac = \frac{f}{q} + m$$

Assuming zero profits, the benchmark data provides the information on the industry total costs (C) and output (Q). If there are n representative firms in the initial equilibrium (1), then $nc_1 = N$ and $nq_1 = Q$. Since

(52) $$\frac{c_1}{q_1} = \frac{nc_1}{nq_1} = \frac{C_1}{Q_1}$$

given the initial data we know already one point on the firm's average cost curve i.e.:

(53) $$\frac{c}{q_1} = \frac{f}{q_1} + m$$

Given the assumption about a specific form of the average cost curve, we only need a second point in order to calibrate it. This is done with the use of information from the engineering estimates on changes in average cost accompanying changes in output. If output declines to $\alpha q_1$ then average costs increase to $\beta\left(\frac{c_1}{q_1}\right)$ where $0<\alpha<1$, $\beta>1$ is required for the marginal cost to be nonnegative. Given the values of $\alpha$ and $\beta$ we know the second point on the industry average cost curve:

(54) $$\beta\frac{c}{q_1} = \frac{f}{\alpha q_1} + m$$

By multiplying the nominators and denominators of the last two equations we obtain equations on the total output and costs of industry, on which the data is available. The equations look as follows:

(55) $$\frac{C}{Q_1} = \frac{F}{Q_1} + m \qquad \text{and}$$

$$\beta \frac{C}{Q_1} = \frac{F}{\alpha Q_1} + m \quad (56)$$

where F is the fixed cost. Further, we solve the above equations for the fixed and marginal costs:

$$F = C_1(\beta - 1)\frac{\alpha}{\alpha - 1} \text{ and} \quad (57)$$

$$m = \left(\frac{C_1}{Q_1}\right)\left(\frac{\beta\alpha - 1}{\alpha - 1}\right). \quad (58)$$

Since the cost disadvantage ratio is defined as f/c, which by symmetry equals F/C, we know that at the initial equilibrium:

$$CDR = \frac{(\beta - 1)\alpha}{1 - \alpha} \quad . \quad (59)$$

We obtain the values of α and β from Pratten (1988). Since there are no estimates of the economies of scale for all 3-digit sectors according to NACE classification or the available estimates are not representative, we used a rage of estimated parameters for each GTAP sector. Based on those parameters we constructed three values of the CDRs i.e. low and high using the lowest and highest values of the estimated parameters and middle one. The only exception was the food sector, where the economies of scale differ a lot by products, so we used the average production values to aggregate the CDRs for more finely defined sectors. The allocation of Pratten's NACE sectors to GTAP sectors, as well as the final CDRs are presented in Appendix 7 Table 1 below.

Following others such as Gasiorek, Smith and Venables (1992) or HRT (1994), we are assuming that in the benchmark equilibrium firms operate at the minimum efficient scale (MES). Firms should have difficulties competing, if they were operating at less than MES. Given the function form used in this study, at the MES further expansion of output reduces average cost of production. If initially output is lower than the MES, then the CDRs will be underestimated since the slope of the average cost curve increases in absolute value for decreases in output. In all scenarios we assume low values for the economies of scale.

