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Exchange rates and the current account in Georgia

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Executive Summary

Georgia's current account deficit has been growing recently, triggering concern and debate among policy makers and analysts. After falling from 22 to 5.8% of GDP between 2008 and 2013, it increased to 9.8% of GDP in 2014. The IMF projects that it will grow to 11.5% of GDP in 2015.

An increase in Georgia's trade deficit is largely responsible for the recent growth in its current account deficit. Between 2013 and 2014, the current account deficit increased by USD 682 m, while the trade deficit in goods increased by USD 733 m.

Exchange rates developments can affect trade flows, and exchange rates of the Georgian Lari against other currencies have fluctuated considerably since mid-2013 and especially mid-2014. However it is important to focus on real rather than nominal exchange rates. Our empirical analysis shows that Georgian exports and imports do react to movements in real exchange rates.

However, with the exception of the RUB in the second half of 2014, the GEL has not appreciated in real terms relative to the currencies of its major trading partners. Hence, exchange rate movements cannot be the main cause of the recent increases in Georgia's trade and current account deficits. If anything, the weakening of the GEL over the last year has probably slowed the growth in these deficits.

Georgia's exports depend heavily on incomes and economic growth in Georgia's trading partners. Sluggish growth in the EU, stagnation in Turkey and economic contraction in Russia, Ukraine and several other CIS countries have contributed to the recent growth in Georgia's trade and current account deficits. These developments are beyond the control of policy makers in Georgia's Government or National Bank.

However, since the recent increase in Georgia's trade deficit has been primarily caused by increased imports and not by reduced exports, economic difficulties in the EU, Turkey and the CIS countries can only provide a partial explanation. Detailed analysis of the commodity composition of the recent increases in Georgian imports would provide additional insights.

A current account deficit is not unusual for a country that is at Georgia's stage of economic development. A current account deficit is sustainable as long as foreign creditors are willing to invest in Georgia. To ensure this in the long run, sound economic policy (a good investment climate, fiscal responsibility and an independent national bank) is essential. Among other things, this implies that the National Bank of Georgia should resist political pressure to target nominal exchange rates.

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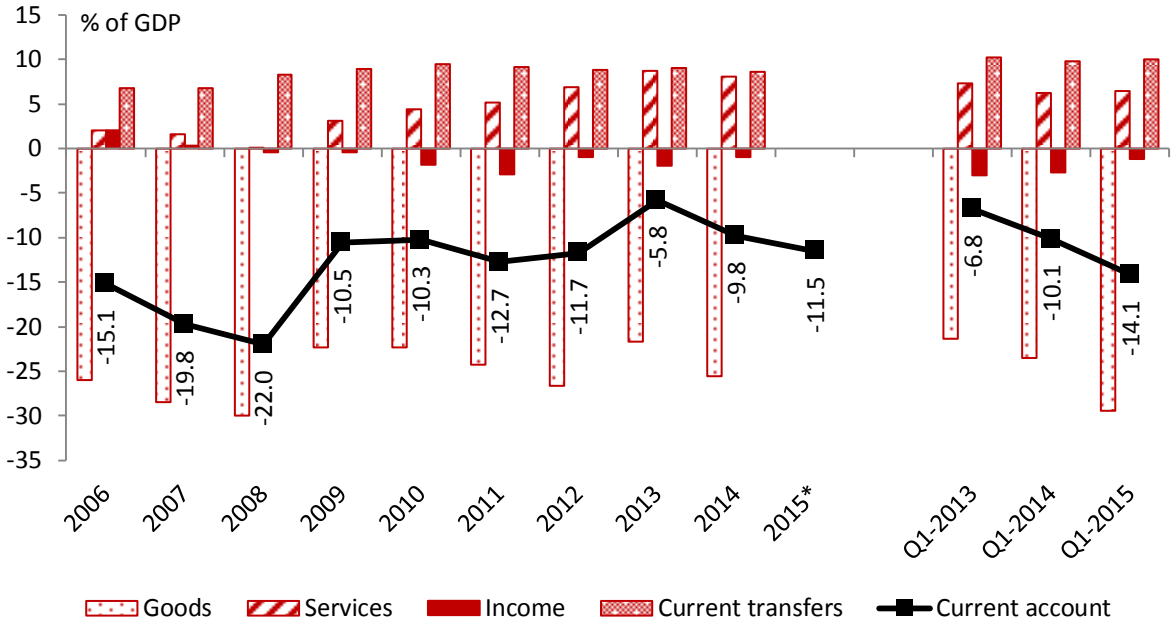
1. Introduction

