

Some Space for Success:
Egypt as part of an Eastern and Southern African Regional
Trade Agreement

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Abstract

It is of Egypt's interest, as a member of the Common Market for East and South Africa (COMESA), to fully implement the agreement, in coordination with the rest of the member countries. This paper attempts to detect the gap between the implementation plans and the actual implementation of COMESA from an Egyptian perspective, and to assess the impact of the institutional factors on the potential implementation of the agreement. The paper relies on a gravity model, where the institutional factors are the independent variables and the trade flows between the member countries -as proxies for the potential implementation of COMESA- are the dependent variables.

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Introduction

This paper is concerned with the Common Market for East and South Africa (COMESA), a Regional Trade Agreement (RTA) which is intended to take the form of a Customs Union (CU) (was originally planned for 2004), as a phase leading to an economic and monetary union by the year 2025.

Since the implementation of COMESA seems to be behind schedule in different aspects, and most of the politicians and decision takers in Egypt and its COMESA trade partners argue that this delay of implementation can mainly be referred to the weak institutions of the member countries of the agreement, the main objectives of the paper are, firstly, to detect the gap between the implementation plans and actual implementation of COMESA from an Egyptian perspective, and secondly, to assess the impact of the institutional factors on the potential implementation of the agreement.

The paper relies on a gravity model, in order to assess the impact of the institutional factors on trade flows between the countries of COMESA, where these trade flows are used as a proxy for a potential implementation.

COMESA in brief

COMESA was established in 1994 as a strengthened successor to the Preferential Trade Area for Eastern and Southern Africa founded in 1981. It had envisaged the establishment of a Common Market and a Monetary Union in the future. Presently, COMESA includes the following 19 members: Angola – Burundi – Comoros Islands – Democratic Republic of Congo – Djibouti – Egypt– Eritrea –Ethiopia – Kenya– Madagascar – Malawi – Mauritius – Rwanda – Seychelles – Sudan – Swaziland – Uganda – Zambia – Zimbabwe.

COMESA is supposed to cover agricultural and animal products; mineral and non-mineral ores; and manufactured goods.

The implementation status of COMESA (gaps of implementation) from an Egyptian perspective

It would be of great importance to compare the plans on the agenda of COMESA with the real implementation, in order to focus on the achievements made and the shortcomings occurring to date. This will be demonstrated in the following subsections.

Elimination of tariffs and negative lists

The original date set by the Preferential Trade Area for Eastern and Southern Africa for attaining the Free Trade Area (FTA) and completely eliminating the tariffs was the 30th of September 1992. But due to the concern about loss of government revenue, the target date for the FTA was postponed to the 31st of October 2000 by the Heads of States and Governments at their Summit held in 1992; they adopted a new program for the gradual

reduction of tariffs applied to all commodities that was supposed to reach the zero-tariff rates by 2000.

When Egypt signed COMESA in 1998 and then the agreement entered into force in 1999, its initial tariff rate reduction was 80 percent. On the 31st of October 2000, the 100 percent tariff reduction was achieved by only nine member countries including Egypt. But even within this FTA, not all the Egyptian exports enjoy duty free access; an example for that is the case of Sudan which has a negative list of 58 items not allowed to be imported from Egypt, unless the full amount of tariff duties is paid..

Although COMESA does not refer to any possible prior exemptions or the right of member states to include negative lists, some members apply exemptions to some tariff lines with prior notifications.

Non-Tariff Barriers and Trade Remedies

Until the end of 2001, the COMESA FTA did not have proper trade remedy provisions (anti-dumping, countervailing measures, injury to industry, etc) and the members were given a free hand to devise their own measures to counter what they considered to be major market disruptions. Although such unilateral measures imply flexibility, their abuse can frustrate trade.

The Twelfth Meeting of the Council of Ministers in Lusaka, Zambia, on the 30th of November 2001, adopted Trade Remedy Regulations for invocation of safeguards, anti-dumping, subsidies and countervailing measures. Work is still on-going through a *Working Group of Experts* to elaborate these regional safeguards and trade remedies.

Concept of originating products and Rules of Origin

Despite the detailed Protocol on the Rules of Origin in COMESA, there have been many claims of incidents of fraud in origin certificates (particularly on the part of Egypt). The issue remains to be a constant item on the agenda of the Ministerial Meetings.

Trade Facilitation

In order to reduce the cumbersome, time-consuming and costly procedures that are faced by the business community in the conduct of international trade, COMESA has adopted a number of measures on the simplification and harmonization of trade documents and customs procedures. But these procedures have not been fully implemented yet by the members.

