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Georgia's agricultural exports

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Executive Summary

1) Georgia is a net importer of agricultural products (including primary commodities and processed food products), having run a net agricultural trade deficit in each of the last 10 years. However, many analyses have shown that Georgia has a comparative advantage in agricultural production. This suggests there is a large potential for expanding agricultural exports from Georgia.

2) The current structure of Georgia's agricultural exports is highly concentrated:
   - Between 2009 and 2014, four product categories (nuts; alcohol, spirits and liqueurs; wine; mineral waters) accounted for 75% of all agricultural exports from Georgia;
   - Over the same period, 65% of Georgia's agricultural exports were destined to CIS countries, a share which would have been even higher if Russia had not banned imports from Georgia between 2006 and 2012.

3) While it is positive that Georgia exports many processed agricultural products, the high dependence on a few products and destinations makes Georgian agricultural exports vulnerable to disruption, as has been experienced in the past.

4) We discuss a series of measures that can contribute to increasing and diversifying Georgia's agricultural exports. These include:
   - Implementing a generic promotions program for Georgian agricultural exports in high-income markets such as the EU;
   - Upgrading Georgia's agricultural education and research capacities;
   - Improving the training of workers and managers in agricultural production and food processing; and
   - Investing in domestic transport infrastructure.

5) Agricultural export growth requires an appropriate trade policy environment. Trade agreements with current and potential trade partners can increase legal certainty for traders and investors, and improve access to foreign markets. The Deep and Comprehensive Free Trade Agreement (DCFTA) between Georgia and the EU signed in June 2014 is a case in point.

6) Reaping the benefits of the DCFTA will largely depend on Georgia's ability to comply with the EU's food quality standards. Compliance will not only improve access to the EU market for Georgia's agricultural exports, it will also improve access to other markets which are increasingly implementing similar standards, and it will strengthen the position of domestic agricultural and food production in Georgia vis-à-vis growing import competition.

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Introduction

Agriculture makes an important contribution to economic development in Georgia. Value added in agriculture accounted for 9.3% of Georgian GDP in 2013 and 53.4% of employment (World Bank, 2014a). Agriculture also provides an essential basis for the food, beverages and tobacco processing industries, which together accounted for just over one-third of value added in manufacturing in Georgia in 2010 (World Bank, 2014a). Hence, overall agricultural and food production in Georgia accounts for roughly 14% of GDP.

In addition, agriculture growth is closely linked to the alleviation of poverty, which is especially concentrated in rural areas in Georgia. While 14.8% of the Georgian population lived below the national poverty line in 2012, this share was only 10.5% in urban areas, but 18.8% in rural areas. Numerous studies have demonstrated that agricultural growth is an especially effective means of reducing poverty: according to evidence cited in the World Development Report (World Bank, 2008), growth in agriculture is 3.5 times more effective in reducing poverty than growth outside of agriculture in China; in Latin America agricultural growth is 2.7 times more effective.

Agricultural trade can also contribute to economic development. Firms that export tend to be more productive than comparable firms in the same industry, in agriculture as well as in other sectors. Hence, exporting firms often play a leadership role in terms of innovation and technology transfer, boosting investment, employment and overall economic growth. Agricultural exports can also make an important contribution to the balance of payments. In Georgia, agriculture accounted for over one-quarter of export earnings in 2013 (Table 1). At the same time, however, agriculture contributed just over USD 518 million to Georgia's overall trade deficit of USD 4,965 million (Table 1). Indeed, Georgia has consistently run an agricultural trade deficit over the last decade (Figure 1).

This is surprising: According to a recent OECD study, Georgia's revealed comparative advantage in agriculture ranks 15th out of 193 countries (Liapis, 2011).[1] In a study of global wine markets (Anderson and Nelgen, 2011), Georgia's revealed comparative advantage in wine ranks second on a list of 13 major wine exporting countries. Hence, there is considerable potential for increasing agricultural exports and agriculture's contribution to economic development in Georgia.

Table 1: Agriculture's contribution to Georgia's trade balance in 2013 (million USD)

	Total trade	Agricultural trade	*Agriculture's share*
Exports	2909	774	*26.6%*
Imports	7874	1292	*16.4%*
Balance	-4965	-518	*10.4%*

Source: MoESD, (2014).