Georgia's current account deficit has been growing recently, triggering concern and debate among policy makers and analysts. After falling from 22 to 5.8% of GDP between 2008 and 2013, it increased to 9.8% of GDP in 2014. Figures for the first quarter of 2015 indicate that this negative trend is continuing – the current account deficit increased from 6.8% of GDP in the first quarter of 2013, to 10.1 and 14.1% in the first quarters of 2014 and 2015, respectively (Figure 1). In May 2015 the IMF projected that Georgia's current account deficit will grow to 11.5% of GDP in 2015.[1] What are the causes of this increasing deficit, and how should policy makers respond?

Figure 1

The evolution of Georgia's current account (2006-2015, % of GDP)



** IMF projection*
Source: National Bank of Georgia, own calculations

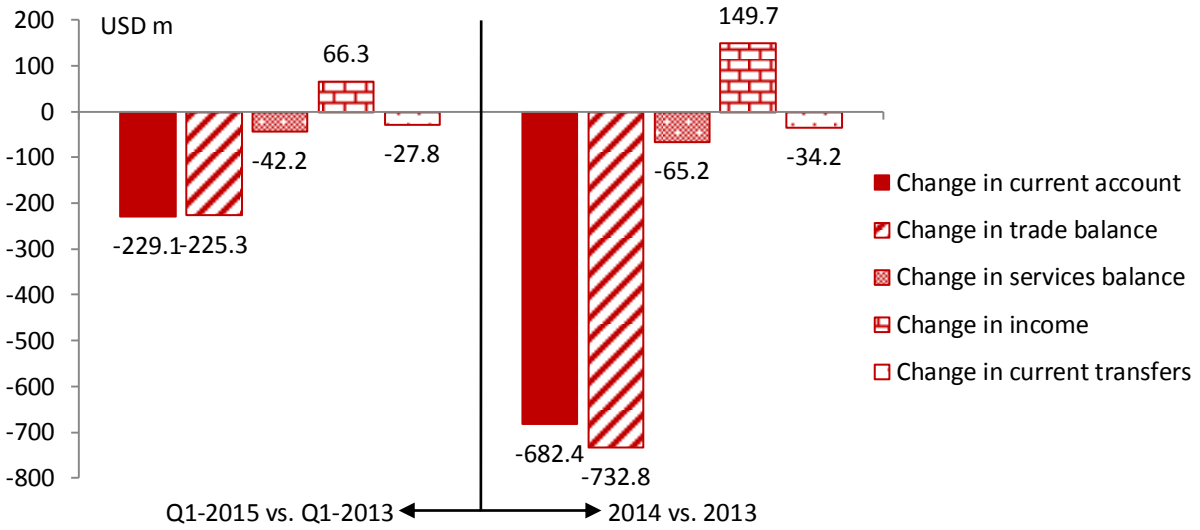
[1] IMF, Regional Economic Outlook – Update, Middle East and Central Asia Department, IMF, Washington DC, May 2015.

2. The current account and the Georgia's balance of trade

A closer look at the data reveals that an increase in Georgia's trade deficit is largely responsible for the recent growth in its current account deficit. Comparing the first quarter of 2015 with the first quarter of 2013, the increase in the current account deficit (USD 229 m) is roughly the same size as the increase in Georgia's trade deficit in goods (USD 225 m), while changes in the other components of the current account are considerably smaller and roughly balance (Figure 2). A similar pattern is apparent when 2014 is compared with 2013: the current account deficit increased by USD 682 m, while the trade deficit in goods increased by USD 733 m. If not for a sizeable increase in the incomes component of the current account (by USD 150 m), the current account deficit would have increased by considerably more in 2014.