Dispute Settlement

The COMESA Court of Justice had intended to declare COMESA as a rules-based institution, with rules which can be enforced through a Court of Law. The latter arbitrates on unfair trade practices and ensures that member countries uniformly implement and comply with the decisions agreed upon. But so far, most disputes have been handled through bilateral consultations and discussions of the Ministerial Meetings, while very few cases have been brought forward to the Court. No details are available on those disputes, which implies non-transparency.

Customs

Negotiations on the modalities and the framework for application of a CU with a Common External Tariff (CET) for all the member countries of COMESA are still in their early stages; it was initially planned for the CU to take place in 2004 (4 years after the FTA entry into force). Nonetheless, such a timetable has proven to be quite unrealistic, especially that not all member countries are included in the FTA formed so far.

Beyond-the-border measures (trade-related domestic regulations)

Concerning the Sanitary and Phyto-Sanitary (SPS) measures, the members of COMESA agreed on detailed provisions set in the treaty. However, none of the measures can be recognized as implemented. There is almost no information on the progress of implementing these far reaching commitments and their corresponding domestic adjustments. And to date, there is no information that any of the member countries has undertaken major changes or modifications to its domestic regulations in these areas to adjust to the COMESA obligations.

Competition Policy and Competition Law

A quite comprehensive and clear draft for a COMESA Competition Law that establishes a common competition authority has been worked on. However, the possibility of implementing this draft is questionable, due to the discrepancy in the legal, political and economic systems existing in the member countries.

Intellectual Property Rights (IPR) and Government Procurements

There is no article or provision in COMESA that deals with IPR and no cooperation or harmonization has occurred to date. As for the public procurement reform initiative in COMESA, its main goal is the achieving good governance through transparency and accountability in public procurements. The only considerable effort in this respect -even though still in an early stage- is the initiation of an intra-COMESA online database for procurements and the establishment of a review mechanism for transparency in practice. The implementation of both is still in the early stages.

Trade in services

The member countries of COMESA agreed to adopt, individually, at bilateral or regional levels the necessary measures to achieve a progressive free movement of persons, labor and services and to ensure the enjoyment of the right of establishment and residence by their citizens within the Common Market. Nonetheless, no negotiations on any modalities or legal frameworks for the liberalization of trade in services took place to date.

The institutional challenges facing the implementation of COMESA

The delay and lack of implementation of COMESA can be referred -among others- to the following problems:

- The awareness of the benefits of COMESA is quite modest, since the government agencies do not make enough effort to keep the public informed. The information channels between ministries, traders and other concerned parties are completely absent.

- The information about markets in COMESA countries and the international promotion for the local products are poor.
- The guarantees system between the partner countries of COMESA is missing in many cases. Consequently, the signed contracts between the different parties are not always respected and enforced.
- partner governments of COMESA -including Egypt- do not always commit themselves to the terms and conditions of the agreement; the articles of the agreement are left to the interpretation of customs officials, who themselves lack knowledge about the operations of the agreement and who are not regularly informed about changes in rules, laws and resolutions.
- Although COMESA looks very promising on paper, it does not necessarily reduce the numerous administrative procedures, paperwork, red tape and corruption and does not necessarily improve the quality of human resources in Egypt.
- The transportation between the countries of COMESA is inadequate in many cases.

A gravity model assessing the impact of institutional quality on the trade flows between the COMESA countries

It has long been recognized that bilateral trade patterns are well described empirically by the gravity model, which relates trade between two countries positively to both of their incomes and negatively to the distance between them, usually with a functional form that is reminiscent of the law of gravity in physics (Deardorff, 1995).

When applied to a wide variety of goods and factors moving over regional and national borders under different circumstances, the gravity model usually produces a

good fit (Anderson and Wincoop, 2003). The gravity model used in this paper mainly relies on the following three indicators for institutional quality:

1. *Government Effectiveness*: It is an indicator for the quality of public service provision, the quality of the bureaucracy, the capability of civil servants, the independence of the civil service from political pressures, and the accountability of the government's commitment to different policies. In many cases, governments are powerful enough to change domestic institutions. Therefore, the “government effectiveness” index is likely to reflect the quality of domestic institutions. It can also determine the importance of uncertainties related to policy changes in general and trade policy changes in particular.
2. *Rule of Law*: It is based on several indicators that measure the extent to which agents trust and bear the rules of society. These indicators contain the perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts.
3. *Control of Corruption*: It measures the perceptions of corruption, usually defined as using the public power for private gain. Hence, high levels of corruption increase the uncertainty about the size of gains to be expected from economic activities. Corruption seems to be a widespread phenomenon with potentially large negative effects on trade (Ades and Di Tella, 1999; Wei, 2000). In a 1996 World Bank survey of 3,685 firms in 69 countries, for instance, corruption proved to be the second most important obstacle for doing business¹ (Brunetti et al. (1997)).