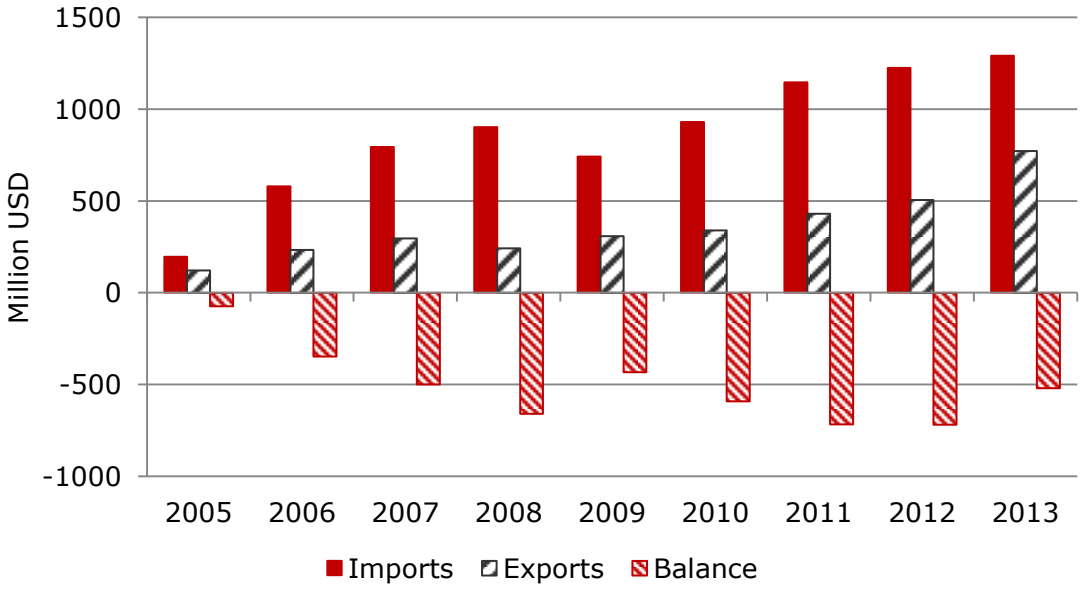
[1] Comparative advantage measured using data from 2007 and Balassa's Revealed Comparative Advantage (RCA) index.

The objective of this paper is to review Georgia's agricultural export performance and make recommendations for improving it. The emphasis is on two important dimensions of Georgia's agricultural export performance: i) the diversity of Georgia's agricultural exports and specifically the share of processed products in Georgia's agricultural exports; and ii) the diversity of the destinations for Georgia agricultural exports.

1. Why focus on diversification and processed agricultural products?

A diverse export structure, in terms of both products and destinations, has the important advantage of reducing dependence and vulnerability to shocks caused by production shortfalls (due for example to weather, or the outbreak of a plant or animal disease) or by trade policy changes (e.g. an import ban in an importing country). In addition, there are several advantages to exporting especially processed agricultural products as opposed to primary commodities. International agricultural trade is shifting towards high-value processed products, a trend which was slowed but not reversed by recent peaks in prices for primary commodity such as grains and oilseeds. Exporting processed agricultural products generates employment in the processing industry and value-added in areas such as packaging, transportation and quality control. This can provide an important impetus to the economic development and diversification of rural areas. Furthermore, prices for processed agricultural products are generally less volatile than prices for agricultural commodities. Many processed agricultural products are easier to store than primary commodities, so their exports can be spread out over time, thus making better use of available infrastructure (e.g. harbour capacities) and reducing the need to sell into temporary glut markets.

Figure 1: Georgia's agricultural trade (2005-2013, in million USD)



Source: MoF, (2014).

