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# Increasing Supply of Tradable Goods in the Common Market for Eastern and Southern Africa (COMESA)

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#### **ABSTRACT**

The author investigated the nature of institutional quality in the Common Market for Eastern and Southern Africa (COMESA) on the basis of voice and accountability political stability, government effectiveness, regulatory quality, rule of law and control of corruption. The author further investigated the existence of a link between institutional quality and factors of production. The results show that capital, entrepreneurship and foreign direct investment are the major determinants of production of tradable goods in COMESA. In exception of Mauritius and Namibia (currently no longer a member) the rest of COMESA member states have very poor institutional quality. This affects their ability to attract foreign direct investment hence production of tradable goods. Voice and accountability, government effectiveness, rule of law and political stability play a major role in increasing production of tradable goods in COMESA. Foreign direct investment is affected by voice and accountability, rule of law and political stability than any other factors. Availability of raw material is affected by government effectiveness, regulatory quality, political stability, voice and accountability and control of corruption. Capital is very sensitive to issues of voice and accountability and control of corruption and regulatory quality.

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#### 1. Introduction

It is essential that supply of tradable goods in the Common Market for Eastern and Southern Africa (COMESA) increases so that it can become a significant player in the global trading arena. Increasing supply of tradable goods is one of the solutions of increasing intra-regional trade in COMESA. The current state of affairs shows that the volume of intra-COMESA trade is 7% of total trade. This means

that extra-regional trade is substantial compared to intra-regional trade. The fact that member countries trade more with non-member countries than other partners simply means tradable goods are in short supply in member countries and can only be sought outside the grouping. However, increasing the production of tradable goods requires that an investment be made for their production. Sometimes domestic investment alone cannot help a country to succeed in increasing production. That then calls for the assistance of external investors. Foreign direct investment (FDI) through the transnational firms have the ability to transfer technology, superior management techniques to developing countries which can lead to increased production at a low cost and then boost exports thereby altering the terms of trade (Lipsey 1995). However, for external investors to invest in a particular country, they analyse governance indicators of a particular country before making their decision. This paper intends to investigate the nature of institutional quality on the basis of voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption. The paper further investigates any existence of a link between institutional quality and factors of production.

#### 2. Background

The COMESA was previously known as the Preferential Trade Area for Eastern and Southern African States (PTA). The Preferential Trade Area was established in 1984. In the 1990s the PTA was transformed to the Common Market for Eastern and Southern Africa. The following countries are members of COMESA: Burundi, Comoros, DR Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe. COMESA region has a population of 430 million people (COMESA 2011, Mzumara 2013).

COMESA launched a customs union (CU) on 7-8 June 2009. The member states agreed to the establishment of a common external tariff (CET) and a three year transitional period before the implementation was also agreed upon (ZimTrade 2010, Mzumara 2013). Due to multiple membership by COMESA member states in two or three sub-regional organizations and duplicity of the activities of the COMESA, the east African Community (EAC) and the Southern African Development Community (SADC) a tripartite agreement was reached by the Heads of State of the three sub-regional groupings. On 12 June 2011, the COMESA-EAC-SADC Free Trade Area was launched (Trade Marks of Southern Africa 2013, Mzumara 2013).

Table 1.1: Intra-COMESA total trade 1997-2003 in US\$ (million)

Member States	1997	1998	1999	2000	2001	2002	2003
Angola	57	65	57	70	98	197	337
Burundi	26	31	23	25	59	33	52
Comoros	6	5	4	5	4	3	5
Congo DR	106	113	99	141	113	349	321
Djibouti	71	74	64	78	83	85	129
Egypt	175	156	179	238	305	620	321
Eritrea	3	9	5	8	2	2	8
Ethiopia	317	338	273	263	222	247	186
Kenya	697	658	612	673	817	945	943
Madagascar	57	52	69	83	50	48	120
Malawi	154	123	132	94	137	115	154
Mauritius	130	150	140	156	186	189	209

Namibia*	65	157	59	75	99	200	348
Rwanda	129	90	80	64	172	31	37
Seychelles	15	12	16	15	15	27	14
Sudan	24	42	25	277	312	346	494
Swaziland	34	36	34	71	52	103	121
Uganda	364	334	222	230	394	381	425
Zambia	174	272	189	240	227	211	380
Zimbabwe	341	327	258	256	153	365	186
Total	2,945	3,044	2,540	3,061	3,499	4,498	4,790

Source: COMESA (2004)

Table 1.2 extra-COMESA imports 1997-2003 in US \$(millions)

<b>Member States</b>	1997	1998	1999	2000	2001	2002	2003
Angola	2,542	2,020	3,054	2972	3082	3603	3983
Burundi	112	170	122	180	133	86	126
Comoros	50	43	31	31	31	34	34
Congo DR	1036	1119	1013	813	1016	1271	1355
Djibouti	145	173	192	197	181	209	232
Egypt	13099	16777	15878	13873	11615	17880	10749
Eritrea	524	503	506	463	535	531	598
Ethiopia	965	1329	1262	1154	1685	1450	2583
Kenya	3637	3706	3106	3342	3815	3273	3450
Madagascar	571	583	707	905	566	386	1008
Malawi	690	490	530	479	505	590	621
Mauritius	2021	2202	2008	2058	1955	2092	2229
Namibia*	1582	1954	1292	1398	1481	1287	1386
Rwanda	270	280	199	112	107	64	91
Seychelles	326	372	419	254	424	395	341
Sudan	142	259	161	1735	1535	1994	2374
Swaziland	1164	1144	1008	1045	836	912	1391
Uganda	529	647	646	546	613	649	919
Zambia	784	880	888	1056	1687	1129	1314
Zimbabwe	2508	2294	1948	1741	1471	2268	2069
Total	32,697	36,545	34,972	34,357	33,311	40,104	36,854

Source: COMESA(2004).

Table 1.1 above shows intra-COMESA total trade from 1997 to 2003. total intra-COMESA trade was

<sup>\*</sup> Namibia is no longer a member of COMESA

US\$2.9 billion in 1997, US\$3 billion in 1998, US\$2.5 million in 1999, US\$3 billion in 2000, US\$3.5 billion in 2001, US\$4.5 billion in 2002 and US\$4.7 billion in 2003. during the same period extra-COMESA imports only (table 1.2) were US\$32.7 billion in 1997, US\$36.5 billion in 1998, US\$35 billion in 1999, US\$34.3 billion in 2000, US\$33.3 billion in 2001, US\$40 billion in 2002 and US\$39.9 billion in 2003. this implies that if the goods were available in the region all the above amounts could have been spent within the region. Taking one country such as Egypt, her total trade was US\$17.2 billion in 1997, US\$19.7 billion in 1998, US\$19.6 million in 1999, US\$18.8 billion in 2000, US\$15.7 billion in 2001 and US\$22.6 billion in 2002. During the same period her total intra-COMESA trade was US\$175 million in 1997, \$156 million in 1998, US\$179 million in 1999, US\$238 million in 2000, US\$305 million in 2001, US\$620 million in 2002. This gives Egypt total extra-COMESA as US\$17 billion in 1997, US\$19.6 billion in 1998, US\$19.4 billion in 1999, US\$18.5 billion in 2000, US\$15.4 billion in 2001 and US\$22 billion in 2002.

It can be seen from the above statistics that trade is heavily titled towards extra-COMESA. Since extra-COMESA imports are substantial, it would appear that member countries would have imported the same goods from partner countries where tariffs have been eliminated or are extremely low. Businesspersons would definitely import from member countries so as to enjoy the advantages of free trade. However, they are not doing so instead they are importing from countries whose goods are subject to higher tariffs. It is clear judging from the statistics that much sought imports are not available in partner countries in COMESA. This shows a serious picture of supply constrain in production of tradable goods in COMESA. Unless capacity to produce tradable goods is improved intra-COMESA trade will continue to remain low while member countries continue to source their requirements elsewhere.

#### 3. Literature on Institutional Economics

This paper is an effort to address the issue of supply of tradable goods in COMESA. The increasingly importance of new institutional economics with its dynamism becomes the most appropriate framework to address the issue of supply of tradable goods in COMESA. According to Nomvete (1992), majority African states face unstable political conditions as well as regional tensions and instability. Effective and successful cooperation framework can only occur if there is an existence of health and democratic conditions in which economic management is both transparent and accountable. Apart from political and economic prerequisites the availability of indigenous institutional capacity is also important. A viable institutional mechanism at regional and national levels is essential. However, very little attention has been given to the institutional framework for regional integration and interface levels.

Muntharika (1990) acknowledged that the primary responsibility for effective regional integration cooperation depends on governments and their people of the countries concerned. However taking in account problems and the meager resources of the majority African states, substantial international support is required to augment national efforts. Bach (1993) and Barad (1990) both agree that despite continuing verbal commitments to regional integration in Africa, in reality very little has been done. The reasons advanced for no action are: historic, political, economic and institutional. Seghor (1990) put forward the same views that the problem of many African states in regional integration is lack of participation by their people in discussion on regional agendas. Bach (1993) posed a question how Africa can bridge the implementation gap and move from away from rhetoric to action without neglecting important decisions to be taken regionally, policies and institutional needs for cooperation must and foremost be addressed at a national level. A national initiative should include strengthening institutional capacities. Adedeji (2002) points out that many Africans states carried out import substitution strategy. To manufacture goods for example, they imported capital goods, the skills and the professional labor. One would therefore on the onset assume that the raw materials would come from African states themselves but in many cases they had to be imported too. So really the manufacturing

plants became just locations of assembly. They were vulnerable and bound to fail.