Figure 2

The contribution of different components to Georgia's growing current account deficit (2014 vs. 2013 and Q1-2015 vs. Q1-2013, changes in USD m)



Source: National Bank of Georgia, own calculations

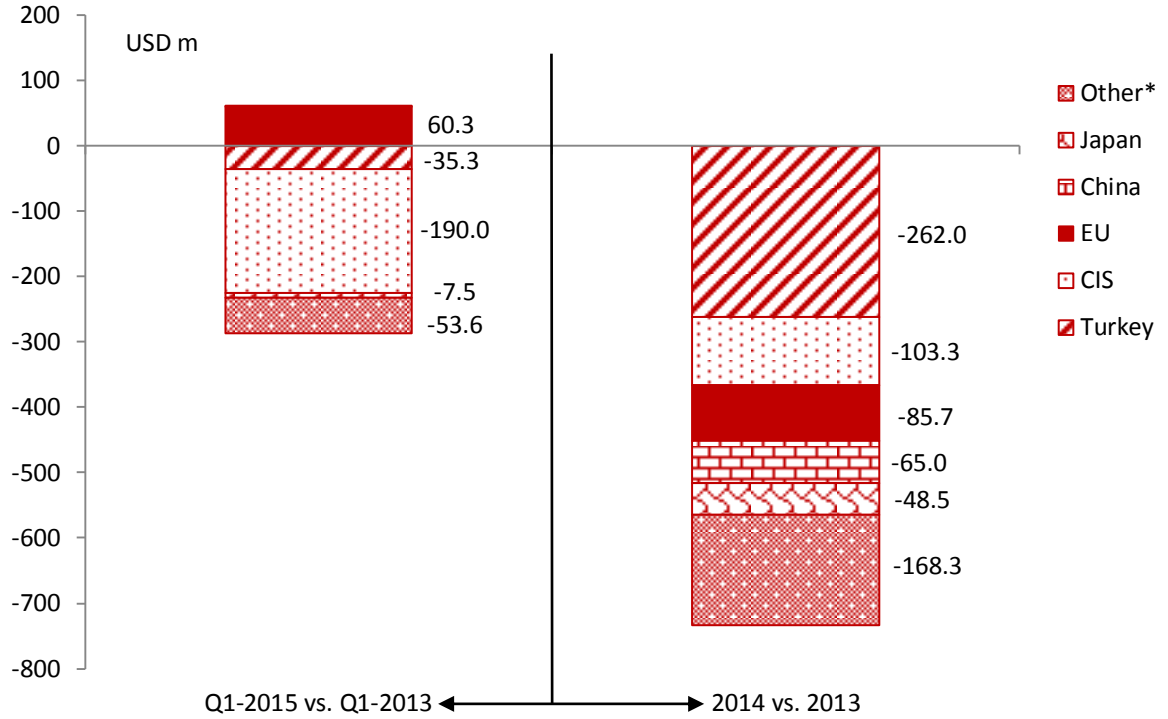
A closer look at trade date reveals several characteristics of the increased trade deficit. First, it is due more to growth in imports than to reductions in exports. Indeed, roughly 90% of the increase in Georgia's trade deficit from 2013 to 2014 was due to increased imports, and only 10% to a reduction in exports. Comparing the first quarter of 2013 with the first quarter of 2015, roughly 70% of the increase in the trade deficit is due to imports growth. Hence, the trade deficit has grown recently because export growth has failed to keep pace with import growth.

Second, breaking down the recent increases in Georgia's deficit in goods trade, we see that Turkey and the CIS play important roles. Increases in Georgia's trade deficits with Turkey and the CIS countries accounted for USD 262 m and USD 103 m, respectively, of the USD 733 m increase in Georgia's overall trade deficit between 2013 and 2014 (Figure 3). However, Georgia's trade deficit with other major trading partners including the EU, China and Japan also grew from 2013 to 2014.