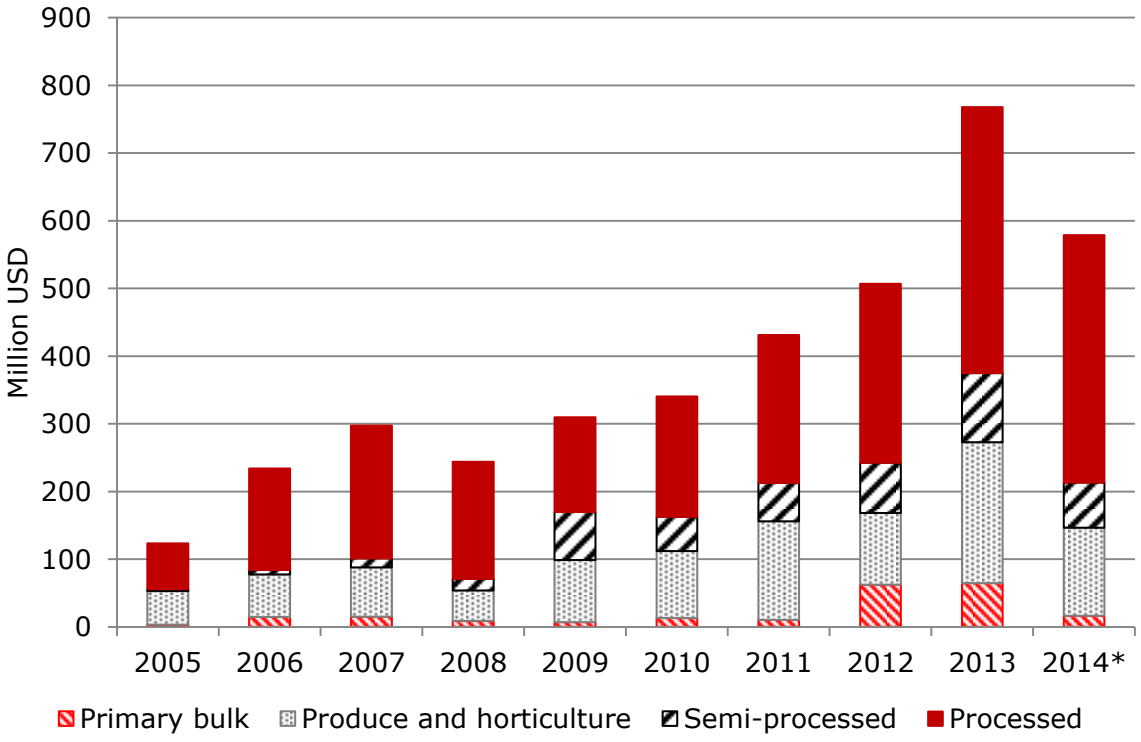
2. Georgia' agricultural exports

Georgia's agricultural exports have steadily increased since 2008, reaching 774 million USD in 2013 (Figure 1). We use a scheme proposed by Regmi et al. (2005) to break these exports down into four categories:

- Primary bulk commodities (e.g. coffee, tea, grains and oilseeds);
- Produce and horticultural commodities (e.g. vegetables, fruits, and spices);
- Semi-processed products (e.g. grain flours, vegetable oils, animal fats, and seeds for sowing); and
- Processed products (e.g. meat, dairy products, pasta, processed grains, and beverages).[2]

Processed agricultural products make up by far the largest share of Georgia's agricultural exports (Figure 2). This category has accounted for no less than 45% of total agricultural exports (in 2009), and as much as 71% (in 2008), averaging 57% between 2005 and 2014. This is comparable to the shares attained by typical high-income countries, and considerably higher than the 10% to 30% attained by most middle- and low-income countries (Liapis, 2011).

Figure 2: The composition of Georgia's agricultural exports (2005-2014, %)



**2014 data only include up to the month of April.*
Source: MoF, (2014).

[2] Regmi (2005, p. 2) provides a comprehensive listing of products in each category. As this classification makes clear, the term 'agricultural exports' includes a wide range of agricultural and food products.

Primary bulk commodities, by contrast, only accounted for an average of 5% of Georgia's agricultural exports between 2005 and 2014, peaking at 12% in 2012. Semi-processed and especially produce and horticultural commodities have considerably larger shares. While produce and horticultural commodities are not highly processed, they are generally labour- and know-how-intensive exports that can contribute significantly to agricultural and overall economic development. As regards the mix of high-value processed products as opposed to lower-value commodities, the structure of Georgia's agricultural exports appears quite favourable.