The three indicators are derived from the Kaufmann et al. (2002) database. The indexes of these indicators take values between -2.5 and 2.5; the higher the value the better the quality of the institutional factor. These indicators were chosen, since they can be expected to strongly affect the uncertainty involved with trade, and hence, the transaction costs.

In all the regressions, the dependent variable is the flows between the member countries of COMESA pair wise, and the main concern is estimating the coefficients of the three institutional independent variables and detecting their sign and significance in the model. We first add only the very basic independent variables -also used as control variables- of the gravity model (GDP^2 for the pair countries and the geographic distance between them) to the institutional variables. In advanced steps, we add other complementary variables, such as landmass or population of the importing partner country, border contingency with the partner country, common official language, common spoken language, common dominant religion (World Fact Book, Central Intelligence Agency), being colonized by a common colonizer, having a colonial relationship and being a same country at a certain time of history (CEPII, 2005), which are all independent variables that could have a certain influence on the trade flows between the countries of COMESA.

Before including the three institutional variables in one regression, the correlation coefficients between the three variables are calculated. They confirm a very high multi-co-linearity, as it is shown in table (1); the correlation coefficients for all combinations of pairs of the three indicators range between 0.85 and 0.90. Thus, the three of them

influence each other in a way or another. But usually, corruption, uncertainties related to entering and enforcing contracts and ineffective provision of government services represent separate cost elements in international trade (Jansen and Nordas, 2004). Therefore, the regressions are run -with respect to each of the institutional indexes- separately.

Using the minimum number of variables of a gravity model

Exports

Firstly, the exports of one country of COMESA are regressed on the institutional variables in both countries (one at a time in the three different regressions) in addition to the GDP of the two countries and the distance between them, using the following regressions:

$$\log_exp_ij = \alpha_1 + \beta_1 \log_gdp_i + \gamma_1 \log_gdp_j + \delta_1 \log_distwces + \eta_1 \log_goveff_i + \theta_1 \log_goveff_j + \mathcal{E}_1 \dots\dots\dots 1$$

$$\log_exp_ij = \alpha_2 + \beta_2 \log_gdp_i + \gamma_2 \log_gdp_j + \delta_2 \log_distwces + \eta_2 \log_rullaw_i + \theta_2 \log_rullaw_j + \mathcal{E}_2 \dots\dots\dots 2$$

$$\log_exp_ij = \alpha_3 + \beta_3 \log_gdp_i + \gamma_3 \log_gdp_j + \delta_3 \log_distwces + \eta_3 \log_contco_i + \theta_3 \log_contco_j + \mathcal{E}_3 \dots\dots\dots 3$$

where:

exp_{ij} are country i's exports to country j

gdp_i is the GDP of the exporting country i

gdp_j is the GDP of the importing country j

$distwces$ is the weighted average distance between countries i and j

$goveff_i$ is the government effectiveness index for country i

$goveff_j$ is the government effectiveness index for country j

$rullaw_i$ is the rule of law index for country i

$rullaw_j$ is the rule of law index for country j

$contco_i$ is the control of corruption index for country i

$contco_j$ is the control of corruption index for country j

$\alpha, \beta, \gamma, \delta, \eta, \theta$ are the respective estimated coefficients and $\mathcal{E}$ is the error term³.

The results are shown in table (2); in the three cases, the GDP coefficients of the two partner countries give a positive sign at a five per cent level. The same applies to the coefficients of the institutional variables in both countries, although the institutional variables of the exporting country matter apparently more than the ones of the importing country. The distance coefficient gives in all cases the expected negative sign and is also significant. In general, the control of corruption matters less than government effectiveness and rule of law.

Imports

To look at the other side of the coin, we regress the imports of one country (i) of COMESA on the GDP, the institutional variables of that country and its exporting partner (j) from the same agreement and the distance between the two countries (i and j) in three separate regressions, as is shown in the three following regressions:

$$\log_{imp_ij} = \alpha_4 + \beta_4 \log_{gdp_i} + \gamma_4 \log_{gdp_j} + \delta_4 \log_{distwces} + \eta_4 \log_{goveff_i} + \theta_4 \log_{goveff_j} + \varepsilon_4 \dots\dots\dots 4$$

$$\log_{imp_ij} = \alpha_5 + \beta_5 \log_{gdp_i} + \gamma_5 \log_{gdp_j} + \delta_5 \log_{distwces} + \eta_5 \log_{rullaw_i} + \theta_5 \log_{rullaw_j} + \varepsilon_5 \dots\dots\dots 5$$

$$\log_{imp_ij} = \alpha_6 + \beta_6 \log_{gdp_i} + \gamma_6 \log_{gdp_j} + \delta_6 \log_{distwces} + \eta_6 \log_{contco_i} + \theta_6 \log_{contco_j} + \varepsilon_6 \dots\dots\dots 6$$

where:

imp_{ij} are country i's imports from country j.