Comparing the first quarter of 2013 with the first quarter of 2015 confirms the importance especially of increasing deficits with the CIS countries. Georgia's overall trade deficit increased by USD 225 m from the first quarter of 2013 to the first quarter of 2015, and 84% of this increase can be attributed to a USD 190 m increase in Georgia's net imports from the CIS countries.

Figure 3

Changes in Georgia's balance of trade in goods with major trade partners (2014 vs. 2013 and Q1-2015 vs. Q1-2013, changes in USD m)



** "Other" includes other countries and discrepancies between official trade statistics and trade as it is reported in the current account*
Source: National Bank of Georgia, own calculations

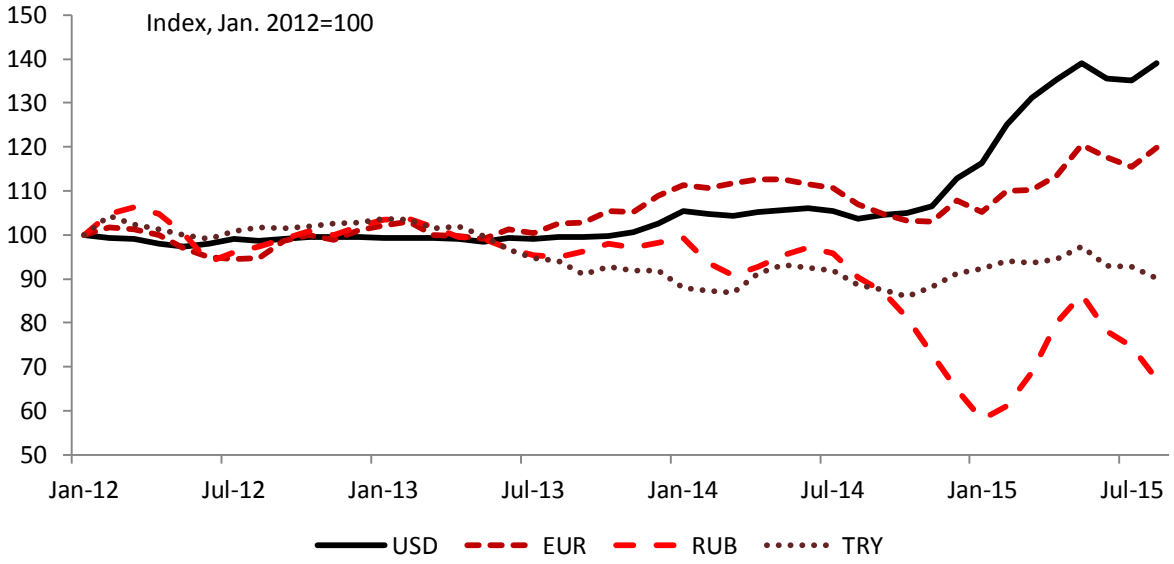
3. The balance of trade and exchange rate changes

When a country's trade balance changes, attention often turns to exchange rate movements as a possible explanation. If a country's currency depreciates, that country's exports become less expensive for consumers in other countries and its imports become more expensive for domestic consumers. All other things being equal, these effects will tend to increase exports, reduce imports and, thus, reduce the trade deficit (or increase the trade surplus) in the long run. These long-run effects might take some time to unfold, however. If import and export quantities do not react immediately to changing prices (because contracts that pre-date the depreciation must be fulfilled, for example), then the trade deficit might first increase following a depreciation before it decreases in the long run. The resulting reaction pattern is sometimes referred to as the J-curve.