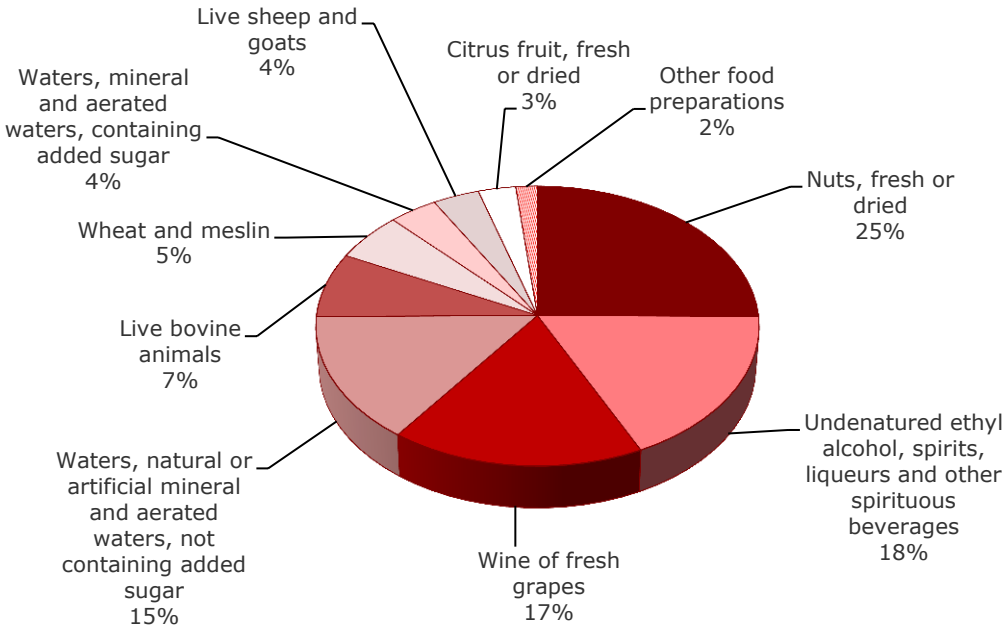
A closer look at the data, however, indicates that Georgia's exports in the processed and produce and horticulture categories are highly concentrated on a small number of product headings. Some initial evidence is provided by Liapis (2011) in his detailed analysis of international trade in processed agricultural products.[3] According to Liapis (2011, p. 93), Georgia exported a total of 101 processed products to 75 trading partners in 2007. By comparison, the average OECD country exported over twice as many products (221) to over twice as many partners (153). This suggests that Georgia's agricultural exports are relatively concentrated. Of course these numbers include a large number of very small trade flows and may be misleading.

However, a look at the top ten products and top ten destinations for Georgia's agricultural exports confirms that they are highly concentrated. Between 2009 and 2014, three product headings ('ethyl alcohol, spirits, liqueurs and other spirituous beverages' - 18%; 'wine of fresh grapes' - 17%; and 'waters, natural or artificial mineral' - 15%) together accounted for 50% of all agricultural exports, and roughly 95% of all processed agricultural exports (Figure 3). Similarly, over the same period the heading 'nuts, fresh or dried' accounted for 25% of all agricultural exports, and 92% of all exports in the category 'produce and horticulture'. Hence, while Georgia does export primarily processed agricultural products, its exports are highly concentrated in two areas – beverages and nuts.

Concentration is also apparent when we look at the destinations for Georgia's agricultural exports (Figure 4). Since 2009, the most important destination has been Ukraine with a share of 21.5%, followed by Azerbaijan, the Russian Federation, Kazakhstan and Armenia, with shares of 15.8%, 8.1%, 7.9% and 7.2%, respectively. Altogether, CIS countries account for 65% of Georgia's agricultural exports. The non-CIS country that imported the most agricultural products from Georgia between 2009 and 2014 is Germany with a share of only 5.6%.

[3] Based on the Harmonised System (HS) 6-digit classification.

Figure 3: The ten agricultural exports with the largest volumes (average 2009-2014, %)

