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### Cape Verde and Mozambique as development successes in Sub-Saharan Africa

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ABSTRACT. This paper assesses the extent to which Cape Verde and Mozambique reveal a positive interaction between globalization and governance in the orientation and predictability of economic policies, as well as the accompanying institutional arrangements. Economic success under globalization involves market perceptions regarding outcomes such as export diversification and narrowing of the income gap with the frontier. Economic success is in turn sustained by good governance and political and economic freedom. The context is provided by cooperation agreements to which Cape Verde and Mozambique belong, notably in their respective sub region of Africa, where a convergence-diversification regime and a divergence-specialization regime can be defined. Comparing regimes across sub regions, we find that West Africa countries are becoming more diversified whilst in Southern Africa they are becoming more specialized. Opening up to trade is also an important driver of both convergence and diversification for the former, especially in the range of 45-75% of GDP, but not for the latter. Finally, in the Southern Africa convergence-diversification regime, economic and political freedom drive convergence, suggesting effective institutional arrangements.

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### 1. Introduction

In less than one year, the global financial crisis turned the risk of excluding Africa economies from globalization into the certainty that poverty would worsen in most. Prior to this crisis, however, Africa accompanied the trend of sustained growth evidenced by emerging economies, which was the strongest in decades (*African Economic Outlook*, 2009, World Bank, 2009), primarily due to the implementation of adequate structural and macroeconomic policies. In Sub-Saharan Africa (SSA), GDP growth increased from an average of 3.5 percent in 2000 to 5.7 percent by 2005 and Burkina Faso, Ethiopia, Mali, Mozambique, Tanzania, and Uganda, none of which is a major primary commodity producer, were able to post annual growth rates of over 5 percent in recent years (United Nations *Africa Report*, 2008).

Indeed, the expansion, diversification and deepening of trade and financial links between countries over several decades presented an unparalleled opportunity to raise living standards and achieve the Millennium Development Goals (MDGs). Notwithstanding Africa's improved economic situation during the last few years, absolute poverty was still widespread when unprecedented energy and food price volatility brought worldwide expansion to a halt. Amidst dire global economic prospects, growth enhancing policies need to be assessed against progress on MDGs, including the global partnership on development and prospects for international cooperation.

To be sure, the evidence suggests that development success under globalization is less a question of relative resource endowments or geographical location than in past waves of globalization. Market perception of the orientation and predictability of national economic policies, and the accompanying institutional arrangements, have proved to be decisive

everywhere. The Asian crises of the mid 1990s showed that economic openness must be accompanied by good public and private sector governance in order for countries to take full advantage of globalization. Examples of the former include sound macroeconomic policies, unfailing transparency, stable and rational incentive frameworks and robust financial systems coupled with effective supervisory and regulatory mechanisms. There is no universally applicable development model, however, as severe regulatory failures also occurred in developed countries. Adequate development responses to globalization thus become all the more important as globalization increasingly affects political and economic governance, mainly by reducing national policy space and increasing institutional and economic interdependence at various levels. At the same time, a more integrated global economic context necessarily demands greater policy and institutional coherence as well the knowledge required to implement the associated reforms.

In this regard, we note that regional economic integration remains a valid intermediate step toward the integration of developing countries into the world economy. In addition to benefiting from regional economies of scale, their participation in reform programs within regional organizations also facilitates domestic authorities' work when implementing politically difficult measures. Regional surveillance and peer pressure between the various partners are now offered by the African Peer Review Mechanism<sup>2</sup>. These may also help reduce the risks of macroeconomic slippage, resulting in a more stable, predictable environment – an essential factor for the private sector to flourish. In the wake of the entry

<sup>&</sup>lt;sup>2</sup> The effectiveness of such mutual control devices reflect the extent to which cooperation overcomes collective action barriers and clears the ground for coherent reforms (Kanbur, 2004). It should be noted that since the establishment of the African Peer Review Mechanism in July 2002, 29 countries signed up but only 5 were examined until 2007. The acceleration of reports is evident: 4 in 2008 and 6 expected for 2009 (more in *African Economic Outlook* 2009, p. 75). Macedo (2003) describes the various peer review mechanisms and the influence of the OECD one, which sits between IMF (by proxy) and EU (by commitment), to borrow Niels Thygesen

into force of the Lisbon treaty, where the diverse perspectives of the 27 EU member states have at last found an institutional framework. The success of the EU attests to the advantages of regional integration among like-minded countries, where a combination of cultural proximity and mutual knowledge facilitated the deepening of the integration process from a free trade area to a single currency and the widening from the original six members through successive enlargements.

The same is perhaps true of French-speaking West and central African (so-called CFA) countries, particularly those pegged to the euro, as a driving force of economic policy coordination and integration, the caveat being that the stability of the nominal exchange rate may be accompanied by unstable real effective exchange rates<sup>3</sup>. Their long experience with a monetary policy conducted by a strong institution that must preserve its independence vis-à-vis national governments has accustomed these countries to yielding some of their economic policy matters to a regional organization. In comparison to CFA common institutions, those in the Economic Community of West African States (ECOWAS), which includes Cape Verde, and in the Southern African Development Community (SADC), which includes Mozambique, appear incapable of achieving, let alone of searching for, the regional common good.

The idea of producing knowledge from within a cooperative framework is what we mean by mutual knowledge. Mutual knowledge is generally more limited and the data harder to compare outside of the OECD so that cooperation at the regional, sub-regional and international levels may neither produce knowledge of effective policies or institutions nor

classfication cited ibid.