Hence, in this case, i is the importing country and j is the exporting country.

The results shown in table (3) are quite similar to the ones in table (2), giving more weight to the government effectiveness and the rule of law as compared to the control of corruption. However, the latter still remains significant.

Using the minimum number of variables of a gravity model in addition to the landmass or population of the importing country

In a following step, we add the landmass and population of the importing country one at a time as a further independent variable and expect the sign of the coefficient to be negative.

Exports

For the three institutional variables, we use the following regression on separate basis:

$$\log_exp_ij = \alpha + \beta \log_gdp_i + \gamma \log_gdp_j + \delta \log_distwces + \lambda \log_size_j + \eta$$

$$\log_inst_i + \theta \log_inst_j + \varepsilon \dots\dots\dots 7$$

where

inst_i is the institutional variable in the exporting country i

inst_j is the institutional variable in the importing country j

size_j is the size of the importing country j (measured in terms of landmass or population one at a time).

λ is the estimated coefficient of the country size.

The results shown in table (4) indicate that the GDP coefficients of both countries remain positive and significant, whereas the landmass coefficients are insignificant in the three cases. What is also noteworthy is the fact that the coefficients associated with the institutional variables in the exporting countries are positive and significant, while the same variables in the importing countries turn to be insignificant. This implies that the trade flows between two member countries of COMESA depend on the good or bad institutions in the exporting country rather than in the importing country.

Replacing the landmass by the population as an indicator for the size of the importing country does not change the insignificance of the associated coefficients, as can be seen from table (5).

Imports

After replacing the exports of regression 7 by the imports, the regression takes the following form:

$$\log_{imp_{ij}} = \alpha + \beta \log_{gdp_i} + \gamma \log_{gdp_j} + \delta \log_{distwces} + \lambda \log_{size_i} + \eta \log_{inst_i} + \theta \log_{inst_j} + \varepsilon \dots\dots\dots 8$$

The results in table (6) indicate that the GDP in both countries has a positive effect on trade flows between the partner countries of COMESA. And once again, the institutional quality in the exporting countries only has a positive effect on the trade flows. Table (7)

gives the same results, but after substituting the population -which in itself does not have a significant effect - for the landmass.

Dropping the institutional variables in the importing countries from the regressions

Since the regressions in the previous section proved that the institutional variable in the importing country does not have a significant effect on the trade flows between two countries, the same regressions are run after dropping this variable, while keeping the institutional variable in the exporting country. A slight change in the regressions occurs as follows:

$$\log_{exp_{ij}} = \alpha + \beta \log_{gdp_i} + \gamma \log_{gdp_j} + \delta \log_{distwces} + \lambda \log_{size_j} + \eta \log_{inst_i} + \mathcal{E} \dots\dots\dots 9$$

$$\log_{imp_{ij}} = \alpha + \beta \log_{gdp_i} + \gamma \log_{gdp_j} + \delta \log_{distwces} + \lambda \log_{size_i} + \theta \log_{inst_j} + \mathcal{E} \dots\dots\dots 10^4$$

Exports

In the case of the exports and as it is shown in table (8), the GDP coefficients, the distance and institutional coefficients remain significant, and even the coefficient of the landmass as an indicator for the size of the importing country turns into significant. This

means that the exports of one country to the other are negatively associated with the size of the importing country.

Table (9) gives the same results after substituting the populations for the landmass. Again, the former becomes negatively significant after dropping the institutional variable of the importing country.

Imports

Tables (10) and (11) show -first using landmass and then population respectively- that not only the GDP in both countries, the distance between them and the institutional quality of the exporting countries matter, but also the size of the importing country has an influence on the imports, a negative one, though, which was predicted by the theory and proven in most of the past empirical evidence.

Adding the complementary variables to the regressions

In the following regressions, we add further complementary independent variables that might have an influence on the trade flows between the pair countries in COMESA. The regression takes the following form:

$$\begin{aligned} \log_exp_ij = & \alpha + \beta \log_gdp_i + \gamma \log_gdp_j + \delta \log_distwces + \lambda \log_size_j + \\ & \mu \log_ (1+contig) + \nu \log_ (1+comla_f) + \omega \log_ (1+comla_k) + \rho \log_ (1+comrel) + \\ & \pi \log_ (1+colony) + \sigma \log_ (1+comcol) + \vartheta \log_ (1+smctry) + \eta \log_inst_i + \theta \log_inst_j \\ & + \mathcal{E} \dots\dots\dots 11^5 \end{aligned}$$

where:

contig is the dummy for the contiguity (common border) between the pair countries.

comla_f is the dummy for the common official language between the pair countries.

comla_k is the dummy for the common spoken language between the pair countries.

comrel is the dummy for the common dominant religion between the pair countries.

colony is the dummy for a historical colonial relationship between the pair countries.

comcol is the dummy for being historically colonized by a common colonizer.

smctry is the dummy for being one country at a certain time of history.