**Appendix 7 Table 1. Data on CDR values**

| | Share of MES (á) | Percentage Cost Increase at Output Level (â) | Implied CDR | | | Source of Data |
|---|---|---|---|---|---|---|
| | | | Low | Medium | High | |
| **Column** | **1** | **2** | **3** | **4** | **5** | **6** |
| Agriculture | 0 | 0 | 0 | 0 | 0 | |
| Raw materials | 0 | 0 | 0 | 0 | 0 | |
| Food, Beverages, Tobacco | | | 7.7 | 11.1 | 14.5 | |
| Meat | 0.67 | 5 | | | | 412 |
| Dairy | 0.67 | 2 | | | | 413 |
| Other food | 0.67 | 4 to 9 | | | | 414, 416, 420, 422 |
| Tobacco | 0.33 | 2.2 to 5 | | | | 429 |
| Textiles | 0.5 | 2 to 10 | 2 | 6 | 10 | 43 |
| Clothing | 0 | 0 | 0 | 0 | 0 | |
| Leather | 0.33 | 1.5 | 0.7 | 0.7 | 0.7 | 451 |
| Wood | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| Paper | 0.5 | 8 to 13 | 8.0 | 10.5 | 13.0 | 471, 472 |
| Petroleum | 0.33 | 4 | 2.0 | 2.0 | 2.0 | 14 |
| Chemicals | 0.33 | 4 to 19 | 2.0 | 5.7 | 9.4 | 25 |
| Non-metallic Minerals | 0.33 | 10 to 26 | 4.9 | 8.9 | 12.8 | 241-247 |
| Iron, steel | 0.33 | 10 to 11 | 4.9 | 5.2 | 5.4 | 22 |
| Other metals | 0.33 | 11 to 11 | 4.9 | 5.2 | 5.4 | 224 |
| Metal prod. | 0.33 | 10 | 4.9 | 4.9 | 4.9 | 221 |
| Motor vehicles | 0.5 | 11 | 11.0 | 11.0 | 11.0 | 35 |
| Other transport | 0.5 | 8 to 20 | 8.0 | 14.0 | 20.0 | 361 |
| Electronics | 0.33 | 5 to 15 | 2.5 | 4.9 | 7.4 | 23, 344, 345 |
| Machinery n.e.c. | 0.5 | 3 to 10 | 3.0 | 6.5 | 10.0 | 321, 322, 326 |
| Manufacturing n.e.c. | 0.5 | 3 to 5 | 3 | 4 | 5 | HRT |
| Utilities | 0 | 0 | 0 | 0 | 0 | |
| Trade | 0 | 0 | 0 | 0 | 0 | |
| Transport | 0.5 | 2 | 2 | 2 | 2 | HRT |
| Financial services | 0.5 | 5 | 5 | 5 | 5 | HRT |

Notes:

Column 1: Parameter β in the CDR calibration equation.

Column 2: Data corresponds to (β-1)*100 where β is from the CDR calibration equation.

Column 3-5: CDR estimated according to equation 58.

Column 6: Numbers indicated in this column correspond to NACE sectors from Table 5.1 in Pratten (1988). The assumptions on CDRs in services follow assumptions of HRT (1994).

# Appendix 8

# CGE Model Results – Georgia

**Appendix 8 Table 1. Welfare, GDP and factor returns results of the CGE simulations – net effects compared to the 2006 scenario**

| | 2006 | SIMPLE FTA | SIMPLE FTA BIS | FTA+ | DEEP FTA | DEEP FTA+ |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Welfare (% change ) | | | | | | |
| Russia | -0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Ukraine | -0.023 | -0.001 | -0.002 | -0.001 | -0.003 | -0.001 |
| Armenia | -0.019 | -0.002 | -0.004 | 0.002 | 0.013 | 0.021 |
| Azerbaijan | -0.111 | -0.001 | -0.002 | 0.004 | 0.002 | 0.014 |
| **Georgia** | **0.973** | **0.112** | **0.034** | **2.379** | **1.763** | **6.536** |
| Turkey | 0.027 | 0.001 | 0.000 | 0.002 | 0.005 | 0.009 |
| EU27 | 0.007 | 0.000 | 0.001 | 0.001 | -0.001 | 0.000 |
| CIS | -0.003 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 |
| ROW | 0.006 | 0.000 | 0.000 | 0.000 | -0.001 | 0.000 |
| GDP (% change) | | | | | | |
| Russia | 0.057 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Ukraine | 0.151 | -0.002 | -0.003 | 0.000 | -0.003 | -0.002 |
| Armenia | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.025 |
| Azerbaijan | -0.082 | -0.008 | -0.008 | 0.000 | 0.000 | 0.007 |
| **Georgia** | **1.056** | **0.114** | **0.045** | **2.386** | **1.766** | **6.539** |
| Turkey | 0.12 | 0.001 | 0.000 | 0.002 | 0.004 | 0.009 |
| EU27 | 0.037 | 0.000 | 0.001 | 0.001 | -0.001 | 0.000 |
| CIS | -0.003 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 |
| ROW | 0.018 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 |
| Wages of unskilled workers (% change) | | | | | | |
| Russia | -0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| Ukraine | -0.024 | -0.002 | -0.003 | -0.001 | -0.003 | -0.002 |
| Armenia | -0.039 | -0.004 | -0.008 | -0.002 | 0.028 | 0.033 |
| Azerbaijan | -0.109 | -0.001 | -0.003 | 0.003 | 0.015 | 0.023 |
| **Georgia** | **2.857** | **0.176** | **0.162** | **2.252** | **2.024** | **6.412** |
| Turkey | 0.021 | 0.000 | -0.001 | 0.001 | 0.002 | 0.006 |
| EU27 | 0.005 | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 |
| CIS | -0.004 | 0.001 | 0.001 | 0.001 | 0.003 | 0.004 |
| ROW | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Wages of skilled workers (% change) | | | | | | |
| Russia | -0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| Ukraine | -0.014 | -0.001 | -0.002 | -0.001 | -0.002 | 0.000 |
| Armenia | -0.009 | -0.001 | -0.001 | 0.010 | -0.004 | 0.019 |
| Azerbaijan | -0.105 | 0.000 | 0.000 | 0.004 | 0.020 | 0.027 |
| **Georgia** | **2.369** | **0.173** | **0.160** | **2.076** | **1.576** | **5.548** |
| Turkey | 0.018 | 0.000 | 0.000 | 0.001 | 0.002 | 0.005 |
| EU27 | 0.005 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 |
| CIS | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROW | 0.004 | 0.000 | 0.000 | 0.000 | -0.001 | 0.000 |