Most of the shortcomings are institutional. Linn (2003) supports better local policies, governance and institutional building. In the absence of such measures regional integration will not be successful in the long term. The New Partnership for Africa's Development (NEPAD) articulate the need to promote democracy, good governance and respect for human rights through appropriate security sector policy and institutional reform. Increasing physical integration through infrastructure development, implementation of NEPAD programs need to be done through establishing of a workable policy, regulatory and institutional framework especially creating a suitable conditions for investment, capacity building program to empower particularly the implementing agencies. NEPAD further states that the critical need is to achieve a purposeful programming and effective implementation of development oriented investment flow and effective intervention in the agencies of global governance. According to the World Bank (2000), market cannot operate without effective and efficient institutional framework. The needed institutional infrastructure includes the rules and regulations of market economy such as property rights, contract enforcements and regulatory mechanisms for anti competitive behavior. It also includes social and political systems that reduce risk and manage social conflict through proper governance. It further states that a key factor that has constrained Africa's integration process is the continent's small markets which do not permit the economies of scale that allow an economy to function effectively. Governments must monitor and enforce rules and regulations effectively and equitably. Regional integration has an advantage of promoting diversification and export to the regional market helps the countries concern gain confidence before entering the global market. Mattli (1999) came up with a model of a rational approach to behavior. He argued that two types of requirements need to be satisfied if integration is to succeed. First, there must be demand by market players for greater integration. Market players must anticipate a significant potential for economic gains, perhaps because regional economics lack complement or because a small size of the regional market does not offer important economies of scale, the process of integration will eventually wither away. The author emphasizes on commitment to improve compliance with the rules of cooperation. Rodlaver (2004) shows empirical evidence that points to clear link between the quality of institutions on one hand and economic growth on the other. He further points out that continued progress in building governance, transparency and the rule of law is essential in attracting private investment and sustaining citizens confidence in the government and the regional coordination can make a major contribution on this. Functioning judicial systems, secure property rights, fighting corruption are important issues for a region to emerge as a strong competitor in the globalized market place.

## 4. Conceptual Development: Factors of Production in COMESA

Mainstream economics single out the following factors of production, land, labor capital and entrepreneurship. In order to produce goods resources are needed. These can be called factor inputs, which are normally available in the production of products. Land is an endowment that mankind can use to produce products. Dale (1997) comments that of the three factors of production that are said to underpin the creation of goods — capital, labor and land — it is the land that is least well understood and defined. Labor is human input that is also needed in the production process. It is not just the statistics of people; it refers to human capital that is the quality of labor inputs. These resources can be improved through investment in education, training and health. The third resource of capital simply means to investment in goods which can be used to produce other goods such as machines. Capital goods can further be divided into fixed and working capital. Fixed capital may include things like plant and equipment. Working capital includes stock of finished or semi-finished goods.

The presence of the above factors may mean nothing if there are no risk takers to organize such other productive resources. These are referred to as entrepreneurs. A French economist Cantillna (1725) described entrepreneur as the agent who purchase the means of production for combination into

marketable products and takes the risk.

In order to produce tradable goods in the Common Market for Eastern and Southern Africa (COMESA) the four factors of production namely, land, labor, capital and entrepreneurship must exist. This is a necessary condition to produce goods but not sufficient as we will observer in the later part of this paper.

For the purpose of this paper the author has expanded the factors of production to include; foreign direct investment (FDI), capital, raw materials, utilities, infrastructure, land, human capital and entrepreneurship. Theory reveals that in order to increase supply of tradable goods in a regional grouping the above factors should be abundant and available. However, according to Muntharika (1990) governments and the people in all regional groupings in Africa and other developing world need international support to augment their meager resources. Foreign direct investment can be seen as an international community response in this regard. This means that the Common Market for Eastern and Southern Africa can augment its limited resources by tapping on FDI in its effort to increase production of tradable goods. FDI is non-resident investment in a domestic such as branch plant. Such an investment can increase the capacity to produce tradable goods in COMESA and other regional settings. If the flow of FDI is good in the region, it may also be an indicative that there is conducive macroeconomic environment that encourages investment. Since domestic resources are limited in COMESA countries, FDI becomes crucial in determining the capacity to produce tradable goods.

Foreign direct investment also transfers technology to the recipient country. Technology is key in reducing the cost of production and enabling a country to enjoy economies of scale (Lipsey 1995). COMESA needs technology in order to increase production of tradable goods. This can be achieved through attracting FDI. FDI offers much more. Foreign direct investment involves much more than just transfer of capital or the establishment of a local factory in a developing country. They carry with them technologies of production, tastes and styles of living, managerial service and various business practices including cooperative arrangements (Todaro 1997). FDI generates rents to transnational corporation by virtue of their possession of superior technology, management and/or access to global markets. According to economic theory, host communities get 'spillovers' benefit of the superior assets. Indeed 'effective spillovers', which occur through the transfers of technologies and management practices, are increasingly seen as the primary benefit of FDI. These are dubbed a 'contagion' effect knowledge is diffuses to domestic firms and workers, thereby raising their efficiency and productivity (Gallanger & Zarsky 2005). The variables which influence FDI are domestic policies, capacities and institutions (Zarsky 2005).

In this section, the author discusses capital in general. Capital is required in COMESA if production and capacity to produce tradable goods is to be improved. This supported by (Muntharika 1990, Cook and Sach 1999). Here emphasis is given to domestic capital. To increase production in COMESA countries, domestic capital is required. Investment is the function of savings. Research has shown that countries with high rates of savings have high rates of investments (Lipsey 1995). Those countries with low rates of savings have low investments. The question that can be posed is how can a COMESA country increase the rate of savings? This question can be answered by looking at tax structures of individual COMESA countries. Most of COMESA countries have very high tax structures. These leave the residents of these countries with less disposable income. Generally the major portion of disposable income is spent on consumption while little is converted into savings. So if the disposable income is very little it is likely that there will be little or no savings at all. Some of COMESA countries such as Zimbabwe have experienced unusual high rates of inflation. In such countries it is hard to save with a severely eroded purchasing power. In such countries people live hand to mouth with nothing in the bank. There are also very high interest rates which discourage borrowings in some COMESA countries. This

means those who want to expand production and those who want to start to produce are discouraged by high costs of borrowing. In the process of capital formation there is also the issue of intermediaries and these are lacking in COMESA countries to harness savings and their allocation to productive sector. In order for COMESA to produce tradable goods the above issues have to be addressed by individual countries. The issue of investment has to seriously be looked into by each COMESA country. Investment is of particular importance to the marginalized people. Through investment in the productive capacities – knowledge, skills technology and institutions for collective action – stagnant patterns of poverty and marginalisation can be changed into robust patterns of economic development and social inclusion (Zarsky 2005). Whilst most of developing countries are gifted with natural resources such as minerals and others, they need capital to exploit such resources. COMESA is no exception. It has a lot of natural resources but incapable of fully exploiting them because of lack of capital. Capital is also required to add value so that COMESA countries do not just export primary products. Primary products are vulnerable to commodity price falls. This could also substitute the importation of capital goods from outside the region.

Supply of tradable goods can also be increased in COMESA if there is availability of raw material. Production in the manufacturing requires raw materials. If there is no raw material, no product can be produced. Raw materials can be sourced within a country or within partner countries or outside the region itself. To produce and acquire raw materials requires land, infrastructure, labor, transport and funding. In some COMESA countries production is now below capacity due to lack of foreign currency to import raw materials. COMESA could reconsider promoting the clearing house once again. That meant that COMESA countries could use their domestic currencies to purchase goods from other COMESA countries. During the trading period, accounts were settled in the United States Dollar. However, when most of the countries embarked on trade liberalization it was felt that they would generate sufficient foreign currency hence there was no need of using the clearing house. As it is now, countries such as Malawi, which is experiencing severe shortage of foreign currency could benefit through the revival of the clearing house to remain and increase its productive capacity.

Utilities such as water, electricity, gas, and so on are essential to produce a product in a factory or on a farm. To increase its production of tradable goods, COMESA member countries need to have adequate resources of water, power supply and gas. If electricity power is not constantly available it may interfere with the production. To increase production of tradable goods it requires constant supply o electricity. Countries such as Uganda and Zimbabwe face constant shortages of electricity. In the case of Zimbabwe it imports electricity from South Africa, Mozambique and Democratic Republic of Congo to augment its domestic supplies. However, sever shortage of foreign currency frequently affects the importation. A number of COMESA countries therefore, electricity supply limits their capacity to produce. This means they need to find long-term solutions of expanding generation of electricity for them to expand production.

Infrastructure is also required to support production of tradable goods in COMESA. Roads, railway, ports and so on are required to transport raw materials or finished goods. If there is no adequate infrastructure it may affect the production of tradable goods. Cook and Sach (1999) recognize the importance of infrastructure in the supply of tradable goods. They lament that transitional cost in creating institutions to manage regional public goods are under funded and frequently incapacitated and concluded that there is an important role for international donors to support their provision. This is in agreement with Muntharika (1990). Business environment risk intelligence (BERI) indicators used by Knack and Keefer (1995) include infrastructure quality. A strong index of infrastructure is associated with higher investments. Investors tend to invest in countries with infrastructure. Human capital is the next, which is referred to as knowledge and skills embodied in an individual are required in the

production process. COMESA can increase the production of the tradable goods if it has adequate human capital not just the big size of human population. This requires provision of education and skills and substantial investments in tertiary and vocational systems. COMESA may have land and other resources but if it doesn't have high quality human resource, production of tradable goods may just be a dream.

In COMESA to increase production of tradable goods land is required. Land is required where to farm or where to build a factory. If there is constraint in either of the two uses of land, production of tradable goods cannot be increased. Firms and individuals in COMESA should have access to land where they can produce crops that can be exported or used as inputs in further production and also used as a factory or a warehouse. It is not just land but good quality land that can lead to higher productivity.

COMESA needs those who can take risks to organize other productive resources in order to increase tradable goods. They cannot increase themselves unless there are individuals in the region or outside investing in COMESA. Entrepreneurs are required to initiate projects in COMESA. Ireland (2001) defines entrepreneurship in the context-dependent social process through which individuals create value by bringing together a peculiar package of endowments to exploit an opportunity in the market place. Two important entrepreneurial skills are ability to gain access to a variety of endowments and knowing how to leverage them effectively. Covin and Stevin (2001) describe entrepreneurship as the prosperity of a firm to take calculated risks, to be innovative and to demonstrate pro-activeness.

To establish whether the above factors are perceived to be determinant of increasing supply and capability of tradable goods in the Common Market for Eastern and Southern Africa (COMESA) statistically, the following hypothesis is developed.

HI There is no relationship between foreign direct investment (FDI) raw materials, utilities, infrastructure, land, human capital, entrepreneurship and production of tradable goods in COMESA.

#### 5. Institutional Framework

The mere presence of factors of production may not lead to increased production of tradable goods. This calls for institutional framework set of institutions or rules of the game. These are the formal or informal rules governing individual's behavior or rules of the game may severely constraint the proper functioning and the availability of factors of production in regional grouping. North (1993) describes institutions as humanly devised constraints that structure human interaction. They are made of formal constraints (rules, laws, constitution) informal constraints (norms of behavior, conventions and self imposed codes of conducts) and their enforcement characteristic. Their combination defines the initiative structure of societies and specifically economic activities. Institutions and the technology used influences the transaction and transformation costs which add up to the costs of production. When it is costly to transact then institution matters and it becomes increasingly costly to transact. A viable institutional mechanism at regional and national levels is needed (Nomvete 1992). The most significant decisions to be taken regionally are policies and institutional needs for cooperation must and the key to be addressed at national level (Batch 1993). Regional integration can accomplish its objectives only if there is commitment of concerned governments and their people (Muntharika 1990).