<sup>&</sup>lt;sup>3</sup> The West African Monetary Union is analyzed in Macedo (1986, p358) emphasizing this paradox and the role of the monetary allocation mechanism enforced by the French Treasury. The devaluation of the CFA franc in 1994 was one factor being the real depreciation observed in Figure 3.5a below in the text.

create conditions for their implementation. In fact, context-adjusted but also widely usable knowledge only results from identifying an appropriate constituency for each set of related problems and challenges<sup>4</sup>. Reaching the MDGs in 2015, for example, presupposes sustained pro-poor economic growth in addition to better governance and more aid, but there are no immediately available recipes on how to bring about a positive interaction between globalization and governance (G&G). In other words, alternatives to both the "one size fit all" and "each case is unique" development ideologies are urgently needed in a context which cannot draw upon existing experiences of institutional cooperation that foster mutual trust and generate mutual knowledge. Under these circumstances, the quest for African development successes remains a policy as well as a research priority, especially acute in the case of SSA. In a nutshell, what is at stake for many African countries is how to ensure that current policy and institutional arrangements in the spheres of trade, finance, debt, investment and technology mutually reinforce each other in support of equitable, rapid and sustainable growth and development.

Against this background, we assess the extent to which Cape Verde and Mozambique may represent SSA development successes in Africa, West and South. Specifically, we seek to identify lessons for successful governance based on meaningful national and regional comparisons of Cape Verde and Mozambique's development experience. These lessons will be drawn from the study of the complementarity of economic policies (trade, competitiveness, financial) and accompanying institutional arrangements. We realize that we are being

<sup>&</sup>lt;sup>4</sup> Bourguignon et al. (2008) underline the heterogeneity of country outcomes and the difficulty in finding patterns even in fragile states. This heterogeneity is no surprise: to "develop a global partnership for development", the eighth MDG goal, reflects disappointment with the performance of developing countries which seemed to follow the policy recommendations of the "Washington consensus" during the 1990s. As governance improvements were not commensurate with the challenges of globalization, especially in what concerns financial markets, these countries faced recurrent financial crises which interrupted the long term convergence process.



somewhat ambitious but, in our view, identifying such lessons necessarily entails a broader scope of analysis than is usual.

Our motivation for studying these countries is twofold: first, it is widely recognized, within the development community, that both countries are actively seeking to overcome adverse developmental conditions, either due to geography (Cape Verde is a small island state with little natural resources and a difficult climate) or history (Mozambique fought a protracted civil war following its independence from Portugal in the mid 1970s). Cape Verde, for example, signed a five year contract in 2005 with the Millennium Challenge Corporation even though it was above the income per capita ceiling that determined eligibility. This was largely seen as an incentive for the country to continue its efforts on the development front. As expected, Cape Verde graduated to middle income status in late 2007 and, at the suggestion of Luxemburg and Portugal, also signed a special partnership with the EU. Mozambique, meanwhile, was eligible for the Millennium Challenge Corporation since its inception in 2004 and "remains a successful example of post-conflict transition, with impressive economic growth averaging 8 per cent from 2000 to 2006 and sustained macroeconomic and political stability" according to the 2008 edition, which was launched on 11 May 2009 in Maputo.

Second, we seek to contribute towards greater mutual knowledge within the Community of Portuguese-speaking Countries (CPLP) on economic development issues in general, and the MDG, in particular. Indeed, the 2006 Bissau Declaration sees cooperative governance as capable of producing "mutual knowledge" within the CPLP based on the fact that the standards of appropriateness regarding policy and institutional reform may be less responsive

to geography than to historical affinities.<sup>5</sup> In spite of their geographical discontinuity, the five Portuguese-speaking African countries (the three others being Angola, Guinea-Bissau and Sao Tome e Principe) formed a group known as PALOP in 1979, which held ten summits until 1992, when they signed the first Regional Indicative Programme with the EU. With Timor-Leste joining in 2005, there are now six ACP Portuguese-speaking countries cooperating under the 10th European Development Fund. They signed a Memorandum of Understanding with the European Commission on the eve of the second Europe-Africa summit in late 2007. Future activities, integrated into a multi-country approach, focus on democratic governance as a key determinant for poverty reduction. This Memorandum extended to CPLP, which also includes Portugal and Brazil.

The present research follows from work initiated at the OECD Development Centre along with the report produced jointly with the African Development Bank since 2001<sup>6</sup>. The emphasis on identifying the linkages between cultural, institutional and economic factors that fostered growth and development remains in this paper, organized as follows. The framework provides a context such that the G&G interaction can be positive or negative, depending on the orientation and predictability of economic policies, as well as the accompanying institutional arrangements. Economic success under globalization involves market perceptions regarding outcomes such as trade diversification and narrowing of the income gap with the frontier. Economic success is in turn sustained by good governance and the political and economic freedom citizens and residents enjoy. This framework is presented in Section 2 as

<sup>&</sup>lt;sup>5</sup> The ECOWAS and SADC secretariats in Abuja, Nigeria and Gabarone, Botswana respectively could promote "mutual knowledge" closer to the citizens of the sub region than the Commission for the African Union, or the local offices of global organizations such as the United Nations, the International Monetary Fund and the World Bank. But there have not been enough constituencies for reform in SSA.

<sup>&</sup>lt;sup>6</sup> The suggestion to analyze the six ACP Portuguese-speaking countries, initially due to Brazil, can be found in OECD (2003). Especially relevant for this projects are Lourenço and Foy (2003) and (Tibana 2003). See also

the context in which specific G&G interactions are positive. The narrative of long term development in Cape Verde and Mozambique in section 3 identifies successful policy and institutional reform experiences in sub-regional cooperation agreements such as ECOWAS and SADC and provides context for good governance indicators by reporting on progress towards the MDGs in PALOP.

Section 4 estimates the factors that determine successful export diversification and income growth strategies in comparison to the sub-regional averages. Given factor endowments, indicators of good governance have the expected positive effect on the export diversification and the income gap relative to developed countries while economic and political freedom contribute positively to these strategies. Cape Verde and, to a lesser extent, Mozambique also compares favorably to respective sub regional averages in financial reputation, measured as the inverse of exchange market pressure<sup>7</sup>. This study of how to create contexts for the implementation cooperation of effective policies allows us to ascertain whether cooperative governance and peer-review mechanisms are capable of sustaining development successes in SSA and in its west and Southern sub regions.

### 2. An Interpretative Framework

### 2.1 How Globalization & Governance interact with Convergence

African Economic Outlook various issues.