How has the value of the Georgian Lari (GEL) evolved recently? After a comparatively stable phase in 2012 and the first half of 2013, exchange rates between the GEL and the currencies of major trading partners such as the Euro (EUR), the US Dollar (USD), the Turkish Lira (TRY) and the Russian Rouble (RUB) have fluctuated considerably (Figure 4). Exchange rates have become especially volatile since mid-2014. Since early 2012, the GEL has weakened against the EUR and the USD, and the National Bank of Georgia has been criticised for allowing this to happen. The depreciation against the USD has been especially pronounced since December 2014. In contrast, the GEL has gained roughly 20% against the TRY since 2012, and roughly 40% against the RUB. The GEL/RUB exchange rate has been especially volatile since mid-2014, with the GEL appreciating against the RUB by over 40% in the second half of 2014, the RUB regaining much of its strength through April 2015, and then falling again sharply since.

Figure 4

The evolution of nominal exchange rates between the Georgian Lari (GEL) and the currencies of major trading partners (January 1, 2012 = 100)



Source: National Bank of Georgia, own calculations

In summary, the GEL has revalued against the TRY and the RUB over the last two years, and Georgia's trade deficit with Turkey and the CIS countries has grown considerably over the same period. Is the strength of the GEL against the TRY and the RUB therefore to blame for Georgia's growing trade and, by extension, current account deficits since 2013? The answer is no for several reasons.

First, not all of Georgia's trade with the CIS countries is carried out with Russia. In 2014, 51.2% of Georgia's exports went to CIS countries, but only 9.6% to Russia. Similarly, 24.7% of Georgia's imports came from CIS countries, and only 6.7% from Russia. Much trade with other CIS countries is conducted in USD or national currencies such as the Ukrainian Hryvnia. If Georgia exporters are competing with Russian exporters in these countries, then the strength of the GEL against the RUB will influence Georgian competitiveness. Otherwise, the strength of the GEL against the relevant national currency will matter. Furthermore, despite the appreciation of the GEL against the RUB, note that Georgia's trade deficit with Russia itself actually fell from USD 397 m in 2013 to USD 303 m in 2014, primarily due to a USD 84 m increase in Georgian exports to Russia.

Second, the GEL has weakened considerably against the EUR and the USD over the last two years. If strength against the RUB and the TRY is responsible for growing trade deficits with these countries, then should not weakness against the EUR and the USD improve Georgia's balance of trade with the EU and the US?

Third, the nominal exchange rates presented in Figure 4 can be misleading because they do not account for differences in rates of inflation between countries that also influence competitiveness and trade flows. Real exchange rates account for differences in rates of inflation, and are therefore a better indicator of shifts in competitiveness between countries than nominal exchange rates.[2] Table 1 shows, for example, that the 9.2% nominal appreciation of the GEL against the TRY between the first quarter of 2013 and the first quarter of 2015 actually masks a mild 0.2% real depreciation. It is true that as a result of the nominal appreciation of the GEL against the TRY in 2013 and 2014 it now takes more TRY to purchase one GEL and Georgian goods have therefore become more expensive for Turkish consumers (and Turkish goods less expensive for Georgian consumers). However, over the same period inflation rates in Turkey (7.4% and 8.2% in 2013 and 2014, respectively, compared with 2.9% and 1.4% in Georgia) have made Turkish products relatively more and Georgian products relatively less expensive. The very small change in the real exchange rate (-0.2%) indicates that changes in the nominal GEL/TRY exchange rate and relative rates of inflation in Georgia and Turkey have largely cancelled each other.

[2] In the following we use real exchange rates published by the National Bank of Georgia.