Groot, Linders, Rietveld and Subramana (2003) emphasized that a better quality of institutional framework decreases uncertainty about contract enforcement and general economic governance. It in turn reduces transactional costs associated with uncertainty by increasing confidence in the process of economic transactions both at national and regional levels. COMESA countries can be in a serious trouble if within the group or outside the group perceives that to do

business with a particular COMESA country requires bribes to get a license, land is not available and at the same time there is no rule of law to protect investment. It may negatively affect such a country. Investors would be calculating on additional transactional costs and find that it may not be profitable to invest or do business with that particular COMESA country. They may go to the countries where here are no additional transactional costs arising out of poor policies. Even though the factors of production may be abundant the institutional environment may not permit the increased supply of tradable goods. This may call for the regional grouping strengthening its member countries capability to produce tradable goods by changing their behavior of doing business and policies, which may be, referred as institutional change as advocated by North (1990).

Institutional quality and governance matter if trade and production can be increased both at national and regional levels. The bank: gives the following as component of institutional quality [constructed from Kaufman, Kraay and Zoida - Lobaton (1999) and other sources] voice and accountability, political stability, government effectiveness, regulatory quality / burden, rule of law and control of corruption. These affect institutional environment and arrangements (World Bank 2000). Kaufman, Kraay and Zoida - Lobaton (1999) constructed six aggregate indexes from numerous indicators collected from 14 different sources including ICRG, BERI, Freedom House and others. The aggregate indexes are rule of law "graft", voice and accountability, government effectiveness, political instability and violence and regulatory burden affect institutional quality. If the people in a particular COMESA country do not have a voice they may not actively participate in the regional integration. They may not become entrepreneurs. The issue of accountability on the part of a particular COMESA government may be crucial in increasing production of tradable goods. Outside investors are keen to see whether a particular COMESA government is accountable and transparent. If these attributes exist they may find it safer to put their money in that country. Investors tend weigh the decision to invest with the performance of a particular government on attributes of voice and accountability. Konnend and Meiguire (1985) used civil liberties index as a proxy for economic rights, such as freedom from expropriation or the enforceability of property rights and private contracts. They found that civil liberties were positively associated with investment rates through increasing investment growth rates.

Where there is no political stability, land and raw material may be available but no one can produce because of the risk associated with political instability. There is a lot of uncertainty in dealing with a country that is politically unstable. How do you deal with the issue of property protection and others such as enforcement of agreements? An example on point of time was Somalia where could an investor go with a dispute when there was no government? Investors and business people will shun away a country highly volatile politically even though it may have abundant natural resources hence it may not be expected to increase production of tradable goods. Wars destroy infrastructure, production concerns and so on. This has been the case in Democratic Republic of Congo (DRC) where civil war in that country has destroyed infrastructure. Although DRC is endowed with natural resources production has gone down due to political instability. Angola was also affected for a very long time until recently when peace returned so was Mozambique. A country politically stable can expect to attract investors holding other factors constant. It can therefore contribute to increase in production of tradable goods in the region hence contribute to increased intra-regional trade.

Government effectiveness is crucial in the institutional framework. It ensures that there is no corruption in issuing licenses, land and other things. It also has the ability to regulate the rules and policies how business is done. It enforces the agreements between business people and between itself and business people. If a particular COMESA government is effective it may raise the institutional quality by making the rules of the game better. In contrast, if the government is ineffective it may impact the institutional quality and this may affect foreign direct investment, proper production of raw material provision of

utilities, infrastructure, human capital, land, capital and entrepreneurship. This would drastically affect the production of the tradable goods. With an ineffective government there is great uncertainty among investors and business. Trading at the stock exchange becomes volatile due to uncertainty. This makes it hard neither to raise capital nor to venture in production. Effective government gives an assurance to investors and others.

Regulatory quality is an important as other factors governing the institutional quality. In developing countries many regulatory entities have been established. There are available in member countries of a particular regional integration grouping. How they perform their duties is considerable importance to business people both investors and traders. If the rules or regulations are not clear they may impact on business people. If they regard policies to be unrealistic it may also impact their decision to invest or trade with a particular country. If there are favoritisms in granting licenses this may also have a negative impact. If competition is suppressed it may also impact on the proper functioning of the economy. If the regulatory quality is credible other things being equal may create a conducive atmosphere to do business hence remove uncertainty and transactional costs. Production of tradable goods can increase.

COMESA member countries need to adhere to the rule of law. Rule of law includes where there is a dispute between the government and a private company and then the government does not follow legal procedure to settle the dispute. It may also include the general decline in exercising rule of law in protection of property and their owners. If the rule of law does not exists in a particular COMESA country investors and traders may not be keen to enter agreements and contracts with other business people if they perceive that there is no rule of law. This has a tendency of increasing transactional costs associated with uncertainty in dealing with the concerned country. This can therefore affect negatively the production of the tradable goods through investment being not forth coming. Generally in countries where a policy of nationalization of production concerns have been exercised, such countries have seen drastic reduction of private investment due to fear that if they establish in such countries they could lose the investment altogether. Knack and Keefer (1995) include nationalization risk in their indicators that investors are concerned with. According to Collier and Pattilo (2000) in their research have shown that investment behavior in the in total depends on measurements of country's risk. Member countries will have to enforce rule of law to create the environment for both investment and trade. Consequently, where there is rule of law, it is not risky to invest in such a country.

There are minimal transactional costs due to absence of uncertainty. Investors and traders would feel safe to trade with counter parts in COMESA countries knowing that the agreements and contracts entered would be honored in the court of law in that country. The rule of law hence affects the provision of factors of production. The quality of institutions in COMESA is affected if there is rule of law or no rule of law.

The quality of institutions depends also on how a particular country controls corruption. Since COMESA is made up of member countries, its success in having high quality institutions depends heavily on the ability to deal with corruption. Corruption renders policies, procedures, regulations a mockery. Corruption brings disorders in the system thereby affecting the institutional costs. It is hard to deal with countries, which are corrupt because there are a lot of uncertainties in dealing with such countries. World Bank (1997) showed the following as main indicators that inhibit investment, production and trade both at national and regional levels. These are policy unpredictability, quality of government service, corruption and red tape and judicial unpredictability. The survey was conducted in 67 countries involving actual investors. World Competitive Year Book (WCY) has used bribing and corruption as part of its indicators that investors look at. International Country Risk Guide (ICRG) - Knack and Keefer (1995) have used ICRG indicators corruption in government enforceability of contract, the rule of law, expropriation risk, and repudiation of contracts by governments and quality of

bureaucracy as significance to the determination of institutional quality. In looking at the quality of institutions in the Common Market for Eastern and Southern Africa (COMESA) on the basis of voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption a specific research question is developed.

1: What is the nature of institutional quality in COMESA member countries with respect to the following variables; voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption?

## 6. The Link Between Institutional Quality and Factors of Production in COMESA

In this section the author intends to establish the link between institutional quality and factors of production in COMESA. The mere existence of natural resources may not lead to increased production of tradable goods. In order for COMESA to increase the supply of tradable goods requires that there should not be high transactional costs arising from institutional quality, uncertainty in contract enforcement in the use and provision of factors of production. World Bank (2000) institutional quality and governance matter if trade and production can be improved both at national and regional levels. Low trade and investment affect nations and regions with poor institutional quality. Investment for example is highly sensitive to corruption, accountability, transparency, regulatory quality and rule of law. Investors will tend to invest in countries that show no corruption, high accountability and transparency regulatory quality that is fair and not corrupt and existence of rule of law. When a bribe is demanded before the approval of the project, the project costs increase by the amount of the bribe yet such money simply goes to an official associated with the process. If the money had gone into the project it would have increased production. According to BERI indicators as used by Knack and Keefer (1995) contract enforceability, nationalization risk, bureaucratic delays and infrastructure quality have effect on investment. A strong index is associated with higher investments. Human resources may be poor if there are no regulatory measures that improve standards. Corruption may also affect the quality of human resources. Corruption in providing training and also in recruitment. Both anomalies lead to poor human resources. Political instability may lead to exodus of skilled people out of a particular country. The rule of law may also affect human resources as skilled manpower feel insecure and may seek to move to other countries where they perceive to have the rule of law. Land is critical to production of tradable goods. The institutional quality may affect its accessibility. If corruption exists in the provision of land it may affect the production of tradable goods. Regulatory quality may also affect land available for production. The delays in land allocation may affect production of tradable goods. Poor land policies may affect production.

Utilities are needed in the process of creating a product. To establish a business you need water, electricity, phone and so on. If corruption exists in member countries the provision of these utilities may affect production. They may be available to those who have paid the bribe but are not producing or may increase transactional costs to those who are producing and that would lead to the limit of their capacity. In contrast if utilities are facilitated by a high institutional quality they may facilitate production.

A high institutional quality can lead to a better provision of raw material. Rule of law that guarantees contract enforcement may encourage suppliers from one country to supply to another without facing a risk of uncertainty arising from the transaction. This can lead to the increase in production in the recipient country. Political stability may also affect the provision of raw material outside or within that country. Generally where there is political instability production of both final goods and intermediate goods are affected.

Countries and regions with low institutional quality have poor infrastructure. Infrastructure supports

production of tradable goods. To address the issue of tradable goods in COMESA requires that there be adequate infrastructure. Where there is no transparency and where there is corruption provision of infrastructure may be negatively affected. Corrupt officials may build a substandard infrastructure and pocket the remaining funds. Since infrastructure supports production, it may be affected with such an act. Private individuals may not invest in infrastructure development if property rights are not respected. High quality institutions are positively associated with high quality infrastructure.

High quality institutions may encourage and facilitate the development of entrepreneurship through which COMESA can increase tradable goods. Entrepreneurs are frustrated if there is a problem with licensing their ventures due to corruption bureaucratic delays, no support from government and policies that make their operations difficult. Entrepreneurs may not find confidence if there is political instability in a particular country. The absence of rule of law may discourage them also.

To establish whether in the Common Market for Eastern and Southern Africa (COMESA) there is a link between institutional quality and factors of production, the following hypothesis is tested.