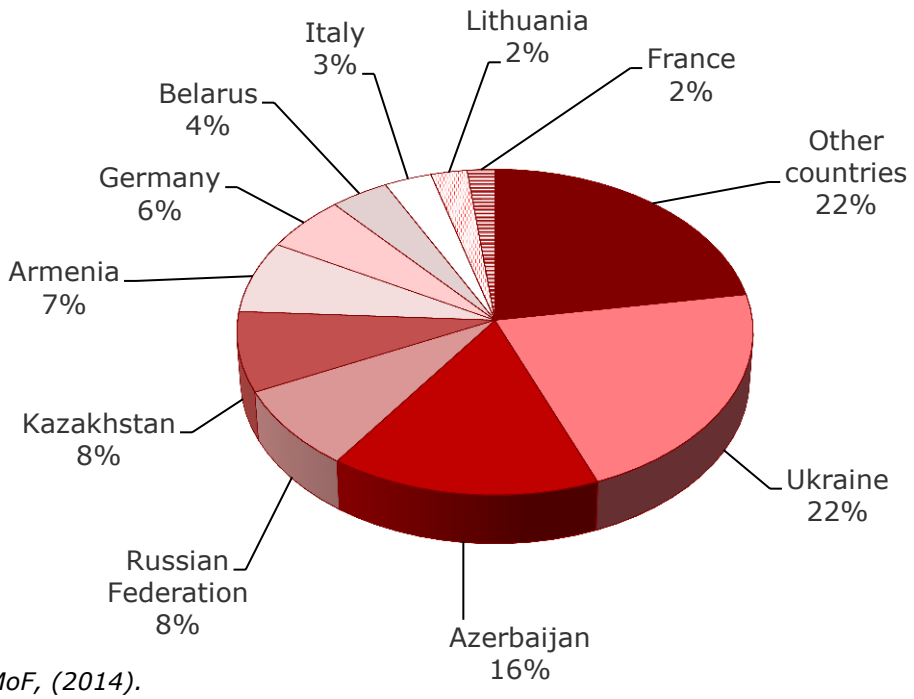


Source: MoF, (2014).

In summary, Georgia's agricultural exports are highly concentrated on a small number of export products and a small number of CIS trading partners. This implies that Georgia is highly competitive in exporting a limited number of products to several specific markets, but it also implies that Georgian agricultural exports are correspondingly vulnerable.

The effects of this vulnerability were felt when Russia imposed a ban on Georgian wines, mineral water and other agricultural products in 2006. In fact, Russia's 8.1% share of Georgian agricultural exports presented in Figure 4 (and, as a result, the overall share of the CIS countries) is biased downward by the effects of this ban. After Russia reopened its borders in 2013, Georgian agricultural exports increased by over USD 250 million and Georgia's balance of agricultural trade improved by a similar amount. Georgian wine exports more than doubled from 2012 to 2013, and in the first eight months of 2014 Russia alone accounted for almost 70% of Georgian wine exports. Russia's recent announcement that it will cancel its bilateral free trade agreement with Georgia and apply most favoured nation (MFN) tariffs to Georgian agricultural products will have a less dramatic effect than the 2006 import ban. However, it does highlight the fact that Georgia's agricultural trade depends heavily on a partner that has frequently displayed a propensity for making abrupt trade policy changes.

Figure 4: The ten destinations for Georgia's agricultural exports (average 2009-2014, %)



Source: MoF, (2014).

3. Implications

The obvious implication of the results presented above is that Georgia should strive to increase the diversity of the agricultural products that it exports, and of the destinations to which it exports these products. The difficult question is how to achieve this goal.

Many factors combine to determine a country's comparative advantage in agricultural production and, hence, its competitiveness in agricultural exports and in particular exports of processed agricultural products. In wine production, experts refer to the "three T's" of terroir, tradition and technology (Anderson, 2013). These terms stand for important determinants of competitiveness that apply not only to wine, but to agricultural exports in general:

Terroir is a specific term that refers to a location's agro-climatic suitability for wine production. But agro-climatic factors such as soils, weather and topography are equally important for many other agricultural products. Although these factors are clearly important, they are predetermined or 'God-given' and cannot be influenced appreciably by policy makers. In any event, Georgia is endowed with very good agricultural 'terroir'. The challenge is to combine it with the other factors that are required to successfully export agricultural products.

Tradition refers to how products are produced, and how they are perceived by consumers abroad. For example, the great majority of Georgian wine exports go to CIS countries because consumers in these countries are familiar with Georgian wines and demand a

"unique style of cheap semi-sweet red wine" (Anderson, 2013, p. 5) that Georgia has supplied for centuries. Most consumers in lucrative OECD and other high-income markets for wine know little about Georgian wine because they have no tradition of consuming the sorts of wine that Georgia traditionally produces.