Table 1

Appreciation of the Georgian Lari with respect to selected currencies

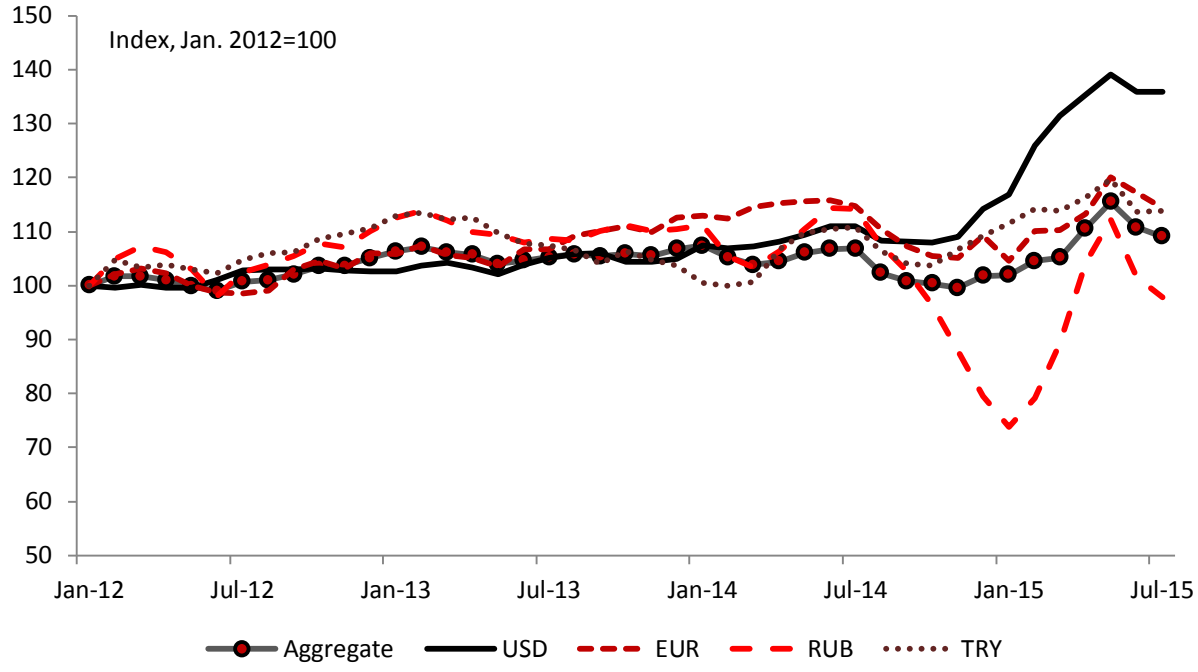
AOP vs. AOP*↓	Russian Rouble		Turkish Lira		US Dollar		Euro	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
2014 vs. 2013	11.0	7.4	7.7	2.6	-6.1	-4.4	-6.2	-3.3
Q1-2015 vs. Q1-2013	39.3	40.1	9.2	-0.2	-24.9	-17.0	-6.8	-1.9

** AOP refers to average over period*
Source: National Bank of Georgia, own calculations

Comparing the nominal exchange rate fluctuations in Figure 4 with the real exchange rate fluctuations in Figure 5 reveals that the latter have been considerably less volatile and that in real terms, the GEL on the whole has if anything tended to devalue against the currencies of its major trading partners, with the exception of the RUB. Hence, if Georgia's exports and imports do react to changes in real exchange rates, these real exchange rates have not moved in a manner which would lead to a significant increase in Georgia's trade deficit. The only currency against which the GEL has revalued strongly in real terms is the RUB, but as we have seen above, Russia accounts for less than 10% of Georgia's exports and imports.

Figure 5

The evolution of real exchange rates between the Georgian Lari (GEL) and the currencies of major trading partners (January 1, 2012 = 100)



Source: National Bank of Georgia, own calculations

Finally, trade flows are influenced by many other factors besides exchange rates. These factors include rates of economic growth at home and abroad, and changes in trade policies such as tariffs, embargoes, etc. Furthermore causality from exchange rates to trade is neither instantaneous nor uni-directional. The short-run and long-run effects of exchange rate changes on trade flows can differ (the J-curve mentioned above) and interact with the seasonality of some trade flows (e.g. for agricultural products and energy) to create complex lead-lag relationships. In addition, changes in trade flows affect the supply of and demand for domestic and foreign currencies and can thus influence exchange rates, leading to bi-directional causality between exchange rates and trade.