<sup>&</sup>lt;sup>7</sup> EMP is defined in Appendix 1 following Eichengreen et al (1996) and it is used in Macedo et al (2009b) and other references therein. The calculations are extended in Lopes (2009) to cover not only PALOP but also ECOWAS and SADC. Appendixes A3 and A4 therein report descriptive statistics on EMP and crises for ECOWAS and SADC respectively, distinguishing between fixers such as the Franc CFA countries (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo in ECOWAS who peg to the euro and Seychelles and Zimbabwe in SADC who peg to the dollar (Botswana, Lesotho, Namibia and Swaziland are pegged to the South African rand) and floaters such as Ghana, Nigeria, Sierra Leone, Gambia in ECOWAS and Zambia, Tanzania, Mauritius, Malawi, Madagascar and South Africa. See below in the text and notes 18 through 20, with the caveats in note 24.

Policy and institutional responses must necessarily change as the nature of globalization itself changes. Indeed, different waves of globalization (16th, 19th and 20<sup>th</sup>-21st centuries) have interacted with different forms of governance responses. G&G interaction is always context-specific, as defined by space (geography) and time (history). In the current wave, the context is captured by convergence, often measure as the gap in per capita income relative to the frontier, and by democracy, often measured in terms of electoral competition and political participation but best understood by its constituent political and economic elements<sup>8</sup>. To enhance the quality of the democracy measure, we look at the index of political rights and of civil liberties published by *Freedom House* and at the indexes of economic freedom published by the *Fraser Institute* and the *Heritage Foundation*.

Political rights are associated with free and fair elections for the executive and legislative branches of power, freedom to constitute political parties, freedom of association, independence from political, religion and military authorities, real possibilities of the change of power and other related aspects of the political system. Key elements of civil liberties include freedom of thought, religion, association, free press and respect for the rights of minorities. The concept of economic freedom is more difficult to define as it may relate only to private ownership, prices being determined by market forces, *de jure* and *de facto* entry and exit, efficient rule of law and official economic regulation guaranteeing competition or also

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<sup>&</sup>lt;sup>8</sup> Przeworski et al. (2000). Garoupa & Tavares (2009) show that higher income increases the survivability of democracy but they label a country as democratic if its governments are designated through elections in which more than one party competes and the winning party is not always the same. The extension of suffrage, for example, would not appear in this dichotomous variable. Yet a negative interaction between democracy and debt default has been found for the period of the classical gold standard. Specifically, Flandreau & Zummer (2004, p. 44) find that the extension of suffrage reduces the default probability with elasticity of 0.5 for the whole sample and of 1.3 for capital-poor countries. They note that contemporaries saw democracy and parliaments as a source of greater stability, because they put checks and controls on the sovereign and imply a greater implied ability to tax. This contradicts the widespread view that the repression of democracy facilitated the operation of the pre-1914 international monetary system by making external adjustment easier. Another way of introducing quality considerations is through the concept of democratic capital (Persson and Tabellini 2006).

include the financial freedom brought about by currency convertibility, stability of money value, central bank independence and deep financial markets. Furthermore, the widely used indexes include low taxes, a small share of government spending in GDP and flexible labor markets, and this appears to some as too extensive a definition of economic freedom.

Macedo (2001) reports that trade openness reduces perceived corruption, even after correcting for its endogeneity, and claims that this was the way in which globalization improves governance, given highly significant historical control variables (e.g. protestant tradition, de facto democracy and OECD membership). Eichengreen and Leblang (2006) find a two-way interaction between democracy and globalization over the entire 1870-2000 period. Macedo et al (2007a) show that the interaction becomes more sensitive to regional context and to stages of national economic and institutional development over the period 1970-2004. In particular, the different types of freedom interact differently with the trade and financial globalization variables<sup>9</sup>. Overall, allowing for the quality of democracy lowers the overall effect of globalization on democracy. One reason for this is the hypothesis that globalization's effects on democracy are mediated by slow-moving cultural values. This would imply that such variables might be accounted for by selecting groups of like-minded countries, like the OECD, for which the effect of globalization on freedoms would be stronger but this would neglect the convergence dimension, more visible on a global scale.

The mutual relationship between globalization, governance and economic performance is described in Bonaglia et al. (2009) along the following lines: a nation's resource endowments and its productivity determine how fast it can grow and the level of its economic well-being in

<sup>9</sup> This result is replicated in section 4 below for ECOWAS and SADC.

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terms of income per capita, both in absolute terms and relative to the income frontier. Feedbacks are possible: a richer country growing fast may invest more resources in scientific research and technology development and thus enjoy higher productivity levels than a poorer, slow-growing economy. Through trade, capital flows or migration, globalization can influence the level of endowments available in an economy, or even, through international technology transfers, its productivity. Conversely a country's endowments of natural resources, labor, and capital, as well as its geographic location and efficiency of its production structures may determine how much it trades with the rest of the world in terms if goods, services and assets. Similarly, a country with good governance, namely a democratic state with high-quality institutions, effective corruption-free accountable bureaucracies, and a flourishing civil society may likely increase the quality, if not the quantity, of its most important endowment: its own people. Once more, cause and effect can be swapped: well-endowed countries may evolve towards democratic forms of government more easily, or, at least, they may afford investing more resources to build well-functioning institutions. Transport technology also changes costs, sometimes dramatically, making them very different from distance, as documented by Feyrery (2008).

While these interactions have been at the core of economics, this has not been the case of "how G&G interact with convergence", perhaps because of the interdisciplinary nature of globalization waves and of governance innovation - even when the distance to frontier is not as fundamental as it is for Africa. With respect to the relative strengths of the links between the current wave of globalization, the benchmark measure of freedoms and convergence, the empirical findings of Macedo et al (2007a) reveal that political rights and civil liberties had a significant impact in the run-up to the third globalization while feedbacks were somewhat

weaker. As mentioned, further work is needed to understand the long-run dynamics and sustainability of this global system, in particular the mechanisms that could enforce or reinforce the expected positive effect of globalization on both convergence and freedoms. The particular G&G interaction which involves democracy reflects historical, geographical, social, cultural, institutional and economic factors and the method employed focuses on the economic aspect of this relationship. A complementary explanation of the G&G interaction can be based on the manner in which diversity, be it socio-cultural or economic is addressed by a given society<sup>10</sup>.