**Appendix 8 Table 1. Welfare, GDP and factor returns results of the CGE simulations – net effects compared to the 2006 scenario**

| | 2006 | SIMPLE FTA | SIMPLE FTA BIS | FTA+ | DEEP FTA | DEEP FTA+ |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Total exports (% change) | | | | | | |
| Russia | 0 | 0.001 | 0.001 | 0.002 | 0.001 | 0.003 |
| Ukraine | -0.038 | 0.077 | -0.003 | 0.001 | -0.008 | -0.003 |
| Armenia | 0.002 | -0.010 | -0.001 | 0.078 | -0.177 | -0.003 |
| Azerbaijan | -0.538 | -0.004 | -0.006 | 0.017 | 0.038 | 0.083 |
| **Georgia** | **14.669** | **1.335** | **1.990** | **4.517** | **6.419** | **13.299** |
| Turkey | 0.026 | 0.001 | 0.002 | 0.004 | 0.004 | 0.011 |
| EU27 | 0.011 | 0.001 | 0.002 | 0.002 | 0.001 | 0.003 |
| CIS | 0.002 | 0.001 | 0.002 | 0.004 | -0.001 | 0.006 |
| ROW | 0.009 | 0.000 | 0.000 | 0.001 | -0.002 | 0.000 |
| Total imports (% change) | | | | | | |
| Russia | -0.006 | -0.001 | -0.001 | 0.000 | 0.000 | 0.002 |
| Ukraine | -0.049 | 0.092 | 0.005 | 0.008 | 0.003 | 0.008 |
| Armenia | -0.099 | 0.031 | 0.037 | 0.085 | -0.080 | 0.026 |
| Azerbaijan | -0.597 | 0.376 | 0.375 | 0.384 | 0.372 | 0.389 |
| **Georgia** | **5.635** | **-1.097** | **-0.809** | **0.748** | **3.319** | **7.369** |
| Turkey | 0.052 | -0.003 | -0.003 | 0.001 | 0.001 | 0.010 |
| EU27 | 0.011 | 0.002 | 0.003 | 0.002 | 0.001 | 0.003 |
| CIS | -0.004 | 0.001 | 0.002 | 0.004 | -0.002 | 0.004 |
| ROW | 0.013 | 0.000 | 0.000 | 0.001 | -0.001 | 0.000 |
| Capital stock (% change) | | | | | | |
| Georgia | 0.871 | 0.111 | -0.036 | 5.833 | 2.835 | 15.096 |