Policy can influence some traditions. However, deep-seated tastes for a product such as wine are difficult to change, and (with the exception of the post-Soviet diaspora) it is difficult to envision consumers in non-CIS countries, who largely prefer drier wines, acquiring a taste for traditional Georgian wines on a large scale. To target these consumers Georgia will have to produce different wines (Anderson, 2013). This is largely a question of adopting new technologies (see 'technology' below), and there are indications that it has begun to take place in Georgian wine production.

However, a public scheme to generically promote Georgian agricultural products in general could complement and support private advertising to increase awareness in high-income markets. Such a scheme could reinforce themes that many consumers in high-income, non-CIS country associate with Georgia; the snow-capped Caucasus, a clean environment, healthy food and healthy people. Not only wine, but in particular exports of produce and horticultural products from Georgia could benefit from such a promotional campaign.

Technology is about finding ways to produce more or better products using the same or less inputs. Governments have an important role to play in ensuring that agricultural producers and processors are working as close as possible to the current technological frontier – i.e. making the best possible use of existing technologies to ensure high yields, environmental sustainability and safe products. This requires an effective agricultural education and extension system to train farmers and processors.

Governments also have an important role to play in supporting the generation of new agricultural technologies that are adapted to local conditions, and that ensure that the resulting products meet the tastes and standards of consumers in target markets. For example, producing dependable quantities of the wines that are demanded by consumers in major high-income importing countries will require the adoption of new technologies in agriculture, processing, certification, and quality control. An effective agricultural research and development system can help develop and disseminate these technologies. In many countries that export agricultural products successfully, the institutions that provide education and research and development in agriculture are linked to ensure that technology development and training complement one another.

The development and adoption of appropriate technologies is a challenge that calls for an integrated strategy that spans the entire food chain. Producers cannot simply produce as they always have and expect processors to somehow make do with what they deliver; processors cannot expect producers to make major investments and change their production systems without reasonable assurance (for example via contractual arrangements) that these investments and changes will pay off. Policy can foster this process by providing a stable macro-economic environment for investment and trade in

agriculture, an efficient and transparent regulatory framework for the certification of food quality and safety, and an agricultural policy that supports necessary structural change (e.g. land re-allotment schemes that fosters the consolidation and growth of farm structures).

Three more "T's" can be added to the three mentioned above. The first of these is transport. The producer of an agricultural export ultimately receives a residual price that equals the price of the final product in the export market minus all of the costs of processing and marketing that take place between his farm and the final consumer. The costs of physically processing an agricultural raw product into a final product are largely determined by the technologies discussed above. But transport costs also play an important role. Georgia benefits from year-round ice-free ports that provide direct access to international sea transport. Since it is a geographically small country, domestic transportation routes are comparatively short. However, the quality of the roads to many rural regions in Georgia is quite poor, which increases transport costs and reduces the prices that farmers in these regions receive for their products. Investments in infrastructure are am important ingredient in reducing transport costs and improving export competitiveness.

The term transaction costs refers to other costs of trade such as the cost of contracting with trade partners, the cost of certifying that goods meet required safety and quality standards, the cost of insuring shipments of goods, and the cost of customs' documentation and delays. According to data compiled by the World Bank (2014b), Georgia has reduced many of these costs considerably over the last decade. The total number of documents required for a shipment to export goods was reduced from 9 in 2006 to 4 in 2014, and the time needed to complete all necessary procedures required to export goods fell from 54 to 9 days over the same period. As a result, Georgia now ranks 31st in international comparison, considerably higher than many of its neighbours, and on par with such competitors on international markets for wine, produce and horticultural commodities as Chile, Italy and Spain (Table 2).

The final "T" is time. All of the steps outlined above (implementing a generic promotions program for Georgian agricultural exports; upgrading Georgia's agricultural education and research capacities; improving the training of workers and managers in agricultural production and food processing; investing in domestic transport infrastructure) take time to implement. While they can generate some positive effects in the short run, many benefits will only be felt strongly after five years or more. Education and research in particular generate returns over the span of a generation and beyond. Policy makers often and understandably think in terms of shorter election cycles, but improving Georgia's agricultural export performance is a medium- to long-run challenge.