4. The determinants of Georgia's exports and imports – empirical evidence

To disentangle these interactions and measure the effect of exchange rates and other factors on Georgia's trade balance, we have carried out an econometric analysis of the Georgian demand for imports and foreign demand for Georgian exports. The analysis was carried out using monthly real exchange rate data published by the National Bank of Georgia and monthly data on Georgian trade published by Geostat for the period January 2000 to May 2015. As a measure of monthly economic growth in Georgia we used data on VAT collection from the Ministry of Finance. To measure monthly economic growth in Georgia's trading partners, OECD data on industrial output were used. All monetary data were deflated, and cointegration methods are used. The main results are reported in Tables 2 and 3, which present estimates of the long-run effects of real exchange rate and income changes on Georgian imports and exports. Key results can be summarised as follows:

a. Georgia's exports and imports are sensitive to real exchange rates. Overall, a 1% appreciation of the aggregate real exchange rate leads to a 1.26% reduction in the volume of Georgian exports and a 1.45% increase in the volume of Georgian imports in the long run.

b. Closer examination of the results shows that it generally takes 12-18 months for long-run effects to unfold. Figure 6 presents an example. It shows that Georgia's total exports increase rapidly in response to a sudden depreciation of the aggregate real exchange rate, reaching a new equilibrium level after roughly 12 months. Georgia's total imports, however, display J-curve-type behaviour, first increasing as a result of the depreciation before they decrease and reach a new equilibrium level after roughly 18 months.

c. Non-agricultural exports react to changes in the real exchange rate, as do exports to Russia and Turkey. However, agricultural exports do not respond to the real exchange rate, and exports to the EU are comparatively insensitive. This suggests that Georgia's exports to Russia and Turkey, and its exports of non-agricultural goods compete especially on the basis of price.

d. Georgia's exports respond more strongly to changes in income in the destination countries than to real exchange rate changes. In all of the cases presented in Table 2, a 1% increase in the importer's income has a larger effect on Georgia's exports than a 1% change in the real exchange rate. Exports to Turkey and Russia depend especially heavily on the economic situation in these countries: if the Turkish (Russian) economy contracts by 1%, Georgian exports to Turkey (Russia) fall by an estimated 4.3% (6.1%) in the long run.[3]

e. Georgian imports also respond to changes in Georgian income. According to the estimates in Table 3, a 1% increase in Georgian income increases imports by 0.84%. This is most likely a

[3] All of the results in Tables 2 and 3 are point estimates that are subject to error. Our estimates of the effects of economic growth in Turkey and Russia on Georgian exports to these countries are high and may overestimate the true effects. If the statistical uncertainty associated with these estimates is factored in, it is possible to calculate so-called confidence intervals. For example, the true value of the effect of 1% economic growth in Russia on Georgian exports lies between 3.4% and 8.1% with 95% probability.

lower bound estimate of the true income effect because we use VAT collection as a proxy for income in Georgia, and monthly VAT collection is more volatile than monthly GDP.

f. Georgia's imports and exports both follow weak but significant positive trends over time. Since 2000, exports have been increasing by roughly 0.01% per month, after changes due to exchange rates and incomes are accounted for. Imports have been growing by 0.002 to 0.004%, although the rate is higher for Russia. This might be evidence that the international integration of the Georgian economy is increasing.

g. The Russian trade embargo with Georgia from early 2006 to 2012 had a significant effect on Georgia's trade with Russia, reducing both exports to and imports from that country. There is also evidence that while the embargo was in place, Georgia's overall exports of agricultural products fell. Russia imports large amounts of wine and other beverages from Georgia, and this result may indicate that Georgia was unable to find alternative export markets for all of these products during the Russian embargo.