$\mu, \nu, \omega, \rho, \pi, \sigma, \vartheta$ are the estimated coefficients of the added variables to the model respectively.

Exports

It seems from table (12) and table (13) -using landmass and population respectively, as indicators for country size- that adding the complementary independent variables does not add much significance to the regressions. Moreover, the inclusion of these variables in the model makes the landmass and population lose their significance in most of the regressions. In other words, the impact of these variables -apart from the common colonizer in a few cases- on trade flows between the partner countries is insignificant, while the significance remains for the GDP, the distance between the pair countries and the institutional variables in the exporting countries.

Imports

Having a look at tables (14) and (15), we obtain similar results for the imports as the other side of the coin. The GDP in all the member countries and the institutional variables in the exporting countries have a significant positive influence on the trade flows and the distance between the countries has a significant negative influence. Adding the complementary variables to the model reduces the significance of the size of the pair countries. The only additional variable in the model that appears to have a positive significant effect on the trade between COMESA countries pair wise is the common spoken language between them.

Conclusions and recommendations

The institutional quality -which is the main concern of this paper- has a positive impact on trade flows, and hence, the potential implementation of COMESA. When controlling for other variables that are supposed to influence the trade between partner countries, we find out that the institutional variables that really matter are the ones existing in the exporting rather than the importing countries. This means that in one commercial deal between two countries of COMESA, it is mainly the institutional quality of the exporting country that influences the deal, which in turn indicates that institutional factors affecting the quality, quantity and timeliness of providing the goods are more important than the financial settlements occurring within this deal.

The GDP in the exporting and importing countries within COMESA has a positive impact on the trade flows between its member countries. Apart from a few cases,

the size of the importing country measured in terms of population and landmass does not play a significant role in COMESA.

The rest of the complementary control variables differ in their importance and significance. The only additional control variable that in most cases significantly affects the trade between partner countries of COMESA is the common spoken language.

Practical experience proves that achieving an Economic and Currency Union is achievable. An essential issue is strengthening the linkages between the different countries of COMESA. These include the availability of market information and also the better transportation between countries. Moreover, the accountability of the government's commitment to different policies is a very important factor that could help speed up the implementation. The occurrence of a strong guarantees system in the trade between the partner countries would automatically lead to a strict enforceability of contracts. Fighting corruption is the right way for decreasing the private gains and rent seeking, and thus, making the best use of the agreement. There is a great need of a flexible system that enhances the incentives of the market representatives instead of dampening their motivations.

As for Egypt, it could use the privilege of being part of several RTAs other than COMESA, such that one experience would positively affect the other.

If the institutions are improved, given the good economic incentives, the implementation of COMESA could be successful and the flows between Egypt and the African countries could boost.

Tables

Table (1)

Correlation coefficient matrix between the institutional variables in COMESA countries

Country i	Government effectiveness	Rule of law	Control of corruption
Government effectiveness	1	0.9286	0.8669
Rule of law	0.9286	1	0.8979
Control of corruption	0.8669	0.8979	1
Country j	Government effectiveness	Rule of law	Control of corruption
Government effectiveness	1	0.8872	0.8523
Rule of law	0.8872	1	0.9060
Control of corruption	0.8523	0.9060	1

Table (2)

**The impact of GDP, distance and institutional variables on exports within
COMESA countries**

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-22.23314 (-1.82)	-27.94181 (-2.28)	-34.67325 (-2.68)
GDP in country i	2.154103 (7.41)	2.35645 (8.32)	2.413375 (8.15)
GDP in country j	1.365371 (3.19)	1.522558 (3.45)	1.682377 (3.57)
Distance between country i and j	-6.970546 (-8.91)	-7.090463 (-9.14)	-6.937071 (-8.37)
Institutional variable in country i	6.735154 (3.91)	4.832982 (4.28)	4.027507 (2.14)
Institutional variable in country j	3.116435 (2.04)	2.615622 (2.38)	4.01008 (2.47)
R-squared	0.4875	0.5016	0.4560

Table (3)

**The impact of GDP, distance and institutional variables on imports within
COMESA countries**

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-49.35495 (-3.86)	-56.15734 (-4.36)	-55.2346 (-4.08)
GDP in country i	1.714901 (5.64)	1.862254 (6.25)	1.852866 (6.00)
GDP in country j	2.939151 (6.56)	3.228312 (6.95)	3.114785 (6.34)
Distance between country i and j	-6.667179 (-8.14)	-6.848802 (-8.38)	-6.710138 (-7.76)
Institutional variable in country i	3.767305 (2.09)	2.560623 (2.16)	3.383848 (2.82)
Institutional variable in country j	5.776103 (3.60)	4.505603 (3.90)	4.263756 (2.51)
R-squared	0.4725	0.4807	0.4429