- H2 There is no relationship between voice and accountability, political stability, government effectiveness, rule of law, control of corruption, regulatory quality and production of tradable goods in COMESA.
- H3 There is no relationship between voice and accountability, political stability, government effectiveness, rule of law, control of corruption, regulatory quality and individual dependent variables individually FDI, raw material, utilities, infrastructure, capital, labor, entrepreneurship.
- H4 There is no differences in the views of stakeholders on the influence of voice and accountability, political stability, government effectiveness, rule of law, control of corruption, regulatory quality and production of tradable goods.

## 7. **Methodology**

The paper used stepwise regression analysis to treat the data. The data was collected using a self administered questionnaire to 61 actual exporters, importers, investors, chambers of industries and commerce and others in Zimbabwe by random sampling. Due to constraints in resources the author did not administer in other member states. In total there were eighty-one questions under the heads; voice and accountability political stability, government effectiveness, rule of law, control of corruption and regulatory quality. Another section of the questionnaire asked the respondents how they perceived; foreign direct investment, raw material, utilities, infrastructure, human capital, land, capital and entrepreneurship as determinants of supply of tradable goods in COMESA.

Further data was collected and develop from the World Bank index on institutional quality indicators related to each COMESA country in respect of the following variables; voice and accountability, political stability, government effectiveness, rule of law, control of corruption and regulatory quality.

The following were measurements on the scale 1-5 in respects of the data collected in the questionnaire. Evaluation of scoring of the questionnaire on voice and accountability, political stability, government effectiveness, rule of law, control of corruption and regulatory quality.

Table 1.3: Scale for evaluation for governance indicators

Scale Response Mean interval Verbal interpretati
--

5	Strongly agree	4.50 -5.00	Very high
4	Agree	3.50 - 4.49	High
3	Neutral	2.50 - 3.49	Undecided
2	Disagree	1.50 - 2.49	Low
1	Strongly agree	1.00 - 1.49	Very low

Source: Authors' own table.

Evaluation of scoring of the questionnaire on supply constraints

**Table 1.4 Scale for supply constraints** 

Scale	Response	Mean interval	Verbal interpretation
5	Strongly agree	4.50 -5.00	Very high
4	Agree	3.50 - 4.49	High
3	Neutral	2.50 - 3.49	Undecided
2	Disagree	1.50 - 2.49	Low
1	Strongly agree	1.00 - 1.49	Very low

Source: Authors' own table

## **Results And Analysis**

HI There is no relationship between Foreign Direct Investment (FDI), raw material, utilities, infrastructures, land, human capital, entrepreneurship, and production of tradable goods in COMESA.

Regressing by stepwise regression production of tradable goods on Foreign Direct Investment, raw material, capital, entrepreneurship, labor, land, utility and infrastructure. Stepwise regression returned capital as the most significant contributor to production of tradable goods in COMESA.

Production of tradable goods = 6.79 + 1.62 capital

Table1.5

Predictor	Coef	StDev	t ratio	p
Constant	-6.794	3.546	-1.92	0.151
Capital	1.62182	0.0561	28.91	0.000

Source: Results of stepwise regression analysis

$$S=4.979$$
  $R-sq = 99.6\% R-sq (adj) = 99.5\%$ 

Table 1.5 shows that capital is related to the production of tradable goods in COMESA. With t ratio = 28.91 and p value = 0.000 both are significant at 5% level of significance. R-sq = 99.6% and R-sq (adj) = 99.5% are both high and there is no variation between the two. With R-sq = 99.6%, capital alone explains 99.6% of variations in tradable goods in COMESA. This gives capital as

major determinant of tradable goods in COMESA.

Table 1.6: The regression equation is production of tradable goods = -20.2 + 1.28 Entrpre

**Table 1.6** 

-	able 1.0					
	predictor	coef	StDev	t-ratio	p	
	Constant	-20.21	12.56	-1.61	0.206	
	Enterpre	1.2804	0.1427	8.97	0.003	

Source: Results of stepwise regression analysis

Table 1.6 shows stepwise regression showing entrepreneurship to be second most significant in the production of tradable goods in COMESA. Both t-ratio = 8.97 and p-value = 0.003 are significant showing a strong relationship between entrepreneurship and production of tradable goods in COMESA with R-sq = 96.4 it indicates that entrepreneurship explains 96.4% of variations in tradable goods in COMESA.

Table 1.7 Production of tradable goods in COMESA = -24.2+0.575 FDI

**Table 1.7** 

able 1.7				
predictor	coef	StDev	t-ratio	p
Constant	-24.23	22.24	-1.09	0.356
FDI	0.5753	0.114	5.16	0.014

Source: Results of stepwise regression analysis

$$S = 26.47$$
  $R-sq = 89.9\%$ 

R-sq (adj) = 86.5%

Table 1.7 shows that FDI is related to the production of tradable goods in COMESA. It becomes third from capital and entrepreneurship. With R-sq =89.9%, FDI explains 89.9% of the variations.

Table 1.8 Production of tradable goods in COMESA = -30.5 + 1.42 labor

**Table 1.8** 

Predicto	Coeff	StDev	t-ratio	р
Constant	-30.52	24.13	-1.26	0.295
Labour	1.4181	.2848	4.98	0.016

Source: Results of stepwise regression analysis

$$S = 27.36$$
  $R-sq = 89.2\%$   $R-sq$  (adj) = 85.6%

In table 1.8, t = 4.98. This is above 2 showing a significant relationship between labor and production of tradable goods in COMESA.

Table 1.9 Production of tradable goods in COMESA (p/goods) = -8.417 + 1. 4 7 capital +0.127 entrepreneur

Table 1.9

predictor	coef	StDev	t-ratio	p
constant	-8.417	5.273	-1.6	0.252
capital	1.4663	0.3238	4.53	0.045

In table 1.9, t-ratio of 0.49 in respect of entrepreneurship is very low. Capital t-ratio of 4.53 is very significant but p-value is medium significant.

Table 1.10 Production of tradable goods in COMESA (pi goods) = 14.7+3.31 capital -2.12 enterpre + 1.08 raw material.

**Table 1.10** 

predictor	coef	StDev	t-ratio	p
constant	-14.739	4.761	-3.1	0.199
capital	3.3104	0.9824	3.37	0.184
enterpre	-2.122	1.182	-1.79	0.324
raw material	1. 0809	0.5623	1.92	0.305

Source: Results of stepwise regression analysis

Table 1.10 shows that capital is highly correlated with other predictor variables. Entrepreneurship is also correlated with other predictor variables. Raw material is highly correlated with other predictor variables. There was presence of multicollinearity. It may explain also why raw material was left out of stepwise regression. Generally there was multicollinearity among the predictor variables. The other variables such as land, utility and infrastructures labor were also left out due to multicollinearity of predictor variables HI is therefore rejected. There is relationship between Foreign Direct Investment (FDI), raw material, utilities, infrastructure, land, human capital (labor), entrepreneurship and production of tradable goods in COMESA. Of all the above variables, capital is the most important factor that influences production of tradable goods in COMESA followed by entrepreneurship and then FDI.

#### **Research Question 1**

What is the nature of institutional quality in COMESA member countries with respect to the following variables~ voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption?

Table 1.11 Relating to 2004

**Table 1.11** 

Country	Voice and	Political	Government	Regulatory	Rule	Control of
	Accountability	Stability	Effectiveness	Quality	of law	Corruptio n

12
14
31
94
21
64
85
83
.33
.18
36
.01
30
95
71
74
1

Source: World Bank

The results presented in table 1.11 have been extracted from World Bank (2000): index on institutional quality indicators. These were computed and constructed from Kaufman Kraay and Zoida- Lobaton (1999). The World Bank: survey was conducted in 67 countries. Actual investors were surveyed. These have been refined with the inclusion of Kaufmann, Kray and Zoido - Lobation using the six aggregate indexes from numerous indicators collected from 14 different sources including; International Country Risk Guide (ICRG) Business Environment Risk Intelligence (BERI), Freedom House and others. The indicators of institutional quality as presented in table 1.11 are negative in most of COMESA countries except Mauritius and Namibia (which is no longer COMESA member) The negativity of the results indicates poor institutional quality while positivity indicat6that the institutional quality is good. Although Mauritius and Namibia are positive the positivity is very low. Madagascar scored positive on Voice and accountability (+0.07) and regulatory quality (+0.10) and scored negative on political stability (-0.02), government effectiveness (-0.43») Rule of law (-0.30) and Control of corruption (-0.83). Egypt

scored positive on government effectiveness (0.20) and negative on voice and accountability (-1.04), political stability (-0.72), regulatory quality (-0.58), rule of law (-0.02) and control of corruption (-0.21). Rwanda scored a positive on political stability (+0.92), government effectiveness (-0.56), Regulatory quality (+0.42), and rule of law (+0.90) but negative on Voice and accountability (-1.09) and control of corruption (-0.36). Seychelles has a positive on political stability (+0.84) and control of corruption (+0.01).

Swaziland has a positive on Political stability (+0.23) and negative scores on Voice and accountability (-1.45), government effectiveness (-0.60), regulatory quality (-0.36), rule of law (-0.95) and control of corruption (-0.95). Uganda has a positive on regulatory quality (+0.07) and negative scores on voice and accountability (-0.64) political stability (-1.27), government effectiveness (-0.43), rule of law (-0.79) and control of corruption (-0.71). Malawi scored positive on regulatory quality (+0.57) and negative on voice and accountability (-0.50), political stability (-0.53), government effectiveness (-0.81), rule of law (-0.29) and control of corruption (-0.83). The civil war tom country DRC scored all negative such as voice and accountability (-1.64), political stability (-2.27), government effectiveness (-1.41), regulatory quality (-1.80), rule of law (-1.74) and control of corruption (-1.31). Angola, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Sudan, Zambia and Zimbabwe have negative scores in all indicators. The nature of institutional quality in COMESA is therefore very poor.

H2 There is no relationship between voice and accountability, political stability, government effectiveness, rule of law, control of corruption, regulatory quality and production of tradable goods in COMESA.

Stepwise supply 'voice ac ' 'politic' 'gvt effe' 'r-of-Iaw' 'c-corrup' 'r-qualit'

**Table 1.12** 

step	1	2
constant	0.09977	43.24222
gvt-effe	0.8	2.8
t-ratio	5.6	3.23
voice ac		-2.12
t-ratio		-2.32

Source: Results of stepwise regression analysis

$$R-sq = 91.27\%$$

$$R-sq (adj) = 97.63$$

When stepwise regression was used voice and accountability and government effectiveness were the best in influencing production of tradable goods in COMESA. The two accounted for 91.27% of variation in tradable goods in COMESA.