While the focus on the management of diversity as a determinant of G&G interaction is one avenue that warrants further investigation, it is especially necessary in connection with Africa, because the knowledge thereabout is certainly less "mutual" than with respect to other regions, even outside of the OECD. This is taken up in the next subsection, in the specific case of the history of the Portuguese empire.

#### 2. 2. World regions and the exclusion of SSA

Three "regions" (North America, EU, ASEAN + China, Korea, Japan) account for ¼ each of world GDP. The rest of the world includes over ½ of world population, with other significant actors (Brazil, Russia, India) and salient regions (Africa, Middle East). Taking a global view should foster governance innovation, as dominant players have different strengths (Nye, 2002). Yet free rider problems prevent cooperation among abstract regions where there is no

<sup>&</sup>lt;sup>10</sup> Indeed, one of the constants of human organization is the "absolute certainty that man will never be common, he will always de different, he will always give rise to diversity. And society, by managing this diversity, will manage prosperity and the creation of wealth" (Borges de Macedo 1996, p.194). The same holds true, of course, for the case of political diversity and whether peace or conflict ensues. The distinct processes of colonization of the Americas is chosen to illustrate the importance of diversity and how it is managed as being a crucial determinant of the interaction between economic and political organization in Macedo et al (2007a).



peer review (Macedo 2003). In addition, there are around 70 "fragile states", most of which located in Africa, and they are very specific in their fragility (Bourguignon et al 2008).

Looking at the rest of the world, Africa plus South America combined doubled their share of world GDP from 1820 to 1950. The share remained constant since at around 10% with North America and EU roughly equal to Asia (including Japan, Russia and Turkey), shares that are comparable to those prevailing in 1820. In 1950, however, North America and EU accounted for 60% and Asia for 30%. In terms of population Africa and South America combined have more than doubled their combined world share from 10% in 1820 to 15% in 1950 to 22% in 2003 while Asia has dropped from ¾ to ½ and then rose again to 2/3. In terms of GDP per capita, the relative shares are ½ for Africa and South America combined and over 2/3 for Asia.

The combination of Africa and South America is more obvious when the Atlantic side is considered. In effect, Mozambique was ruled from Goa in India during the first wave of globalization in the 16<sup>th</sup> century and the influence remained throughout the history of the Portuguese empire. The crucial role of the South Atlantic is evident in the departure of the Portuguese Crown to Brazil during the Napoleonic invasion in 1807. The Crown remained in Rio de Janeiro after the congress of Vienna and the liberal revolution of the 1820s. Brazil was therefore the sole monarchy in the Americas during most of the 19<sup>th</sup> century while the sole civil war in Portugal's history lasted until 1834. In spite of a successful stabilization in the 1850s when it joined the gold standard, Portugal suffered from the 1890 crisis and the currency became inconvertible until 1992 (Macedo et al. 1996). The transition of Brazil from

Empire to Republic coincided with the financial crisis and the first default quickly followed the one of Portugal.

Similarly, the successive revolutions in 1910, 1918, 1926 and 1974 influenced the independence of the five PALOP and their own very diverse initial experiences with political and economic freedom<sup>11</sup>. For example, the presumption that political freedom is incompatible with financial instead of complementary damages financial reputation considerably because when political rights decrease the capacity to tax, countries become serial defaulters; but Reinhart and Rogoff (2009) show that they are also capable of graduating<sup>12</sup>. More recently, the experience of Portugal with IMF adjustment programs may also be relevant to understand how countries like Cape Verde and Mozambique considered financial reputation<sup>13</sup>.

The data drawn from Maddison (2007) illustrates the lack of knowledge about Africa as in year 1 there are only estimates of GDP for the five North African countries (Algeria, Egypt, Libya, Morocco, Tunisia), estimates of GDP for Ghana and South Africa begin in 1820 and for the remaining SSA countries in 1950. The share of Africa in world GDP falls from over 4% to under 3% in 1000, 1% in 1500 and around .8% until 1820, when it begins to rise to about 1.2% in 1913. In 1950, when estimates for 34 new countries become available, the Africa share reaches under 4% again while SSA remains just under 3%. Since then both

<sup>&</sup>lt;sup>11</sup> The specificity of the Portuguese empire is acknowledged by historians, e.g. Maddison (2001, p. 71-75). Amaral (2009) revisits the Portuguese transition to democracy during the second wave of globalization. The inspiration for Macedo and Pereira (2007) was to study the diversity of Portugal's and Portuguese speaking countries' responses to globalization by drawing on the concept of "differenciality" due to Borges de Macedo and discussed in Macedo et al. (2009a).

<sup>&</sup>lt;sup>12</sup> .Tables 6.1-2-4-6, pp. 86-99 record one bankruptcy in Portugal from 1300 until 1812 (against 7 in Spain and 9 in France), six are recorded until 1890 (against 7 in Spain and zero in France and Brazil)... Thus the share of years in default since independence or 1800 is similar in Brazil and Spain (Table 10.2, p. 149) while France stands out for the share in a banking crisis.

<sup>&</sup>lt;sup>13</sup> Bliss and Macedo (1990) and Macedo (2009). Using Reinhart and Rogoff (2009) again, the change from 1979 to 2008 in the credit rating from *Institutional Investor* (Table 17.2, p. 285) is 19 points in Spain and Greece but

shares have declined about 1pp of world GDP. As for the share of SSA in Africa, it rose from around 20% until 34% in 1913 and more than doubled to 34 in 1950. Thereafter the SSA share of Africa GDP declined by more than 10 pp but West (=ECOWAS) and South (=SADC) shares in SSA remain at 40% and 30% respectively. The increase in population has been such that the relative stability in the share of world GDP implies a decline in GDP per capita of about 20 percentage points, from 42% of world GDP per capita in 1950 to 24% in 2003. The corresponding figure for SSA is 18%, forecast by IMF to rise to 21% in 2013.