**Appendix 8 Table 2. Output changes - Georgia (%)**

| | 2006 | Simple FTA | Simple FTA BIS | FTA+ | DEEP FTA | DEEP FTA+ |
|---|---|---|---|---|---|---|
| Grains, fruits, vegetables, crops nec | 0.4 | 0.3 | 0.3 | 6.8 | 4.3 | |
| Livestock | -0.1 | -0.1 | -0.2 | 3.9 | 1.5 | 6.3 |
| Forestry | -2.9 | -2.8 | -2.6 | -0.8 | -3.6 | 2.1 |
| Fishing | 0 | -0.1 | -0.1 | 4.8 | 1 | 8.9 |
| Coal | 3.5 | 3.6 | 3.8 | 3.8 | 0.3 | 7.5 |
| Oil | 9.5 | 9.7 | 9.8 | 18 | 5.4 | 32.2 |
| Gas | 2.7 | 2.8 | 5.6 | 8 | 2.8 | 13.6 |
| Mining and quarrying | 12.2 | 14 | 14.4 | 25 | 17.3 | 33.4 |
| Food products, beverages and tobacco | -4.9 | -6 | -7.1 | -4.4 | -6.8 | -2 |
| Textiles and textile goods | 1.4 | 2.7 | 3.3 | 56.6 | 56.3 | 56.7 |
| Leather products | -21.4 | -21.4 | -21.1 | -19.5 | -21.2 | -17.8 |
| Wood products | 1.8 | 4.1 | 4.4 | 18.1 | 13.6 | 22.8 |
| Paper products, publishing | -20.2 | -20.8 | -20.7 | -19.9 | -23.3 | -16.3 |
| Petroleum, coal products | -2 | -2.1 | -1.8 | 3.6 | -4.9 | 0 |
| Chemical, rubber, plastic products | 0.9 | 2.7 | 2.8 | 15.9 | 12.2 | 19.8 |
| Mineral products nec | -6.2 | -8.1 | -7.9 | -4.8 | -7.6 | -1.8 |
| Metals and metal products | 16.6 | 21.1 | 21.7 | 42.9 | 39.6 | 46.1 |
| Transport equipment | -5.2 | -4.8 | -4.6 | -3.4 | -6.5 | 0 |
| Machinery and electronic equipment | -16.4 | -16.4 | -16.2 | -16.1 | -18.4 | -13.6 |
| Manufactures nec | -20.4 | -20.3 | -20.1 | -5.3 | -10.5 | 0.4 |
| Electricity | -0.2 | -0.1 | -0.3 | 3.4 | 0.7 | 6.4 |
| Gas manufacture, distribution | 3.9 | 4 | 4 | 6.7 | -1.2 | 15.7 |
| Water | 0.3 | 0.3 | 0.2 | 4.7 | 1.9 | 7.8 |
| Construction | 2.2 | 2.2 | 2.1 | 6.4 | 4 | 8.9 |
| Trade | -0.5 | -0.4 | -0.5 | 4.4 | 1.3 | 7.8 |
| Transportation and Storage Services | 9.2 | 9.6 | 9.7 | 9.1 | 7.5 | 10.9 |
| Communications | -0.7 | -0.7 | -0.8 | 2.2 | -1.8 | 6.7 |
| Banking lending and insurance | -0.6 | -0.6 | -0.6 | 2.4 | -0.2 | 5.2 |
| Business services nec | -0.3 | -0.3 | -0.4 | 5.6 | 1.4 | 10.3 |
| Other Communal, Social and Personal Services | 0.6 | 0.7 | 0.7 | 5 | 2 | 8.3 |
| Public administration, education, health care | -0.3 | -0.3 | -0.3 | 1.9 | 0.5 | 3.5 |
| Investments | 2.1 | 2.2 | 2.1 | 6.4 | 4 | 8.9 |