The best alternative was voice and accountability and rule of law with t-ratio = 4.17 and -2.00 respectively. Another alternative was rule of law and political stability with t-ratio = 3.99 and -1.60 respectively.

Table 1.13 The regression equation was supply of tradable goods = -21.4 + 1.88 r-of- law 1.01 politic

**Table 1.13** 

Predicator	Coef	StDev	t-ratio	P
Constant	-21.38	24.13	-0.89	0.469
r-of-law	1.8781	0.5714	3.29	0.081
Politic	-1.0104	0.5218	-1.94	0.192

$$S = 28.56$$

$$R-sq = 94.5\%$$

$$R-sq (adj) = 89.0\%$$

Table 1.13 shows that R-sq = 94.5. This is very high. Rule of law and in political stability. Political stability has a role to play. It also shows that rule of law has a role to play.

H2 is rejected in respect of voice and accountability, government effectiveness, rule of law and political stability and accepted in respect of control of corruption and regulatory quality. Voice and accountability, government effectiveness, rule of law and political stability have a role to play in the production of tradable goods in COMESA. Control of corruption and regulatory quality has no significant role in the production of tradable goods in COMESA.

H3 There is no relationship between voice and accountability, political stability, Government effectiveness, rule of law, control of corruption, regulatory quality and the following dependant variables individually, FDI, raw material, utilities, infrastructure, capital, labor, land and entrepreneurship.

Table 1.14 FDI = 32.1 + 1.14 gvt-eff

**Table 1.14** 

Predicto	Coef	StDev	t-	P
Constant	32.12	20.12	1.60	0.209
Gvt – eff	1.1368	0.1330	8.55	0.003

Source: Results of stepwise regression analysis

S = 27.25

$$R-sq = 96.1\%$$

R-sq 
$$(adj)=94.7\%$$

In table 1.14, government effectiveness has significant relationship with FDI judging from t -ratio of 8.55 and significant p value (0.003) government effectiveness explains 96.1 % of variations.

Table 1.15 FDI = 8.6 + 1.20 voice and accountability

**Table 1.15** 

Predicto	Coef	StDev	t-	P
Constant	8.60	22.73	0.38	0.730
Voice ac	1.1970	0.1423	8.41	0.004

Source: Results of stepwise regression analysis

S = 27.66

$$R-sq = 95.9\%$$

R-sq 
$$(adj)=94.6\%$$

In table 1.15 voice and accountability's t-ratio is significant (8.41) and p-value (0.004) is significant showing relationship exists between voice and accountability and FDI.

Table 1.16 FDI = 24.5 + 1.18 r-of-law

**Table 1.16** 

predictor	coef	StDev	t-ratio	p
constant	24.49	24.85	0.99	0.397
r-of-Iaw	1.1845	0.1657	7.15	0.006

$$S = 32.31$$

$$R-sq = 94.5\%$$

$$R-sq (adj)=92.6\%$$

In table 1.16, rule of law affects FDI as evidenced by high t-ratio (7.15) and a significant p-value (0.006) relationship exists between rule of law and FDI. This is also strengthened by  $R^2 = (94.5\%)$ .

Table 1.17 FDI = 56.6 + 1.02 politic

**Table 1.17** 

predictor	coef	StDev	t-ratio	p	
constant	56.62	37.13	1.152	0.225	
Politic	1.0216	0.2549	4.01	0.028	

$$S = 54.43$$

$$R-sq = 84.3\%$$

R-sq 
$$(adj)=79.0\%$$

Political stability is related to FDI. The p – value is significant and t-ratio (4.01) is also significant. FDI is affected by political stability.

H3 is rejected in respect of government effectiveness and accountability, rule of law and political stability. H3 is however accepted in respect of control of corruption and regulatory quality. There is significant relationship between government effectiveness voice and accountability, rule of law, political stability and FDI. There is no significant relationship between control of corruption, regulatory quality and FDI.

Table 1.18 Raw material = 4.20 + 0.368 gyt-effe +0.149 R-quality

**Table 1.18** 

Predic	Coef	StDev	t-ratio	P
Consta	44.200	3.043	1.38	0
Gvt-eff	0.3676	0.0146	25.04	0
r	0.1487	0.0157	9.45	0

Source: Results of stepwise regression analysis

In table 1.18 both the government effectiveness and regulatory quality have significant relationship with raw material with p-values of 0.002 and 0.011 respectively. The two explain 99.8% of variations in raw material.

Table 1.19 Raw material = 13.2 + 0.976 R-of-Iaw -0.535 politic

**Table 1.19** 

W-10 1/12					
predictor	coef	StDev	t-ratio	p	
constant	13.17	12.12	1.09	0.391	

r-of law	0.9765	0.2871	3.40	0.077
Politic	-0.5354	0.2622	-2.04	0.178

Source: Results of stepwise regression analysis R-sq (adj)=89.2%

S = 14.35

R-sq = 94.6%

# **Analysis of variance**

**Table 1.20** 

Source	DF	SS	MS	F	P
Regression	2	7241.4	3620.7	17.59	0.054
Error	2	411.8	205.9		
Total	4	7653.2			

Source: Results of stepwise regression analysis

The p – value (0.054) is marginal significant. Political stability and rule of law affect raw materials. Political stability has an inverse relationship with raw material, which means that political stability has a negative effect on raw material.

Table 1.21 Raw Material = 17.7 + 0.416 voice and accountability

**Table 1.21** 

predictor	coef	StDev	t-ratio	p
constant	17.67	15.81	1.12	0.345
Voice ac	0.41591	0.09897	4.20	0.025

Source: Results of stepwise regression analysis

S = 19.25

R - sq = 85.5

R - sq(adj) = 80.6

Table 1.22 raw material = 5.5 + 0.380 voice acc + 0.139 c – corrup

**Table 1.22** 

predictor	coef	StDev	t-ratio	p
constant	-5.51	14.44	-0.38	0.739
Voice acc	0.37984	0.06595	5.76	0.029
C – corrup	0.13936	0.06129	2.27	0.151

Source: Results of stepwise regression analysis

$$S = 12.45$$

$$R - sq = 95.9\%$$

$$R - sq (adj) = 91.9\%$$

# Analysis of variance

**Table 1.23** 

Source	DF	SS	MS	F	P
Regression	2	7343.2	3671.6	2369	0.041
Error	2	310.0	155.0		
Total	4	7653.2			

Source: Results of stepwise regression analysis

Table 1.23 indicates that there is marginal significant relationship between raw material and voice accountability and control of corruption.

H3 was rejected in respect of government effectiveness, regulatory quality, political stability, and rule of law, voices and accountability and control of corruption. Rule of law was accepted. There is significant relationship between effectiveness, regulatory quality, political stability, voice accountability, rule of law, control of corruption and raw material.

Regressing capital on 6 predictors

**Table 1.24** 

Table 1.24						
Step	1	2	3			
constant	3.8965	0.7490	29.2242			
Politic	0.412	0.287	0.614			
t-ratio	12.72	5.99	5.44			
gvt-effe		0.140	1.046			
t-ratio		2.81	3.40			
voice ac			-1.29			
t-ratio			-2.95			

Source: Results of stepwise regression analysis

Voice and accountability is highly correlated with other predictor variables. Political stability was highly correlated with other predictor variables. Government effective was highly correlated with other predictor variable. There was an existence of multicollinearity.

Table 1.25 Capital = 29.2 - 1.29 voice & acc + 0.614 politic + 1.05 gvt - effe **Table 1.25** 

predictor	coef	StDev	t-ratio	p
constant	29.224	9.723	3.01	0.204
Voice & acc	-1.2948	0.4383	-2.95	0.208
Politic	0.6140	0.1128	5.44	0.116
gvt-effe	1. 0460	0.3074	3.40	0.182

$$S = 1.727$$

$$R - sq = 100.0\%$$

$$R - sq(adj) = 99.8\%$$

# Analysis of variance

**Table 1.26** 

tuble 1.20						
Source	DF	SS	MS	F	P	
Regression	3	7875.8	2625.3	880.45	0.025	
Error	1	3.0	3.0			
Total	4	7878.8				

Source: Results of stepwise regression analysis

Table 1.25 shows that voice and accountability, political stability and government effectiveness explain very well capital with  $R^2=100\,$ %. However voice and accountability has negative relationship with capital.

The regression equation is capital = -2.00+0.463 voice accountability -0.0542 c-corrup

**Table 1.27** 

predictor	coef	StDev	t-ratio	p
constant	-2.000	9.026	-0.22	0.845
Voice&acc	0.46339	0.04123	11.24	0.008
c-corrup	-0.05420	0.03831	-1.41	0.293

Source: Results of stepwise regression analysis

$$S = 7.782$$

$$R - sq = 98.5\%$$

$$R - sq (adj) = 96.6\%$$

# **Analysis of variance**

**Table 1.28** 

Source	DF	SS	MS	${f F}$	P
Regression	2	7757.7	3878.8	64.05	0.015
Error	2	121.1	60.6		
Total	4	7878.8			

Table 1.27 shows that voice and accountability and control of corruption have a lot to explain about capital. A significant relationship exists between them and capital. Control of corruption has inverse relationship with capital.

The regression equation is capital = 2.47 + 0.460 r-of-law - 0.0560 r-quality

**Table 1.29** 

predictor	coef	StDev	t-ratio	p
constant	2.474	7.076	0.35	0.760
r-of-Iaw	0.45989	0.03389	13.57	0.0005
r-quality	-0.05597	0.03459	-1.62	0.247

Source: Results of stepwise regression analysis

S = 6.489

R-sq = 98.9%

R-sq (adj)=97.9%

# Analysis of variance

**Table 1.30** 

table 1.50					
Source	DF	SS	MS	F	P
Regression	2	7794.6	3897.3	92.56	0.011
Error	2	84.2	42.1		

Source: Results of stepwise regression analysis

Table 1.29 shows that rule of law and regulatory quality explained 98.9% of the variation in capital. Regulatory quality has negative relationship with capital.

# H3 is rejected.

There is significant relationship between voice and accountability, political stability, rule of law government effectiveness, control of corruption, regulatory quality and capital.

Regressing entrepreneurship with voice and accountability, political stability, governmental effectiveness, rule of law, control of corruption, regulatory quality.