Table (4)

**The impact of GDP, distance, landmass and institutional variables on exports within
COMESA countries**

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-31.98795 (-2.28)	-33.58361 (-2.54)	-37.11433 (-2.68)
GDP in country i	2.169479 (7.48)	2.361787 (8.35)	2.41336 (8.13)
GDP in country j	2.202963 (2.98)	2.004189 (3.26)	1.922035 (2.90)
Landmass of country j	-0.5570618 (-1.39)	-0.3474317 (-1.12)	-0.1937438 (-0.52)
Distance between country i and j	-7.102365 (-9.04)	-7.153432 (-9.20)	-6.940776 (-8.36)
Institutional variable in country i	6.813302 (3.96)	4.830913 (4.29)	4.00035 (2.11)
Institutional variable in country j	0.3554717 (0.14)	1.624471 (1.15)	3.08593 (1.27)
R-squared	0.4950	0.5064	0.4571

Table (5)

**The impact of GDP, distance, population and institutional variables on exports
within COMESA countries**

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-29.05389 (-2.30)	-32.52485 (-2.61)	-37.45125 (-2.85)
GDP in country i	2.195654 (7.60)	2.384131 (8.46)	2.433537 (8.22)
GDP in country j	2.488058 (3.37)	2.339004 (3.52)	2.295544 (3.28)
Population in country j	-0.9437221 (-1.85)	-0.7365251 (-1.64)	-0.5845353 (-1.18)
Distance between country i and j	-7.302963 (-9.18)	-7.315949 (-9.34)	-7.08345 (-8.47)
Institutional variable in country i	6.930711 (4.05)	4.900408 (4.37)	4.116302 (2.18)
Institutional variable in country j	.5147501 (0.25)	1.368502 (1.03)	2.496294 (1.21)
R-squared	0.5008	0.5118	0.4618

Table (6)

**The impact of GDP, distance, landmass and institutional variables on imports
within COMESA countries**

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-66.02495 (-4.70)	-69.64503 (-5.15)	-68.14524 (-4.87)
GDP in country i	3.202826 (4.98)	3.110683 (5.73)	3.152361 (5.66)
GDP in country j	2.964749 (6.77)	3.281678 (7.23)	3.151919 (6.57)
Landmass of country i	-1.048322 (-2.61)	-0.9512979 (-2.72)	-1.011651 (-2.78)
Distance between country i and j	-6.966325 (-8.61)	-7.251933 (-8.94)	-7.064429 (-8.29)
Institutional variable in country i	-0.6016684 (-0.25)	0.4136521 (0.29)	-0.2996674 (-0.13)
Institutional variable in country j	5.925594 (3.78)	4.706003 (4.16)	4.58457 (2.76)
R-squared	0.4989	0.5089	0.4743

Table (7)

**The impact of GDP, distance, population and institutional variables on imports
within COMESA countries**

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-50.48576 (-3.93)	-56.9079 (-4.43)	-55.71572 (-4.13)
GDP in country i	2.235333 (3.64)	2.47185 (4.57)	2.494904 (4.53)
GDP in country j	2.940591 (6.57)	3.241984 (7.00)	3.128448 (6.39)
Population in country i	-0.4993383 (-0.98)	-0.6192088 (-1.35)	-0.6592732 (-1.41)
Distance between country i and j	-6.918498 (-8.06)	-7.228643 (-8.39)	-7.112444 (-7.84)
Institutional variable in country i	2.659239 (1.25)	1.954024 (1.54)	2.468388 (1.19)
Institutional variable in country j	5.851141 (3.65)	4.618811 (4.00)	4.470591 (2.63)
R-squared	0.4763	0.4880	0.4513

Table (8)

The impact of GDP, distance, landmass and *institutional variables of the exporting countries* on exports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-32.59282 (-2.44)	-34.20385 (-2.59)	-37.89752 (-2.74)
GDP in country i	2.169549 (7.51)	2.339389 (8.28)	2.385815 (8.04)
GDP in country j	2.26332 (3.76)	2.175457 (3.64)	2.197096 (3.50)
Landmass of country j	-0.6022409 (-2.47)	-0.5712857 (-2.37)	-0.5475523 (-2.16)
Distance between country i and j	-7.101858 (-9.07)	-7.039638 (-9.12)	-6.763386 (-8.24)
Institutional variable in country i	6.805899 (3.98)	4.732816 (4.21)	3.754576 (1.99)
R-squared	0.4949	0.5013	0.4502

Table (9)