The views of "development as self discovery" (Haussman and Rodrik, 2003) and the "ladder of competitiveness" (Causa and Cohen, 2006) suggest measures of competitiveness that go beyond relative unit labor costs (Branson et al 1987) and other refinements to the country narratives presented below. The main point, once again, is that diversity must be taken into account; While the Maddison database has been criticized, it allows a "millennial" perspective on world regions and helps to avoid the pitfalls of a purely geographic approach: regions may be historical rather than geographical and interaction during the first wave of globalization (15th century) and even the second (19th century) did not involve nearly as many players as the current one. The complementarity between globalization and regional integration and the development paradigm based on mutual accountability contained in the 2002 Monterrey declaration both suggest weak G&G interaction in SSA. At the same time there is evidence that complementary reforms are not a "luxury" for developing countries (Macedo et al 2009c).

Given Africa's diversity, assessing development successes requires comparisons among partners in sub regional organizations which include members with different cultural, historical and strategic affinities. ECOWAS was established in 1975 and includes Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo. SADC was established in 1980 and includes Angola, Botswana, Congo Democratic Republic, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. The experience of Cape Verde and Mozambique is systematically compared to the ECOWAS and SADC average but also to SSA and PALOP<sup>14</sup>. Table 2.1 summarizes the various sizes relevant to the comparisons in the next section, including comparisons between PALOP and CPLP<sup>15</sup> and the share of both Africa and SSA in the world in terms of GDP, population and GDP per capita.

### (Insert Table 2.1 here)

In the next section, emphasis is given to export diversification, measured by the number equivalent Herfindahl index, financial reputation measured by the inverse of exchange market pressure and good governance, measured by World Bank indicators. A snapshot for each member country of ECOWAS and SADC of eight indicators used in the empirical analysis is provided, including in Figures 4.1a, b, 1 through 8, respectively:

- 1. Income Gap to Frontier, Country and U.S. GDP per capita, constant 2000 US\$;
- 2. Number Equivalent Index at 1,2,3,4,5 digit SITC;

<sup>14</sup> The ranking CV, STP, MZ, GB, ANG applies to export diversification, political and economic freedom as well as corruption perception computed in the *African Economic Outlook 2009*. The last two are shown in Tables 3.5 and 3.6 below in the text.

<sup>&</sup>lt;sup>15</sup> The weight of Brazil is of course overwhelming and the four micro states never rise above 25 basis points of



- 3. Inflation in consumer prices;
- 4. Government Surplus/Deficit % GDP;
- 5. Degree of openness, Exports plus Import % GDP;
- 6. Political Freedom;
- 7. Economic Freedom;
- 8. Life expectancy at birth).

Figures 4.2a, b 1 through 3 show the time series of Income Gap and Number Equivalent Cape Verde and ECOWAS, Mozambique and SADC, Figures 4.3a, b 1 and 2 show the relation between same variables in terms of the raw data as well as country means, Figures 4.4a, b 1 through 3 show the raw data, country means and time means for the relation between Income Gap and Government Deficit, Figures 4.5a, b 1 and 2 for the relation between Economic and Political Freedom. Account is taken of the different performances by defining high and low regimes in terms of the variables of interest and Figures 4.5a, b 3 compare the relation between Economic and Political Freedom for the full sample and the two regimes. Figures 4.6a, b 2 through 7 present the indicators in Figures 4.1a, b, 2 through 7, while growth in GDP per capita replaces the distance to frontier in Figures 4.6a, b 1. In the description that follows, the emphasis is given to Foreign Trade and Economic Growth in the subsection 1, where the empirical work described in Annex 1 is summarized. This is followed by Macroeconomic Policy and Financial Reputation (subsection 2) and MDGs and Governance Indicators (subsection 3).

- 3. Comparative description of Cape Verde and Mozambique
- 3. 1. Foreign Trade and Economic Growth

The results obtained in Cabral (2009) about the way in which institutional, trade policy and economic variables promote or limit the capability of the SSA countries to pursue successful export diversification and sophistication strategies serve as guidelines for the identification of the factors that determined the success obtained by Cape Verde and Mozambique<sup>16</sup>. Since 1960, current SADC countries showed greater export diversification than those of ECOWAS or the average for SSA (Cabral, 2009 graph 7). Export diversification in Mozambique and Cape Verde is also higher than the SSA average but the number equivalent varies a great deal, data for Cape Verde begins in 1976 and in Mozambique recent large scale investments determined both a strong increase in the exports and an increase in specialization (Figures 4.2 a and b below). The decrease in export diversification in Mozambique followed a strong expansion of one single industrial product rather than from a decrease in the exports of other products.

<sup>&</sup>lt;sup>16</sup> Drawing on the version of this paper which he presented at the pre-conference, Cabral (2009) studies the political and economic factors that determine successful export diversification (ED) and upgrading of export sophistication (ES) strategies in SSA countries, together with the effects of ED and ES on growth and development variables. It claims that the very low levels of diversification in SSA may have contributed to explain income instability. Using regression analysis in a panel of 48 SSA countries and 45 years, the findings of previous studies are found to apply to SSA countries, namely that the level of development and the size of the economy are positively correlated with export diversification and economies with larger populations or GDP also tend to have higher levels of export sophistication. Thus increased integration and efforts to reduce transport costs promote ED and ES in SSA. Improvements in institutional, political and educational factors play an important role in promoting ED and ES. When used to explain ED, 19 out of the 26 governance variables presented significant positive signs. The results were particularly robust for the variables reflecting government accountability, respect for the rule of law, political stability, effectiveness, and control of corruption (Table 3.5 below in the text). In ES regressions, the majority of the institutional variables (15 out of 26) are not statistically significant but "transparency", "accountability" and "control of corruption in the public sector", "debt policy and fiscal policy rating", "economic management cluster average" and "policies for social inclusion" have a positive association. Improving the education standards of the labor force (measured by the share of GDP spent in education or the World Bank index about "building human resources") is associated with a successful export diversification strategy. Moreover, lower levels of education are associated positively with diversification while higher levels are associated with sophistication. While equations in which ED and ES were used to explain GDP growth suggested a positive but not robust relationship, higher Ed and ES were associated to lower variation in the rate of growth of both GDP and per capita income. The estimated coefficients suggest that a 10% per cent increase in ED leads to a 4,6% decrease in the variation of GDP growth and to a 4,4% reduction of income per capita variability. Similar results were obtained for ES, with country fixed effects model suggesting that increasing sophistication may have a stronger marginal effect in decreasing economic instability than diversification in SSA countries. In addition, higher the level of export diversification and export sophistication are associated with lower infant mortality and the higher life expectancy. The estimated coefficients were robust and the impact independent of that of ED and ES on income per capita, which is all the more relevant when higher average income does not translate in better life for the majority of the population.