**Table 1.31** 

predictor	coef	StDev	t-ratio	p
constant	-8.047	2.603	-3.09	0.091
Voice &acc	0.56023	0.01189	47.13	0.000
c-corup	0.02874	0.01105	2.60	0.121

S = 2.244

R-sq = 99.9%

R-sq (adj) = 99.8%

# Analysis of variance

**Table 1.32** 

Source	DF	SS	MS	F	P
Regression	2	12220.7	6110.4	1213.58	0.001
Error	2	10.1	5.0		
Total	4	12230.8			

Source: Results of stepwise regression analysis

In table 1.31 voice and accountability and corruption show significant relationship with entrepreneurship accounting 99.9% of variation when the two independent variables are regressed with the dependent variable.

Entrepre = 3.89 + 0.565 r-of-law

**Table 1.32** 

able 1.52					
predictor	coef	StDev	t-ratio	p	
constant	3.891	4.429	0.88	0.444	
r-of-Iaw	0.56482	0.02953	19.12	0.000	

Source: Results of stepwise regression analysis

S = 5.759

R - sq = 99.2%

R - sq (adj) = 98.9%

Table 1.32 indicates that there is significant relationship between entrepreneurship and rule of law this was confirmed by a very high t – ration (19.12) and p – value (0.000) was significant. Rule of law explained 99.2% of variation on entrepreneurship, when regressed with it. This would mean that in a COMESA country without rule of law entrepreneurship may be suppressed and this can also lead to exodus of entrepreneurs to other countries, which have rule of law.

Table 1.33 entrepre = 8.8 + 0.536 gvt – effe – 0.0031 r – quality

**Table 1.33** 

predictor	coef	StDev	t-ratio	p
constant	8.77	10 .44	0.84	0.490
gvt -effe	0.53615	0.05041	10.64	0.009
r-quality	-0.00311	0.05407	-0.06	0.959

Source: Results of stepwise regression analysis

S = 9.946

R-sq = 98.4%

R-sq (adj)=96.8%

**Table 1.34** 

Source	DF	SS	MS	F	P
Regression	2	12032.9	6016.5	60.82	0.016
Error	2	197.9	98.9		
Total	4	12230.8			

Source: Results of stepwise regression analysis

Table 1.33 indicates that there is a significant relationship between government effectiveness, regulatory quality and entrepreneurship. Regulatory quality has an inverse relationship with entrepreneurship.

Entrepreneur = 9.25 + 0.399 gvt-effe + 0.141 politic

**Table 1.34** 

1 able 1.54				
predictor	coef	StDev	t-ratio	р
constant	9.255	4.454	2.08	0.173
gvt -effe	0.39867	0.07857	5.07	0.037
politic	0.141432	0.07538	1.87	0.202

Source: Results of stepwise regression analysis

S = 5.995

R-sq = 99.4%

R-sq(adj) = 98.8%

**Table 1.35** 

Source	DF	MS	F	P

Regression	2	12158.9	6079.5	169.17	0.006
Error	2	71.9	35.9		
Total	4	12230.8			

In table 1.34, government effectiveness and political stability have significant relationship with entrepreneurship. They explain 99.4% of the variation in entrepreneurship when the two are regressed with entrepreneurship.

H3 is rejected. There is a significant relationship between voice and accountability, government effectiveness, rule of law, regulatory quality, control of corruption and entrepreneurship.

Regressing labor with voice and accountability, political stability, government effectiveness, rule of law, control of corruption, regulatory quality.

**Table 1.36** 

predictor	coef	StDev	t-ratio	p
constant	14.255	1.343	10.61	0.060
gvt -effe	0.67266	0.04615	14.58	0.044
r-of-Iaw	-0.22782	0.04755	-4.79	0.131
r-quality	0.033113	0.006364	5.20	0.121

Source: Results of stepwise regression analysis

S = 0.8939

R-sq = 100.0%

R-sq(adj) = 100.0%

**Table 1.37** 

Source	DF	SS	MS	F	P
Regression	3	9225.2	3075.1	3848.58	0.012
Error	1	0.8	0.8		
Total	4	9226.0			

Source: Results of stepwise regression analysis

In table 1.36, government effectiveness, rule of law and regulatory quality have significant relationship with labor. Rule of law has negative relationship with labor, government effectiveness, rule of law and regulatory quality explain 100% of variation. This is very high.

Labor = 8.92 + 1.46 voice & acc -0.686 r-of-law -0.276 politic

**Table 1.38** 

Predictor	Coef	StDev	t-ratio	p
Constant	-8.916	2.447	-3.64	0.171
Voice & acc	1.4621	0.1996	7.33	0.086
r-of-law	-0.6858	0.2137	-3.21	0.192
politic	-0.27581	0.02515	-10.97	0.058

$$S = 1.186$$

$$R-sq = 100.0\%$$

$$R-sq(adj) = 99.9\%$$

## **Analysis of Variance**

**Table 1.39** 

Source	DF	SS	MS	F	P
Regression	3	9225.2	3075.1	3848.58	0.012
Error	1	0.8	0.8		
Total	4	9226.0			

Source: Results of stepwise regression analysis

Table 1.38 indicates that voice and accountability, rule of law and political stability have significant relationship with labor. They account 100% variation in labor when regressed with it. Rule of law and political stability have negative relationship with labor.

H3 is rejected in respect of government effectiveness, rule of law, regulatory quality, voice and accountability and political stability but accepted in respect of control of corruption. There is therefore significant relationship between government effectiveness and rule of law, regulatory quality, and voice and accountability political stability with labor. There is no significant relationship between control of corruption and labor.

Regression utility on voice and accountability, political stability, government effectiveness, rule of law, control of corruption and regulatory quality.

Utility = 
$$-2.83 + 0.436 \text{ c} - \text{corrup} - 0.0994 \text{ r-of-law}$$

**Table 1.40** 

Predictor	coef	StDev	t-ratio	р
Constant	-2.831	1.367	-2.07	0.174

c-corrupt	0.435614	0.005842	74.57	0.000
r-of-law	-0.099408	0.006269	-15.56	0.004

S = 1.195

R-sq = 100.0%

R-sq (adj) = 99.9%

**Table 1.41** 

Source	DF	SS	MS	F	P
Regression	2	7938.3	3969.2	2779.99	0.000
Error	2	2.9	1.4		
Total	4	7941.2			

Source: Results of stepwise regression analysis

Control of corruption and rule of law affect the provision of utilities significantly than any other factor. Rule of law has a negative relationship with provision of utilities. This means that if there is no control of corruption the provision of utilities will be very poor. Similarly where there is no rule of law private investment in utilities may be affected negatively.

Utility = 6.7 + 0.462 r-quality -0.0861 voice & acc

**Table 1.42** 

Predictor	Coef	StDev	t-ratio	p
Constant	6.71	17.89	0.38	0.744
r-quality	0.46194	0.08656	5.34	0.033
Voice	-0.08606	0.8503	-1.01	0.418

Source: Results of stepwise regression analysis

S = 16.13

R-sq = 93.4%

R-sq (adj) = 86.9%

**Table 1.43** 

Source	DF	SS	MS	F	P
Regression	2	7420.6	3710.3	14.25	0.066
Error	2	520.6	260.3		
Total	4	7941.2			

Source: Results of stepwise regression analysis

Table 1.43 above p – value (0.066) is marginally significant. There is also a big difference between  $R^2$  and adjusted  $R^2$  showing this marginally significant relationship.

H3 is rejected in respect of control of corruption, rule of law, regulatory quality and voice and accountability. There is a significant relationship between control of corruption and rule of law, regulatory quality, voice and accountability and utility. Utility has no significant relationship with government effectiveness and political stability.

Regressing infrastructure on voice and accountability, political stability, government effectiveness, rule of law, control of corruption and regulatory quality.

**Table 1.44** 

Predictor	Coef	StDev	t-ratio	р	
constant	-6.865	4.343	-1.58	0.25	
Gvt-effe	0.37337	0.02096	17.81	0.00	
r-quality	0.17131	0.02248	7.62	0.01	

Source: Results of stepwise regression analysis

S = 4.135

R-sq = 99.6%

R-sq (adj) = 99.2%

## **Analysis of Variance**

**Table 1.45** 

Source	DF	SS	MS	F	P
Regression	2	8272.6	4136.3	241. 87	0.004
Error	2	34.2	17.1		
Total	4	8306.8			

Source: Results of stepwise regression analysis

Government effectiveness and regulatory quality show significant relationship with infrastructure. They affect both quality and availability of infrastructure. P-vale (0.004) and t-ratios are significant.

Table 1.46 infrastr = 18.2 + 0.386 voice & acc + 0.016 c-corrup

**Table 1.46** 

predictor	coef	StDev	t-ratio	p
constant	-18.25	12.08	-1.51	0.270
Voice&acc	0.38592	0.05519	6.99	0.020
c-corrup	0.16584	0.05129	3.23	0.084

Source: Results of stepwise regression analysis

S = 10.42

R - sq = 97.4

R - sq (adj) = 94.8%

# **Analysis of variance**

**Table 1.47** 

Tuble 1117						
Source	DF	SS	MS	F	P	
Regression	2	8272.6	4136.3	241.87	0.004	
Error	2	34.2	17.1			
Total	4	8306.8				

Voice and accountability and control of corruption show that they contribute to infrastructure development. They explain about 97.4% of variation in infrastructure when they are regressed with it.

Infrastructure = 15.4 + 0.421 r-of-law

**Table 1.48** 

predictor	coef	StDev	t-ratio	p
constant	15.42	17.54	0.88	0.444
r-of-Iaw	0.4212	0.1170	3.60	0.037

Source: Results of stepwise regression analysis

$$S = 22.81\%$$

$$R - sq = 81.2\%$$

$$R - sq(adj) = 74.9\%$$

P – value (0.037) is marginally significant. There is marginally significant relationship between rule of law and infrastructure.

H3 is rejected in respect of government effectiveness, regulatory quality, voice and accountability, control of corruption and rule of law. H3 is accepted in respect of political stability. There is a significant relationship between government effectiveness, regulatory quality and accountability, control of corruption, rule of law and infrastructure. There is no significant relationship between political stability and infrastructure probably due to multicollinearity.

Regressing land on voice and accountability, political stability, government effectiveness, rule of law, control of corruption and regulatory quality.