The impact of GDP, distance, population and *institutional variables of the exporting countries* on exports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-29.28283 (-2.33)	-31.3597 (-2.52)	-35.15209 (-2.70)
GDP in country i	2.19696 (7.63)	2.369976 (8.42)	2.415916 (8.16)
GDP in country j	2.574445 (3.96)	2.502868 (3.88)	2.503003 (3.69)
Population in country j	-1.02977 (-2.77)	-1.001409 (-2.72)	-0.9531934 (-2.45)
Distance between country i and j	-7.309648 (-9.22)	-7.25299 (-9.29)	-6.972739 (-8.37)
Institutional variable in country i	6.919552 (4.06)	4.834358 (4.32)	3.956018 (2.10)
R-squared	0.5005	0.5078	0.4557

Table (10)

The impact of GDP, distance, landmass and *institutional variables of the exporting countries* on imports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-64.62396 (-5.05)	-70.69572 (-5.44)	-67.81233 (-4.95)
GDP in country i	3.096306 (6.51)	3.18838 (6.73)	3.119147 (6.35)
GDP in country j	2.962714 (6.79)	3.285541 (7.27)	3.152943 (6.60)
Landmass of country i	-0.9799708 (-3.37)	-1.009297 (-3.50)	-0.9850449 (-3.30)
Distance between country i and j	-6.98241 (-8.69)	-7.2322 (-8.98)	-7.080081 (-8.42)
Institutional variable in country j	5.941948 (3.80)	4.691966 (4.17)	4.597304 (2.79)
R-squared	0.4987	0.5086	0.4743

Table (11)

The impact of GDP, distance, population and *institutional variables of the exporting countries* on imports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-53.14414 (-4.19)	-58.59173 (-4.55)	-55.77159 (-4.13)
GDP in country i	2.646794 (5.10)	2.728553 (5.28)	2.656134 (4.97)
GDP in country j	2.943771 (6.56)	3.251211 (6.98)	3.110168 (6.34)
Population in country i	-0.8392804 (-2.45)	-0.8702512 (-2.02)	-0.8356747 (-2.42)
Distance between country i and j	-6.875599 (-8.00)	-7.114964 (-8.24)	-6.946318 (-7.73)
Institutional variable in country j	5.745287 (3.58)	4.506109 (3.89)	4.293808 (2.53)
R-squared	0.4700	0.4785	0.4453

Table (12)

The impact of GDP, distance, landmass, institutional *variables of the exporting countries* and further complementary variables on exports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-51.0476 (-3.58)	-50.87263 (-3.63)	-55.45756 (-3.91)
GDP in country i	2.329443 (7.09)	2.390419 (7.51)	2.45178 (7.56)
GDP in country j	2.32132 (3.97)	2.283382 (3.95)	2.302363 (3.89)
Landmass of country j	-0.4848667 (-1.93)	-0.4970283 (-2.01)	-0.4278911 (-1.69)
Distance	-5.575068 (-5.25)	-5.59768 (-5.37)	-5.315152 (-4.97)
Institutional variable in country i	3.637215 (3.05)	3.09331 (2.52)	1.963493 (2.07)
Common borders	0.7977753 (0.32)	0.9044068 (0.37)	0.5584883 (0.22)
Common official	0.9238935	0.5295622	0.961233

language	(0.46)	(0.27)	(0.47)
Common spoken language	2.34796 (1.22)	2.224976 (1.17)	2.993986 (1.57)
Common dominant religion	2.375906 (1.50)	2.443034 (1.56)	2.375025 (1.47)
Colonial relationship	-4.592283 (-0.60)	-5.099866 (-0.67)	-4.332491 (-0.56)
Common colonizer	3.286137 (1.99)	3.580117 (2.21)	3.880818 (2.34)
Same country in the past	0.6035055 (0.15)	0.6495024 (0.16)	0.7227115 (0.17)
R-squared	0.5568	0.5661	0.5466

Table (13)

The impact of GDP, distance, population, institutional *variables of the exporting countries* and further complementary variables on exports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-47.55241 (-3.44)	-47.36355 (-3.49)	-52.3164 (-3.81)
GDP in country i	2.373488 (7.24)	2.437728 (7.66)	2.492596 (7.67)
GDP in country j	2.447669 (3.81)	2.417308 (3.82)	2.386764 (3.67)
Population in country j	-0.7126236 (-1.87)	-0.7341386 (-1.96)	-0.6059327 (-1.58)
Distance	-5.791426 (-5.34)	-5.819023 (-5.48)	-5.485479 (-5.03)
Institutional variable in country i	3.724635 (2.87)	3.149504 (2.55)	1.965488 (2.06)
Common borders	0.5393156 (0.22)	0.6403426 (0.26)	0.3186997 (0.13)
Common official	1.079696	0.6817053	1.121431

language	(0.55)	(0.35)	(0.55)
Common spoken language	2.445541 (1.27)	2.32808 (1.23)	3.096914 (1.62)
Common dominant religion	2.261977 (1.43)	2.327642 (1.49)	2.265993 (1.41)
Colonial relationship	-5.53731 (-0.72)	-6.076411 (-0.80)	-5.139977 (-0.66)
Common colonizer	2.769991 (1.67)	3.059051 (1.90)	3.441184 (2.09)
Same country in the past	0.9131196 (0.22)	0.9674887 (0.24)	1.019027 (0.25)
R-squared	0.5560	0.5655	0.5453