**Appendix 8 Table 3. Price changes – Georgia (%)**

| | 2006 | Simple FTA | Simple FTA BIS | FTA+ | DEEP FTA | DEEP FTA+ |
|---|---|---|---|---|---|---|
| Grains, fruits, vegetables, crops nec | -1 | -1 | -1.1 | -0.7 | -0.5 | -0.9 |
| Livestock | -0.3 | -0.4 | -0.5 | 0.3 | 0.5 | 0 |
| Forestry | -0.3 | -0.3 | -0.4 | 0.3 | 0.6 | -0.1 |
| Fishing | -0.8 | -0.8 | -0.9 | -1.1 | -0.2 | -1.9 |
| Coal | -0.9 | -0.9 | -0.9 | -0.9 | -0.8 | -0.9 |
| Oil | -0.9 | -0.9 | -0.9 | -1.7 | -0.5 | -2.8 |
| Gas | -0.7 | -0.7 | -0.1 | -1.2 | -0.5 | -1.9 |
| Mining and quarrying | -1.4 | -1.8 | -1.8 | -2.6 | -2 | -3.1 |
| Food products, beverages and tobacco | -2.6 | -3.1 | -3.5 | -3.5 | -3.4 | -3.6 |
| Textiles and textile goods | -10.9 | -11 | -11 | -11.4 | -11.4 | -11.4 |
| Leather products | -8.4 | -8.4 | -8.5 | -8.3 | -8.2 | -8.3 |
| Wood products | -10.4 | -10.7 | -10.7 | -12.2 | -12.2 | -12.2 |
| Paper products, publishing | -7.6 | -7.8 | -7.8 | -9 | -8.9 | -9.2 |
| Petroleum, coal products | -2.8 | -2.9 | -2.9 | -3.3 | -3.2 | -3.3 |
| Chemical, rubber, plastic products | -7.8 | -7.9 | -7.9 | -8.4 | -8.4 | -8.5 |
| Mineral products nec | -3.6 | -4.3 | -4.4 | -4.8 | -4.6 | -4.9 |
| Metals and metal products | -8.3 | -8.4 | -8.4 | -8.8 | -8.8 | -8.9 |
| Transport equipment | -4.2 | -4.2 | -4.2 | -4 | -3.9 | -4.2 |
| Machinery and electronic equipment | -4.1 | -4 | -4.1 | -3.9 | -3.9 | -3.9 |
| Manufactures nec | -7.9 | -7.9 | -7.9 | -7.9 | -7.8 | -8.1 |
| Electricity | -0.4 | -0.3 | -0.4 | -0.1 | 0.4 | -0.7 |
| Gas manufacture, distribution | -0.4 | -0.4 | -0.4 | -0.6 | 0.1 | -1.3 |
| Water | -0.6 | -0.6 | -0.7 | -0.9 | -1.4 | -1.7 |
| Construction | -1.7 | -1.8 | -1.8 | -2.3 | 0 | -3.1 |
| Trade | -0.2 | -0.2 | -0.3 | -0.6 | 0.4 | -1.6 |
| Transportation and Storage Services | -1 | -1 | -0.9 | 0 | 0 | 0 |
| Communications | 0.2 | 0.2 | 0.1 | 0.2 | 1 | -0.7 |
| Banking lending and insurance | 0.2 | 0.3 | 0.2 | 0.8 | 1.3 | 0.4 |
| Business services nec | -0.3 | -0.3 | -0.3 | -2.4 | -0.2 | -4.6 |
| Other Communal, Social and Personal Services | -0.7 | -0.7 | -0.7 | -1.5 | -0.2 | -2.7 |
| Public administration, education, health care | -0.5 | -0.5 | -0.6 | 1.4 | 0.7 | 2 |
| Investments | -3 | -3 | -3 | -3.1 | -2.7 | -3.4 |

**Appendix 8 Table 4. Change in exports to all regions - Georgia (%).**

| | 2006 | Simple FTA | Simple FTA BIS | FTA+ | DEEP FTA | DEEP FTA+ |
|---|---|---|---|---|---|---|
| Grains, fruits, vegetables, crops nec | 11 | 12 | 12 | 32 | 29 | 34 |
| Livestock | 4 | 4 | 5 | 3 | 1 | 5 |
| Forestry | 1 | 1 | 2 | -1 | -3 | 2 |
| Fishing | 11 | 12 | 12 | 20 | 11 | 30 |
| Coal | 3 | 3 | 3 | 3 | 1 | 5 |
| Oil | 9 | 10 | 10 | 17 | 6 | 30 |
| Gas | 0 | 0 | 0 | 0 | 0 | 0 |
| Mining and quarrying | 15 | 17 | 18 | 28 | 20 | 37 |
| Food products, beverages and tobacco | 41 | 46 | 47 | 70 | 68 | 72 |
| Textiles and textile goods | 90 | 95 | 97 | 250 | 252 | 248 |
| Leather products | 51 | 51 | 52 | 65 | 64 | 67 |
| Wood products | 33 | 37 | 37 | 62 | 57 | 67 |
| Paper products, publishing | 20 | 20 | 21 | 36 | 30 | 42 |
| Petroleum, coal products | 3 | 3 | 3 | 9 | 0 | 19 |
| Chemical, rubber, plastic products | 40 | 44 | 44 | 73 | 69 | 78 |
| Mineral products nec | 25 | 29 | 30 | 51 | 48 | 53 |
| Metals and metal products | 31 | 36 | 37 | 62 | 59 | 65 |
| Transport equipment | 14 | 15 | 16 | 13 | 10 | 16 |
| Machinery and electronic equipment | 17 | 19 | 20 | 39 | 38 | 40 |
| Manufactures nec | 64 | 65 | 66 | 185 | 167 | 204 |
| Electricity | 3 | 3 | 4 | 1 | -4 | 7 |
| Gas manufacture, distribution | 4 | 4 | 4 | 6 | -1 | 14 |
| Water | 6 | 6 | 7 | 8 | 0 | 17 |
| Construction | 0 | 0 | 0 | 0 | 0 | 0 |
| Trade | 2 | 2 | 3 | 5 | -4 | 15 |
| Transportation and Storage Services | 9 | 9 | 10 | 0 | 0 | 6 |
| Communications | -2 | -2 | -1 | -2 | -9 | -3 |
| Banking lending and insurance | -2 | -2 | -1 | -7 | -11 | 53 |
| Business services nec | 3 | 3 | 3 | 25 | 2 | 28 |
| Other Communal, Social and Personal Services | 6 | 7 | 7 | 14 | 2 | -16 |
| Public administration, education, health care | 5 | 5 | 6 | -11 | -6 | 0 |