Land = -47.8 + 5.72 voice & acc -0.657 politic -4.41 r-of-law

**Table 1.49** 

predictor	coef	StDev	t-ratio	р
constant	-47.769	8.812	-5.42	0.116
Voice & acc	5.7215	0.7186	7.96	0.080

politic	-0.65703	0.09055	-7.26	0.087
r-of-Iaw	-4.4053	0.7696	-5.72	0.0110

$$S = 4.271$$

$$R - sq = 99.9\%$$

$$R - sq (adj) = 99.9\%$$

Voice and accountability, political stability and rule of law explain 99.9% of the variations in land when they are regressed with it.

Land = 20.0 + 1.48 government – effe + 0.178 r-quality – 0.975 r-o-law

**Table 1.50** 

Table 1.30						
predictor	coef	StDev	t-ratio	p		
constant	19.984	7.852	2.55	0.238		
gvt-effe	1.4806	0.2698	5.49	0.115		
r-quality	0.17819	0.03721	4.79	0.131		
r-of-Iaw	-0.9747	0.2780	-3.57	0.177		

Source: Results of stepwise regression analysis

$$S = 5.226$$

$$R - sq = 99.8\%$$

$$R - sq = 99.4\%$$

Government effectiveness, regulatory quality and rule of law explain 99.8% of variation in land. Rule of law is negatively associated with land.

H3 is accepted in respect of control of corruption, but rejected in all others. There is a significant relationship between voice and accountability, political stability, rule of law, government effectiveness, regulatory quality and land. There is no significant relationship between control of corruption and land.

H4 there are no differences in the views of shareholders on the influence of voice and accountability, Political stability, government effectiveness, rule of law, control of corruption, regulatory quality and production of tradable goods.

Table 1.51 Analysis of variance for control of corruption One-Way analysis of variant

**Table 1.51** 

able 1.51						
Source	DF	SS	MS	F	P	
Regression	60	5557.56	9.29	8.97	0.000	
Error	1408	1459.18	1.04			

Total	1468	2016.74		
10001	1.00	2010.7		

Individual 95% CIs for mean Based on pooled StDev **Table 1.52** 

1 abie 1.52			
Level	n	Mean	StDev
Cl	24	4.292	1.083
C2	25	4.52	0.714
C3	24	4.75	0.532
C4	25	3.28	0.936
C2 C3 C4 C5 C6 C7	24	2.75	1.894
C6	24	2.083	0.776
C7	25	4.16	0.688
C8 C9	24	4.083	0.881
C9	25	4.64	0.569
ClO	25	3.4	0.957
C11	9	3.333	1. 000
C12	25	3.4	1.258
C13	25	3.182	1. 097
C14	25	3.6	0.816
C15	24	3.417	0.929
C16	24	3.458	1.103
C17	25	3.04	1.399
C18	25	3.56	0.821
C19	25 25	3.44	0.507
C20	25	3.08	0.277
C21	25	2.6	1.555
C22	24	3.458	1.414
C23	25	3.2	0.816
C24	25	3.64	0.81
C25	25	4.44	0.507
C26	25	4.52	0.51
C27	25	4.08	0.702
C28	25	3.2	0.737
C29	24	2.667	1.341
C30	25	1.56	0.961
C31	24	3.458	1.103
C32	24	2.792	0.833
C33	24	3.5	1.063
C34	24 24	3.25	0.737
C35	24	4.042	0.624
C36	24	3.292	1.429
C37	24	2.542	1.793
C38	25	3.16	0.987
C39	24	3.417	1.139
C40	24	3.75	0.794
C41	24	3.917	0.974
C42	24	3.833	0.565
C43	24	3.333	1.167
C44	25	3.8	0.816
C45	24	4.292	1.042
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C46	25	3.88	0.971
C47	24	2.833	0.963
C48	24	3.5	1.18
C49	24	3.458	0.588
C50	24	3.375	0.875
C51	24	3.417	0.881
C50 C51 C52 C53	24	3.708	1.628
C53	24	3.125	0.947
C54 C55 C56			0.737
C55	24	3.5	0.511
C56	24	3.375	1.135
C57	23	2.348	1.434
C58	24	3.958	1.301
C59	24	4.208	1.141
C60	24	3.792	1.25
C61	25	3.92	0.759

H4 is rejected in respect of control of corruption. There are differences in the views of stakeholders. Majority was in agreement.

Our decision to trade and invest in a particular COMESA country is based on whether that country controls corruption.

Analysis of variance for government effectiveness One-way analysis of variance

**Table 1.53** 

Source	DF	SS	MS	F	P
Regression	59	340.457	5.770	9.78	0.000
Error	537	317.000	0.590		
Total	596	657.457			

Source: Results of stepwise regression analysis

INDIVIDUAL 95% CIS FOR MEAN BASED ON POOL STDEV

**Table 1.54** 

LEVEL	N	MEAN	STDEV
Cl	10	2.9	1.3703
C2	10	4.1 000	0.9944
C3	10	4.9	0.3162
C4	10	3.7	0.8233
C5	10	2.6	0.5164
C6	10	1. 9000	0.8756
C7	10	4.3	0.6749
C8	9	4.4444	0.527

C9	10	5	0
C10	10	4.3	0.6749
C11	9	3.5556	1.236
C12	10	4.6	0.5164
C13	10	2.4	1.1738
C14	10	3.4	1.075
C15	10	4.1	0.3162
C16	10	4.4	0.5164
C17	9	4.2222	1.0929
C18	10	4.7	0.483
C19	10	4	0
C20	10	3.1	0.3162
C21	10	4.1	1.1005
C22	10	4.5	0.7071
C23	10	3.4	0.6992
C24	10	4	0
C25	10	4.8	0.4216
C26	10	4.5	0.527
C27	10	4.6	0.5164
C28	10	4.5	0.527
C29	10	4.2	0.9189
C30	10	150000	0.7071
C31	10	4.6	0.5164
C32	10	3.4	0.8433
C33	10	4.8	0.4216
C34	10	4.2	0.6325
C35	10	4	0.8165
C36	10	4.8	0.4216
C37	10	4.3	0.483
C38	10	4.4	0.8433
C39	10	3.6	1.075
C40	10	4.3	0.8233
C41	10	4.2	0.7888
C42	10	3.9	0.7379
C43	10	4.5	0.9718
C44	10	3.9	0.8756
C45	10	4.5	1.2693
C46	10	4	0.6667
C47	10	3.8	0.6325
C48	10	4.8	0.4216
C49	10	3.4	0.6992
C50	10	5	0
C51	10	3.6	0.8433

C52	10		
C53	10	3.7	0.6749
C54	10	4	1.1547
C55	10	3.9	0.7379
C56	10	4.9	0.3162
C57	10	3.6	1.3499
C58	10	2.5	1.354
C59	10	5	0
C60	10	4.5	0.9718
C61	10	5	0

H4 is rejected in respect of government effectiveness. There are differences in the views of stakeholders. Overall mean was above 4. Majority was in agreement.

# Questions on government effectiveness

- 22. Government effectiveness affects foreign direct investment in COMESA countries
- 23. Our decision to invest and trade with a COMESA country is based on whether the government is effective.
- 24. The provision of raw material for producing goods is constrained by government effectiveness.
- 25. The availability and quality of infrastructure is affected by government effectiveness.

# **Analysis Of Variance For Political Stability**

One-way analysis of variance

**Table 1.55** 

Source	DF	SS	MS	F	P
Regression	60	359.276	5.688	8.21	0.000
Error	485	353.750	0.729		
Total	545	713.026			

Source: Results of stepwise regression analysis

#### INDIVIDUAL 95% CIS FOR MEAN

## BASED ON POOL STDEV

**Table 1.56** 

LEVEL	N	MEAN	STDEV
C1	9	3.3333	1.3229
C2	9	4.6667	0.7071
C3	9	4.2222	0.8333
C4	9	4.375	0.5175
C5	9	2.1111	1.0541
C6	9	1.3333	0.5
C7	9	3.6667	1.6583

C8	9	4.5556	0.527
C9	9	4.7778	0.6667
C10	9	4.4444	0.8819
C11	9	3.625	1.4079
C12	9	4.7778	0.441
C13	9	3.5556	1.424
C14	9	3.8889	1.1667
C15	9	4.5	0.5345
C16	9	4.3333	0.5
C17	9	4	1.3229
C18	9	4.3333	0.866
C19	9	4	0
C20	9	3.2222	0.441
C21	9	3.4444	1.0138
C22	9	5	0
C23	9	3.1111	0.928
C24	9	4.1111	0.7817
C25	9	4.7778	0.441
C26	9	4.4444	527
C27	9	4.8889	0.03333
C28	9	4.4444	0.527
C29	9	3.8889	1.453
C30	9	1.2222	0.441
C31	9	4.5556	0.441
C32	9	4.2222	0.9718
C33	9	4.1111	1.2693
C34	9	4.1111	0.06009
C35	9	4.6667	0.7071
C36	9	4.8889	0.3333
C37	9	4.4444	0.527
C38	9	3.6667	1
C39	9	3.8889	1.2693
C40	9	4.4444	0.7265
C41	9	4.4444	7265
C42	9	3.7778	0.6667
C43	9	4.4444	0.7265
C44	9	4.4444	0.7265
C45	9	4.5556	1.3333
C46	9	4.6667	0.7071
C47	9	3.7778	0.6667
C48	9	4.4444	0.8819
C49	9	4.7778	0.441
	<u> </u>	1.7770	V. 1 11

C50	9	5	0
C51	9	4.5556	0.527
C52	9	1.8889	1.0541
C53	9	4.3333	0.7071
C54	9	4.2222	1.3017
C55	9	4.7778	0.441
C56	9	5	0
C57	9	4.111	1.453
C58	9	3.889	1.453
C59	9	5	0
C60	9	4.7778	0.441
C61	9	4.889	0.3333

H4 is rejected in respect of political stability. There are differences in the views of stakeholders. The majority was strongly in agreement.