Table 3.1 shows the average annual change in the number equivalent for 5 year periods in Cape Verde and ECOWAS and in Mozambique and SADC. In the period from 1976 to 2005, a new good was being exported by Cape Verde approximately every five and a half years (1/0.18=5.55). In Mozambique there was significant diversification up to the late seventies while SADC was actually concentrating. However, from the eighties on, concentration was large, especially in the early nineties and between 2001 and 2005. During the latter period, on average, every two years a product stopped being exported (1/0.48)<sup>17</sup>.

#### (Insert Table 3.1 here)

Tourism is absent from the OECD database used so far and Cape Verde is classified by the IMF as a tourism-based economy as its travel exports have exceeded 10% of GDP for at least one year during 1998-2007. Indeed, since 2003 service exports and FDI (especially tourism-related FDI) outpaced remittances, an historically significant source of foreign exchange, and aid transfers. Tourism is undoubtedly an important sector of economic activity due to Cape Verde's political stability, good geographical location and weather, and also Cape Verde's currency peg to the Euro. As tourism is highly procyclical, an excessive reliance on it increases output volatility unless exports of goods and services are sufficiently diversified. Following increasing trade and financial integration into the world economy, Cape Verde's business cycles have become more synchronized with developed economies but structural problems persist. The labor market is relatively rigid and some administered prices still exist

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<sup>&</sup>lt;sup>17</sup> With respect to export sophistication Cape Verde has ranked higher than both the ECOWAS or SSA averages, whereas Mozambique managed to improve recently the sophistication of its exports (Cabral, 2009 graph 9). In this regard, Cape Verde is close to 6000 while ECOWAS is around 5000, even though in the early nineties it decreases to 3000 and 2000 respectively. Mozambique with a lower sophistication than SADC during the

(e.g., in the energy sector), which makes that adjustment to external shocks more difficult. Regarding the sources of foreign financing, emigrant's remittances remain quite important for Cape Verde's economy. In 2006, they totaled 12% of GDP and their low volatility has allowed for consumption-smoothing in response to external shocks. However, remittances have become more procyclical in recent years, e.g. the correlation between (detrended) GDP and remittances was around 65% for the period 1980-2006. This fact may be associated with investment-driven flows rather than traditional consumption-smoothing behavior. Since financial flows are far more volatile and less prone to act as a buffer in times of crisis, this is another challenge to Cape Verde: as Lourenço and Foy (2003) note, reforms are a necessary but not sufficient condition for success. Adequate implementation and control is also required to ensure that increased foreign direct investment translates into higher growth and employment.

Notwithstanding the progress achieved thus far, Mozambique also faces a number of challenges. As it depends on foreign aid, revenue and administration reform as well as a stronger fiscal regime towards mineral and oil resources will be required for the government to enforce an "exit strategy" which enables it to raise revenue for its own, to finance at least current expenditure as soon as the MDGs are achieved (Lledó et al., 2007). While is true that Mozambique has a strong export record when one considers its share of world exports over the last few years, this achievement has been primarily due to specific mega-projects, most noticeably in the aluminum sector. Moreover, its trade pattern is sometimes the result of protectionist policies, such as tax exemptions and qualification as export-processing zones that allow companies to import goods duty free and benefit from tax incentives. Two

nineties but its sophistication increased sharply since 2000 overcoming SADC's.

examples are the sugar and cashew industries. In the late 1990's, an import tax on sugar led to increased domestic sugar production and an export tax on raw cashew nuts penalized small exporters while encouraging small and medium-sized cashew processing. In this case, the pattern of specialization is clearly linked not only to comparative advantage but also to trade policy. It should be noted, however, that Mozambique's trade regime is not too restrictive. In 2006, the average tariff was in line with the rest of SADC, there were no significant nontariff barriers according to the IMF and the process of tariff disarmament will likely continue. As a result, the maximum tariff has declined from 35% in 1999 to 20% in 2006. Mozambique's business environment is still relatively weak. The "Ease of Doing Business" indicators for 2006 suggest that custom procedures, business registration and contract enforcement still perform poorly against other SADC members. Mozambique was one of the countries that benefited most from the HIPC and MDRI. Debt relief coupled with a cautious macroeconomic stance has allowed for increased spending, especially in the health and education sectors. However, long-term fiscal sustainability hinges crucially on the widening of the tax base and on economic growth underpinned by high-quality structural investments.

The comparative evolution of GDP per capita in 1990 international dollars from 1950 until 2006 for PALOP and SSA averages shows a more volatile growth pattern for the former group with more pronounced growth in the 1950s and the last decade (Figure 3.1). This reflects civil wars following independence especially in Angola and Mozambique, the two larger economies. Figures 3.2 compare GDP per capita in Cape Verde and Mozambique to the respective sub regional averages and the pattern in Figure 3.1b is closer to the PALOP average<sup>18</sup>. Comparing GDP growth rates since 1950 shows a growth differential of almost 2%

<sup>&</sup>lt;sup>18</sup> The source is Maddison database which contains two outliers for GDP of Cape Verde in million GK\$. The series is 1990: 430; 1991: 283; 1992: 231; 1993: 434 and the correction was interpolating the two outliers, so

for Cape Verde relative to ECOWAS whereas Mozambique growth is slightly below that of SADC. The decade averages show the greater volatility of Mozambique's output with two decades of negative growth, whereas in Cape Verde there was a negative differential of 4 pp in the 1970s. While this difference has roots in the colonial period, the pattern was reinforced after independence. After achieving independence in 1975, successive Cape Verde governments played a prominent role in the agricultural, industry and service sectors through their direct interventions and control. As consequence, there was limited scope for increases in competitiveness and foreign direct investment was also discouraged. As of 1988, however, a wide-ranging program of reforms aimed at trade liberalization and privatization reduced the government's role to essentially that of building badly needed infrastructure. More recent governments have continued these and other related reforms, including those of relevance to financial and exchange markets. Most of the recent increased and sustained growth is attributable to the growth in the service sector, namely transports, hotel and restaurants and communications, and also due to increased spending on education and improved governance. Indeed, the importance of the service sector, largely in tourism, is evident as early as 1980. Its continued success depends on further improving required infrastructure, namely good communications and a liberalized air transport market (Lourenço and Foy, 2003).