Table 2: Costs of exporting goods in Georgia and selected other countries/groups (2014)

Country or group	Rank	Documents to export (number)	Time to export (days)	Cost to export (US$ per container)
East Asia & Pacific	-	6,1	20,2	864,0
Europe & Central Asia	-	6,9	23,6	2154,5
Latin America & Caribbean	-	5,7	16,8	1299,1
Middle East & North Africa	-	6,0	19,4	1166,3
OECD high income	-	3,8	10,5	1080,3
South Asia	-	8,1	33,4	1922,9
Sub-Saharan Africa	-	7,6	30,5	2200,7
Armenia	110	5	16	1885
Azerbaijan	166	9	27	3460
Bulgaria	57	4	18	1375
Chile	40	5	15	910
GEORGIA	**33**	**4**	**9**	**1355**
Israel	12	4	10	620
Italy	37	3	19	1195
Moldova	152	9	23	1510
Romania	65	5	13	1485
Russian Fed.	155	9	21,1	2401
Spain	30	4	10	1310
Turkey	90	7	13	990
Ukraine	154	8	29	1880

Source: World Bank (2014b).

4. Georgian agricultural exports to the EU

Agricultural export growth requires an appropriate trade policy environment. Trade agreements with current and potential trade partners can increase legal certainty for traders and investors, and improve access to foreign markets. The Deep and Comprehensive Free Trade Agreement (DCFTA) between Georgia and the EU signed in June 2014 is a case in point. Georgia has an agricultural trade deficit with the EU (Table 3), but this deficit is comparatively small (USD 41 million) and accounts for only 2.3% of Georgia's overall trade deficit with the EU, and less than 1% of Georgia's trade deficit with the world as a whole. Roughly one-half of all Georgian fruit, vegetable and nut exports go to the EU, and hazelnuts make up the vast majority of these exports. Hence, Georgia has succeeded in penetrated some markets for agricultural products in the EU.

Nevertheless, there is potential for expanding agricultural exports to the EU, which is an attractive, near-by, high-income market. The challenge is tapping this potential. Much research is needed to address this challenge, but it is clear that EU food safety standards are a crucial issue. The DCFTA will lower many remaining tariff barriers to the EU agricultural market, but most of these tariffs are already low because Georgia already

receives unilateral trade concessions from the EU under the so-called Generalised System of Preferences (GSP+). However, the EU applies a wide range of sanitary and phytosanitary (SPS) standards to ensure that EU consumers are supplied with safe food. Furthermore, major food processors and supermarket chains in the EU implement additional private standards (such as Globalgap) that often exceed the EU's SPS standards. It is comparatively easy to meet these standards for hazelnuts, which helps explain why Georgia has been successful in exporting this product to the EU. For other products (such as meat products) these standards are very exacting and also pose challenges to domestic producers in the EU.

Table 3: Georgia's trade with the EU in 2013 (mill. USD)

	Total trade	Agricultural trade	*Agriculture's share*
Exports	888	163	*18.4%*
Imports	2700	205	*7.6%*
Balance	-1812	-41	*2.3%*

Source: European Commission (2014).

Simulations suggest that the DCFTA could lead to a roughly 20% expansion of Georgian exports of fruits, vegetables and nuts (Ecorys and CASE, 2012). These gains do not result so much from reductions in tariff barriers (which are already quite low), but rather depend on Georgia's compliance with the EU's food quality standards. Furthermore, the beneficial effects of quality compliance on Georgia's agricultural exports would likely be felt not only in the form of increased access to the EU market itself, but also in the form of increased access to other markets (e.g. Turkey). For perishable fruit and vegetable products, distance and complex transport logistics (e.g. uninterrupted cooling during shipment) will remain important challenges for Georgian exports to the EU. However, the example of hazelnuts shows that niche markets can be developed; future niches in the EU might include other types of nuts, fruit juices, and varieties of berry.

Furthermore, as food markets become increasingly global and growing urban and middle-class populations all over the world increasingly demand high-quality food products, many countries are adopting food safety standards that are similar to, and sometimes even modelled on those applied by the EU. Hence, investments in complying with EU standards as a result of the DCFTA will also increase market access to non-EU markets. Equally important, they will strengthen the position of domestic agricultural and food production in Georgia vis-à-vis competing imports, as segments of the Georgian population also become increasingly demanding.

Adapting Georgia's food standards to those in the EU, and implementing these standards, will require amendments to laws and regulations in Georgia, but also public and private investment in food testing laboratories and types of infrastructure. In making these investments, Georgia can benefit from technical assistance from the EU and donors such as the World Bank and the EBRD.

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