## Questions

- 13. Political stability affects the supply of tradable goods in COMESA.
- 14. Our decision to trade and invest in COMESA country is based on political stability of that country

**Table 1.57** 

Source	DF	SS	MS	F	P
Regression	59	315.385	5.346	5.90	0.000
Error	766	693.714	0.906		
Total	825	1009.099			

Source: Results of stepwise regression analysis

# INDIVIDUAL 95% CIs FOR MEAN BASED ON POOL STDEV

**Table 1.58** 

LEVEL	N	MEAN	STDEV
C1	14	3.8571	1.1673
C2	14	4.0006	0.8771
C3	14	4.7143	0.4688
C4	14	3.1429	0.7703
C5	14	1.7857	1.3114
C6	14	1.9286	0.73
C7	14	3.6429	0.9288
C8	14	3.8571	0.8644

C9	14	4.6429	0.7449
CIO	14	3.3571	0.4972
C11	14		
C12	14	3.7857	0.6993
C13	14	2.9286	0.4746
C14	14	3.5714	0.8516
C15	14	2.8571	0.8644
C16	14	3.1429	0.663
C17	14	3	0.8771
C18	14	3.6429	0.9288
C19	14	3.5	0.6504
C20	14	3	0
C21	14	2.7143	1.1387
C22	14	2.7143	0.9139
C23	14	3.5714	0.6462
C24	14	3.4286	0.6462
C25	14	4.1429	0.663
C26	14	3.8571	0.9493
C27	14	4.1429	0.7703
C28	14	3.2143	0.8018
C29	14	2.7143	1.069
C30	14	1.3571	0.9288
C31	14	3.5	0.7071
C32	14	2.92286	0.6157
C33	14	3.5714	0.8516
C34	14	2.7143	1.069
C35	14	3.5714	0.7559
C36	14	3.7143	1.1387
C37	14	3	1.9612
C38	14	2.2857	0.4688
C39	14	3.1429	1.0995
C40	14	3.7143	0.6112
C41	14	3.2143	1.1217
C42	14	3.1429	1.0271
C43	14	3.2857	1.4373
C44	14	3.6429	0.4972
C45	14	3.3571	1.2774
C46	14	4	0.7845
C47	14	3	0.7845
C48	14	3.6429	1.0082
C49	14	2.6429	0.6333
C50	14	3.5	0.7596
C51	14	3.9286	0.8287

C52	14	3.0714	1.2067
C53	14	2.9286	0.9972
C54	14	3.2857	0.9945
C55	14	3.1429	0.3631
C56	14	2.7857	0.8018
C57	14	2.4286	1.2225
C58	14	3.2857	1.7289
C59	14	3.7857	1.3688
C60	14	3.871	1.4064
C61	12	3.5	1.0871
Pooled StDev =	0.9516		

H4 is rejected in respect of regulatory quality. There are differences between the views of the stakeholders. Stakeholders responded between neutral and agreement.

# Questions

- 68. Our decision to trade and invest in a COMESA country is based on the regulatory quality of that country.
- 69. There are delays in receiving a license in COMESA.
- 70. Regulatory provisions are unclear in COMESA

# ANALYSIS OF VARIANCE FOR RULE OF LAW

One-way analysis of variance

**Table 1.59** 

Source	DF	SS	MS	F	P
Regression	60	398.729	6.645	9.89	0.000
Error	539	362.256	0.672		
Total	599	760.985			

Source: Results of stepwise regression analysis

INDIVIDUAL 95% CIs FOR MEAN BASED ON POOL STDEV

**Table 1.60** 

Tuble 1.00				
N	MEAN	STDEV		
10	4.1	1.1005		
10	3.8	1.0328		
10	4.3	0.6749		
10	3.1	1.1972		
10	2.2	0.6325		
10	1.9	0.9944		
10	3.8	1.3984		
	10 10 10 10 10	10 4.1 10 3.8 10 4.3 10 3.1 10 2.2 10 1.9		

C8	10	4.4	0.5164
C9	10	5	0
CIO	10	4.2	0.6325
C11	9	2.7778	1.3017
C12	10	4.8	0.4216
C13	2	4.5	0.7071
C14	10	3.7	1.0593
C15	10	4.1	0.5676
C16	10	4.3	0.483
C17	10	3.7	1.7029
C18	10	4.7	0.483
C19	10	4	0
C20	9	3	0
C21	10	3.2	1.3166
C22	10	4.7	0.6749
C23	10	3.4	0.8433
C24	10	4.4	0.5164
C25	10	5	0
C26	10	4.5	0.527
C27	10	4.5	0.527
C28	10	4.7	0.483
C29	10	4.1	0.5676
C30	10	1.2	0.4216
C31	10	4.8	0.4216
C32	10	3.6	1.075
C33	10	4.8	0.4216
C34	10	3.6	0.9487
C35	10	4.8	0.527
C36	10	3.3	0.7071
C37	10	4.7	0.483
C38	10	4.1	0.8756
C39	10	4.1	0.8756
C40	10	4.7	0.483
C41	10	4.2	0.9189
C42	10	3.6	0.8433
C43	10	4.4	0.6992
C44	10	4.6	0.5164
C45	10	4.7	0.483
C46	10	4.7	0.483
C47	10	3.8	0.4216
C48	10	4.4	1.2649
C49	10	3.5	0.7071
C50	10	5	0

C51	10	3.7	1.2517
C52	10	3.3	1.7029
C53	10	3.9	0.8756
C54	10	4.6	0.5164
C55	10	4.2	0.4216
C56	10	4.6	0.5164
C57	10	3.3	0.9487
C58	10	1.9	1.4491
C59	10	5	0
C60	10	3.9	1.3703
C61	10	5	0
Pooled StDev = $0.81$	98		

H4 is rejected in respect of rule of law. There are differences in the view of stakeholders.

Their views were between agreements and strongly in agreement

## **Questions**

- 32. Our decisions to trade and invest in a COMESA country are based on whether that particular country has a rule of law to protect property and agreements.
- 33. Foreign direct investment is affected by rule of law.

# ANALYSIS OF VARIANCE FOR VOICE AND ACCOUNT ABILITY

One-way analysis of variance

**Table 1.61** 

Source	DF	SS	MS	F	P
Regression	60	332.198	5.537	5.73	0.000
Error	603	582.164	0.965		
Total	663	914.361			

# INDIVIDUAL 95% CIs FOR MEAN BASED ON POOL STDEV

T	<b>able</b>	1.62

LEVEL	N	MEAN	SIDEV
Cl	11	3.6364	1.2863
C2	11	4.2727	0.9045
C3	11	4.5455	0.6876
C4	10	4	0.9428
C5	11	1.2727	0.4671
C6	10	1.5	1.0801
C7	11	4.3636	1.0269

C8	11	4.5455	0.5222
C9	11	5	0
ClO	10	4	0.8165
C11	10	4	0.8165
C12	11	4	0.6325
C13	11	3.1818	1.4013
C14	11	3.9091	0.8312
C15	10	4.4	0.5164
C16	11	4.1818	0.7508
C17	11	3.3636	1.2863
C18	11	4.4545	0.5222
C19	11	2.7273	1.0091
C20	11	3.3636	0.5045
C21	10	3.9	1.1005
C22	11	4.6364	0.6742
C23	11	3.8182	0.603
C24	11	4	0.7746
C25	11	4.2727	0.6467
C26	11	3.9091	0.8312
C27	11	4.5455	0.5222
C28	11	3.9091	0.5394
C29	11	4.0909	0.9439
C30	11	2.7273	1.7373
C31	11	3.6364	1.5015
C32	11	4	1.1832
C33	11	4.2727	0.9045
C34	11	4.3636	0.5045
C35	11	4.0909	0.6742
C36	11	4.6364	1.1362
C37	11	4.0909	0.5045
C38	11	4.6364	1.2721
C39	11	3.7273	1.4206
C40	11	3.7273	0.6742
C41	11	4.0909	1.1362
C42	11	2.5455	1.2136
C43	11	2.9091	0.9439
C44	11	4.3636	0.5045
C45	11	3.4545	1.0357
C46	11	4.2727	1.2721
C47	11	3.8182	0.603
C48	11	3.9091	1.5783
C49	11	3.9091	0.7006
C50	11	3.3636	1.4334

#C51	10	4	0.8165
C52	11	2.4545	1.3685
C53	11	4	0.7746
C54	11	3.6364	1.0269
C55	11	4	1. 0000
C56	11	4.4545	0.5222
C57	11	4.0909	1.6404
C58	11	3.5455	1.5076
C59	11	5	0
C60	11	4.0909	1.221
C61	11	4.6364	0.9244
Pooled StDev = $0.9826$			

H4 is rejected in respect of voice and accountability. There are differences between the views of stakeholders. The majority was in agreement.

## **Ouestions**

- 2. Voice and accountability is important in increasing supply of tradable goods in COMESA
- 3. Our decision to invest in COMESA is largely based on voice and accountability of a particular COMESA country.
- 5. Foreign direct investment is very sensitive to the issue of voice and accountability of a particular country.

## Views provided by respondents

In an additional open question stakeholders were asked in their opinion what was needed to increase supply of tradable goods in COMESA. The following were their responses.

- 1. Favorable macroeconomics environment and curtailment of corruption.
- 2. Political and economic stability, governments driven economics.
- 3. Raw materials, skills and capital.
- 4. Availability of raw material, skilled manpower coupled with working capital supply at moderate rate.
- 5. Honesty good business practice.
- 6. Political stability, zero corruption, free trade and low taxes.
- 7. Removal of trade barriers and unnecessary bureaucracy.
- 8. Loan capital from World Bank.
- 9. Very clever people.
- 10. Political unity.
- 11. Enterprises.
- 12. Entrepreneurship.
- 13. Skilled manpower.
- 14. Capital.
- 15. Affordable tariffs
- 16. Free trade zone.
- 17. Infrastructure.
- 18. Capital
- 19. Capital and raw material
- 20. Rule of law.
- 21. Infrastructure and transparency

- 22. Maximum utilization of available resources including land
- 23. Stable political environment
- 24. Protection and tariffs.
- 25. Raw material and infrastructure
- 26. Free Trade (barriers to entry and political stability)
- 27. Capital formation
- 28. Favorable trade conditions
- 29. Removal of all trade barriers

#### 8. Conclusions and Recommendations

The results are indicative of perception of investors and others. The quality of institution indicators index is applicable to all COMESA countries show poor performance by individual member states. Capital, entrepreneurship and foreign direct investment are the major determinants of production of tradable goods in COMESA. Institutional quality in COMESA countries is very poor. Except Mauritius and Namibia (now no longer a member) the rest of COMESA member states have poor institutional quality. This affects their ability to attract foreign investment hence production of tradable goods. Voice and accountability, government effectiveness, rule of law and political stability play a very important role in increasing production of tradable goods in COMESA. Foreign direct investment is affected by voice and accountability, rule of law and political stability than any other factors. Availability of raw material is affected by government effectiveness, regulatory quality, political stability, voice and accountability, and control of corruption. Capital is very sensitive to issues of voice and accountability, political stability, government effectiveness, control of corruption and regulatory quality. It is recommended that COMESA should urge its member states to improve on governance indicators in their respective countries.

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