**Appendix 8 Table 5. Change in imports from all regions- Georgia (%)**

| | 2006 | Simple FTA | Simple FTA BIS | FTA+ | DEEP FTA | DEEP FTA+ |
|---|---|---|---|---|---|---|
| Grains, fruits, vegetables, crops nec | 10 | 10 | 10 | 11 | 25 | 28 |
| Livestock | 5 | 5 | 6 | 5 | 13 | 15 |
| Forestry | 10 | 10 | 10 | 11 | 26 | 29 |
| Fishing | 11 | 11 | 10 | 9 | 18 | 14 |
| Coal | -2 | -2 | -1 | 5 | -3 | 11 |
| Oil | 0 | 0 | 0 | 0 | 0 | 0 |
| Gas | 0 | 0 | 0 | 2 | 1 | 6 |
| Mining and quarrying | 16 | 16 | 16 | 17 | 33 | 36 |
| Food products, beverages and tobacco | 13 | 13 | 15 | 15 | 21 | 25 |
| Textiles and textile goods | -1 | -1 | -1 | 1 | 2 | 6 |
| Leather products | 8 | 8 | 7 | 10 | 11 | 15 |
| Wood products | -8 | -8 | -8 | -6 | -6 | -1 |
| Paper products, publishing | 9 | 9 | 9 | 11 | 13 | 16 |
| Petroleum, coal products | -3 | -3 | -3 | -1 | -3 | |
| Chemical, rubber, plastic products | -1 | -1 | -1 | 1 | 1 | 5 |
| Mineral products nec | 20 | 20 | 19 | 22 | 30 | 34 |
| Metals and metal products | 1 | 1 | 1 | 3 | 2 | 7 |
| Transport equipment | 7 | 7 | 7 | 9 | 10 | 13 |
| Machinery and electronic equipment | 2 | 2 | 2 | 4 | 4 | 9 |
| Manufactures nec | 5 | 5 | 5 | 6 | 7 | 10 |
| Electricity | -2 | -2 | -2 | -2 | 3 | 2 |
| Gas manufacture, distribution | 1 | 1 | 1 | 4 | 1 | 7 |
| Water | -3 | -3 | -3 | -4 | 1 | -2 |
| Construction | 0 | 0 | 0 | 0 | 0 | 0 |
| Trade | -2 | -2 | -2 | -4 | 3 | -1 |
| Transportation and Storage Services | 3 | 3 | 3 | 6 | 23 | 29 |
| Communications | 0 | 0 | 0 | 0 | 8 | 7 |
| Banking lending and insurance | 1 | 1 | -2 | 1 | 27 | 27 |
| Business services nec | -2 | -2 | -3 | -9 | 0 | -14 |
| Other Communal, Social and Personal Services | -3 | -3 | -3 | -6 | 0 | -6 |
| Public administration, education, health care | -3 | -3 | -3 | 1 | 4 | 13 |