On the other hand, Mozambique's economic growth was stunted by thirteen years of civil war that followed its independence from Portugal in 1975, which is estimated to have killed up to a million people. It is also affected by the Marxist-socialist ideology espoused by the governments in the immediate post-independence period. Prior to independence, there was significant public investment in infrastructure and also expenditures in health and education

during the period 1960-73, which contributed strongly to Mozambique's growth. In agricultural sector, it was generally true that large private farms performed better than smaller ones, and therefore accounted for the bulk of agricultural output. However, the postindependence economy was very much government-controlled. By 1984, for example, more than half of all registered firms were state-owned. Not unexpectedly, the development of a market-economy was severely hampered, which impacted negatively on growth. During the 1980's, Mozambique began gradually moving away from a centrally planned economy, e.g. price controls on vegetables and fruits were removed. Another example is the enactment of 1987 Economic Rehabilitation Program, which led to a strong shift toward market-based economic policies and the pursuit of structural reforms. These included the stabilization of the Mozambican currency's exchange rate, trade liberalization, extensive privatizations and tariff and financial sector reforms. However, it was only after the consolidation of peace that any significant improvements had the opportunity to occur. Following the signing of the 1992 Rome treaty, a new constitution was adopted that allowed for democratic elections and progress further toward a market-economy. Over the past decade, Mozambique has again become one of the attractive economies in the sub region.

### 3.3. Macroeconomic Policy and Financial Reputation

The very diverse experience with political and economic freedom of the five PALOP has reflected that of Portugal not only with respect to damaged financial reputation when political rights decrease the capacity to tax but also in the capacity to improve their credit rating through appropriate policies. In this regard, the main difference is the exchange regime, even though a common evolution towards less EMP can be observed <sup>19</sup>. Figures 3.5 show a similar

<sup>&</sup>lt;sup>19</sup> Lopes (2009) describes the exchange regimes in PALOP, ECOWAS and SADC, with particular emphasis on Cape Verde and Mozambique and analyzes EMP using monthly data from 1990 to 2005, both in a descriptive



relationship between real exchange rate depreciation and GDP per capita growth in ECOWAS and SADC.

Cape Verde's inflation rate has been low as its currency is pegged to the Euro. Macedo and Pereira (2006) find Cape Verde's currency board to be credible, given the substantial reduction in the number of exchange market pressure crisis episodes occurring after the peg was adopted, amongst other factors. In 2002, deficit financing by the central banking was also formally prohibited. In practice, the government has not needed to rely on this type of financing due to the receipt of donor-aid and the sale of treasury bonds with medium-term maturities. Fiscal policy has also been prudent with a medium-term fiscal strategy for 2008-2010 approved by the IMF. Fiscal reforms were accompanied by an increase in tax effort, particularly of income tax, as corporate tax rates are still relatively low. Together, this environment of fiscal responsibility has allowed Debt Sustainability Analysis to classify Cape Verde's debt risk as low. As for its external position, Cape Verde continues to depend much on transfers, mostly attributable to the remittances of its emigrant diaspora. However, it is likely that second and third generation emigrants from Cape Verde will be less inclined to send less remittances and will, instead, only invest in Cape Verde when it is profitable to do so. Moreover, the decreasing role of transfers and the increasing role of portfolio investment and FDI erodes remittances' role as a buffer for households. The government will have to take cognizance of this fact when designing and implementing its medium-term development strategy.

sense and in a model-dependent framework. He finds that real exchange rate depreciation improves financial reputation in Cape Verde while doing the opposite in Benin, where it increases EMP mean and volatility.

Mozambique's inflation rate has been under control for some time now and it now ranks amongst the lowest in the SADC. This relative stability in inflation has been accompanied from the 1990's onward by a steady depreciation of the Mozambican metical's exchange rate against the U.S. dollar, which is in line with other depreciation rates of SADC currencies. In terms of monetary policy, the Bank of Mozambique has undertaken several important measures recently, namely daily liquidity forecasting and sterilization of changes in the monetary base. In 2007 inflation rose, but a tight monetary policy will probably keep inflation under control in the near future. Turning to fiscal matters, it seems that budget equilibrium is not a goal for the Mozambican policymakers at present. The budget deficit is expected to increase as revenues from donors and taxes are used to invest in health, education, agriculture and infrastructure. Moreover, the tax effort is still very low, although it has increased recently. However, it is important for government to increase taxes on big projects and to create procedures that increase compliance in order to widen the future tax base. Regarding its external position, Mozambique has experienced trade deficits and negative factor incomes balances, which have been partially compensated by transfers (with the exception of 2006, where transfers were in excess of the shortfalls). The trade balance improved up till 2006 due to high aluminum prices and export growth of cashew nuts, sugar, prawns and tobacco. However, the increase in the oil price and a decrease in traditional exports in 2007 deteriorated the trade balance. It is important to note that the financing of the current account deficit (which was 22% of GDP in 1999) was made easier by the debt relief programs made available to Mozambique throughout period under consideration. Indeed, it has been said that much of Mozambique's current development would never have occurred had debt not been relieved in the early 2000's. If financial reputation is defined as low exchange market pressure with low volatility, then fixers behave better than floaters both in ECOWAS and SADC<sup>20</sup>. Note that in the EMP models of annex 2, financial reputation is associated with real exchange rate depreciation in both Cape Verde and Mozambique<sup>21</sup>.