5. Conclusions and recommendations

What conclusions can be drawn regarding Georgia's balance of trade and current account?

a. Exchange rates developments do affect trade flows. However it is important to focus on real rather than nominal exchange rates. With the exception of the RUB in the second half of 2014, the GEL has not appreciated in real terms relative to the currencies of its major trading partners. On the contrary, in real terms the GEL has stayed relatively constant and tended to depreciated against most other currencies. Hence, exchange rate movements cannot be the main cause of the recent increases in Georgia's trade and current account deficits. If anything, the weakening of the GEL over the last year has probably slowed the growth in these deficits.

b. Georgia's exports depend heavily on incomes and economic growth in Georgia's trading partners. Sluggish growth in the EU, stagnation in Turkey and economic contraction in Russia, Ukraine and several other CIS countries have contributed to the recent growth in Georgia's trade and current account deficits. These developments are beyond the control of policy makers in Georgia's Government or National Bank.

c. Since the recent increase in Georgia's trade deficit has been primarily caused by increased imports and not by reduced exports, economic difficulties in the EU, Turkey and the CIS countries can only provide a partial explanation. It may be that exporters in these countries have been targeting foreign markets, including Georgia, more aggressively as their domestic markets stagnate and shrink. A detailed analysis of the commodity composition of the recent increases in Georgian imports would provide additional insights.

d. A current account deficit is not unusual for a country that is at Georgia's stage of economic development. A current account deficit is sustainable as long as foreign creditors are willing to invest in Georgia. To ensure this in the long run, sound economic policy (a good investment climate, fiscal responsibility and an independent national bank) is essential. Among other things, this implies that the National Bank of Georgia should resist political pressure to target nominal exchange rates.

Table 2

Long-run effects of real exchange rates and importers' income on Georgian exports

Effect of ↓	% change in exports					
	Total exports	Non-agricultural exports	Agricultural exports	Exports to EU	Exports to Russia	Exports to Turkey
1% revaluation of real exchange rate	-1.26**	-1.46***	0.19	-0.50***	-2.02**	-2.17**
1% increase in importer's income	2.16***	2.48***	2.25**	3.19***	6.09***	4.34***
Trend (monthly % change in exports)	0.009***	0.009***	0.010***	0.010***	0.007**	0.012*
Russian embargo (03/2006 – 12/2012)	-	0.13**	-0.26***	-	-1.93***	-

*Notes: *** and ** refer to statistical significance at the 1% and 5% level, respectively. For total exports, non-agricultural exports and agricultural exports, industrial output in the OECD countries is used as a proxy for importer's income and the weighted aggregate real exchange rate is used. For exports to the EU, Russia and Turkey corresponding national industrial output and real exchange rates of the GEL against the EUR, the RUB and the TRY are used. All estimations carried out with deflated monthly data from January 2000 to May 2015.*

Source: Own calculations with data from Geostat, National Bank of Georgia, Ministry of Finance of Georgia, OECD

Table 3

Long-run effects of real exchange rates and domestic income on Georgian imports

Effect of ↓	% change in imports					
	Total imports	Non-agricultural imports	Agricultural imports	Imports from EU	Imports from Russia	Imports from Turkey
1% revaluation of real exchange rate	1.45***	0.89***	0.77***	1.56***	3.05***	-0.28***
1% increase in Georgian income	0.84***	0.92***	0.74***	0.96***	1.37***	0.89***
Trend (monthly % change in imports)	0.004***	0.002***	0.003***	0.003***	0.012***	0.004***
Russian embargo (03/2006 – 12/2012)	-	-	-	-	-0.63***	-

Notes: *** and ** refer to statistical significance at the 1% and 5% level, respectively. In all estimations, monthly VAT collections in Georgia are used as a proxy for Georgian income. For total imports, non-agricultural imports and agricultural imports, the weighted aggregate real exchange rate is used. For imports from the EU, Russia and Turkey, real exchange rates of the GEL against the EUR, the RUB and the TRY are used. All estimations carried out with deflated monthly data from January 2000 to May 2015.

Source: Own calculations with data from Geostat, National Bank of Georgia, Ministry of Finance of Georgia, OECD

Figure 6

Estimated responses* of Georgian imports and exports to a depreciation of the aggregate real exchange rate of the Georgian Lari (GEL)

** The lines trace estimated changes in the logarithms of Georgian exports and imports following a hypothetical sudden one standard deviation depreciation of the aggregate real exchange rate of the GEL.*
Source: Own calculation with estimation results in Tables 2 and 3

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