Table (14)

The impact of GDP, distance, landmass, institutional *variables of the exporting countries* and further complementary variables on imports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-70.38249 (-5.10)	-75.34138 (-5.47)	-71.44055 (-4.96)
GDP in country i	2.14831 (3.77)	2.242991 (3.98)	2.190906 (3.71)
GDP in country j	3.157728 (7.11)	3.53928 (7.77)	3.381934 (7.05)
Landmass of country i	-0.3814769 (-1.11)	-0.3985101 (-1.18)	-0.3661224 (-1.03)
Distance	-5.246463 (-4.68)	-5.839076 (-5.21)	-5.784434 (-4.87)
Institutional variable in country j	5.730216 (3.59)	4.613606 (4.14)	4.270489 (2.53)
Common borders	3.63075 (1.40)	3.112241 (1.23)	2.249968 (0.86)
Common official	-1.230766	-1.071217	-1.097274

language	(-0.60)	(-0.53)	(-0.52)
Common spoken language	5.032236 (2.38)	5.36345 (2.57)	5.004277 (2.30)
Common dominant religion	0.6498707 (0.40)	-0.3993645 (-0.25)	-0.0917447 (-0.05)
Colonial relationship	-3.789437 (-0.48)	-3.300599 (-0.42)	-3.274277 (-0.40)
Common colonizer	2.784267 (1.64)	2.956782 (1.77)	3.503907 (2.01)
Same country in the past	-1.363165 (-0.32)	-1.906274 (-0.45)	-2.039242 (-0.45)
R-squared	0.5578	0.5712	0.5356

Table (15)

The impact of GDP, distance, population, institutional *variables of the exporting countries* and further complementary variables on imports within COMESA countries

(T-statistics in parenthesis)

	Government effectiveness	Rule of law	Control of corruption
Constant	-67.52521 (-4.95)	-72.21497 (-5.31)	-68.39883 (-4.83)
GDP in country i	1.746273 (2.93)	1.830802 (3.11)	1.791013 (2.91)
GDP in country j	3.197826 (7.19)	3.567491 (7.80)	3.397304 (7.05)
Population country i	-0.1072275 (-0.23)	-0.1220685 (-0.27)	-0.0931163 (-0.20)
Distance	-4.951887 (-4.28)	-5.519001 (-4.78)	-5.44985 (-4.47)
Institutional variable in country j	5.474477 (3.44)	4.434988 (3.99)	3.948334 (2.36)
Common borders	3.411982 (1.31)	2.913828 (1.15)	2.087637 (0.79)
Common official	-1.530663	-1.382998	-1.382508

language	(-0.73)	(-0.67)	(-0.64)
Common spoken language	5.823189 (2.81)	6.161405 (3.01)	5.77475 (2.72)
Common dominant religion	0.8019029 (0.49)	-0.1943821 (-0.12)	0.0904495 (0.05)
Colonial relationship	-2.900969 (-0.36)	-2.413031 (-0.31)	-2.431168 (-0.30)
Common colonizer	3.065199 (1.80)	3.235552 (1.93)	3.732564 (2.13)
Same country in the past	-0.5372537 (-0.13)	-1.051581 (-0.25)	-1.118828 (-0.25)
R-squared	0.5535	0.5666	0.5317

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Footnotes

¹ The obstacle that ranked first was complaints about tax regulation and high taxes.

² To avoid the endogeneity problem between the GDP on one hand and the exports and imports on the other, instrumental variables that explain the GDP were used, such as belonging to a certain continent, having colonized or having been colonized in the past, and using the languages used in the former colonies.

³ Since the institutional indexes range between -2.5 and +2.5, the value 2.5 was added to them, in order to avoid zero and negative values, leading to missed values when deriving the natural logarithms.

⁴ Note that regression 9 reflects the situation of the exporting country, and therefore the institutional variables of country j (the importing country) were dropped. On the other hand, regression 10 reflects the situation of the importing country i and therefore its own institutional variables were dropped, while the institutional variables of country j remained in the regression.

⁵ All the dummies were added to unity, in order to avoid zero values while deriving the natural logarithm.