### 3.4. Millennium Development Goals and Governance Indicators

The information on MDGs is drawn from a report on MDGs in CPLP prepared at the request of the Guinean presidency (Macedo et al 2007b) and from the 2009 *African Economic Outlook*: data before the crisis show the percentage of satisfactory outcomes increasing from 26% to 31%. Overall, we find that Cape Verde is better placed than Mozambique, which reflects the fact that the latter is departing from a very low point, but it is progressing very fast at most of the MDGs.

(Insert Tables 3.2 and 3.3 here)

On the eradication of poverty, Cape Verde has one of the lowest shares of the poorest quintile in national consumption. Using the data available, we see that it is slightly worse than the average ECOWAS member. Angel-Urdinola and Wodon (2007) argue that relative poverty increased between the 1988/89 and 2001 surveys, based on the increase in the Gini coefficient from 50.2% to 53.83%), while absolute poverty measures decreased dramatically. Mozambique, meanwhile, has a slightly larger share (5.4%) of consumption of poor people when compared to the SADC average. Although the US has a comparable figure, its definition of poverty is a relative and not an absolute one. However, IMF (2008) considers it likely that this goal will be attained by 2015 in view of Mozambique's recent evolution.

<sup>20</sup> Conditional volatility and mean EMP, reported in Figures 3.3 and 3.4 for ECOWAS and SADC, strengthen conclusions from the unconditional volatility and mean EMP. In particular, the results bring Mozambique, a floater, closer to Seychelles, a fixer. Lopes (2009).

<sup>21</sup> In SADC, the overall pattern is harder to discern than in ECOWAS and there are many differences across countries and groups thereof as is evidenced by the record of crises, taken to be extreme values of EMP (Macedo and Pereira 2006, Macedo et al 2009b, Lopes 2009).

On net enrolment in primary education in Cape Verde has actually decreased slightly. However, the enrolment level is very high even by the developed world's standards. Notably, Cape Verde is well ahead its ECOWAS partners, which reflects its focus on education and the quality thereof. For Mozambique, the net enrolment in primary education has increased significantly since the 1990's, especially during 2000-06. Indeed, Mozambique has improved remarkably when compared to most SADC countries but stills lags behind them. The same can be said for its level of literacy. On gender parity, Cape Verde is better placed than its ECOWAS partners but some of them are now catching-up fast. Gender parity in Mozambique is one of the poorest in SADC but, at the same time, it registers a sustained and strong improvement.

With respect to child mortality, Cape Verde's is by far the lowest in ECOWAS but still far short of the level in developed countries. Even so, it has decreased significantly. On this score, Mozambique is improving rapidly, as its child mortality rate has decreased to 153.67 per thousand, which is much better than the SADC average. The IMF (2008) foresees that this MDG will probably be reached by 2015. For maternal health, for which there is only one observation, Cape Verde is the best in ECOWAS. Mozambique's maternal mortality rate was below the SADC average in 2005, which is in line with the improvement in child mortality and in public health as a whole.

On the incidence, prevalence and death rates associated with tuberculosis are much lower in Cape Verde than for ECOWAS. There is no data on HIV prevalence in Cape Verde as far as we are aware. The prevalence and death rate of tuberculosis grew more in Mozambique than



in SADC members while HIV/AIDS statistics show a worrying increase in infection rates among young people.

The goal of sustainable development is often proxied by the proportion of the population having access to safe drinking water source. It is much higher in Cape Verde than in ECOWAS. Similarly, the proportion of the urban population is also higher in Cape Verde but a significant catching-up is noticeable in ECOWAS member states. In Mozambique, the proportion of population having access to improved sanitation facilities has increased from 22% to 31 % between 1995 and 2006: it lags behind other SADC partners but is quickly narrowing the gap. The same can be said of the proportion of the population living in slums, which has fallen drastically since 2001 (whereas in the SADC partners the reduction has been modest). The weak spot of this MDG lies in the water quality since the improvement in the proportion of population having access to an improved drinking water source has been negligible while the proportion of the urban population has actually decreased from 83% to 71% when comparing 1995 to 2006.

The global partnership for development is often illustrated by debt service as a percentage of exports of goods and services. It has been historically lower in Cape Verde when compared to ECOWAS and has decreased over time, but ECOWAS decreased more markedly when looking at the year-by-year numbers. Mozambique's debt service has fallen markedly and the period of high growth coincides with that of the donor community's relief of debt.

(Insert Tables 3.4- 3.6 here)

The report on MDGs in CPLP (Macedo et al 2007) includes the following six governance indicators from the World Bank Institute: freedom and accountability (FREE), stability and

absence of violence (STAB), government efficiency (EF GV), quality of regulation (Q REG), quality of justice (JUST) and control of corruption (CORR). Good governance has been one of the main features of Cape Verde's development. Rule of law and accountability stem from the fact that democracy is well established and that free elections take place regularly with the results not being disputed. The only aspect that fares worse is regulatory quality but this indicator still fares better than most ECOWAS member states. Education is a major concern for Cape Verde governments: between 1970 and 1990, the number of children leaving school with secondary education increased dramatically. In 1990, half of the children in rural areas attended secondary school and 60% of girls received secondary education in urban areas (see Goujon and Wils, 1996). The literacy rate in the people between 15 and 24 years old is the highest in all ECOWAS. With respect to Mozambique, no significant evolution is noticeable between 1996 and 2006 for most indicators, and then it improves gradually. The exception is the indicator of political stability and the absence of violence/terrorism, which has improved markedly.

(Insert Tables 3.7 - 3.11 here)

There are 28 indicators for which both Cape Verde and Mozambique had at least 10 answers, in the 2006 and 2007 World Bank Enterprise Surveys are reported in Tables 3.7 to 3.11 The indicators for regional groupings and SSA are simple averages of the countries, some of which are missing (2 ou of 15 from ECOWAS and SADC, 12 in SSA). Relative to the average of their comparator countries (in parentheses), then Cape Verde has more developed financial markets, greater macroeconomic stability, less corruption and a state where rule of law is more grounded than ECOWAS, PALOP, SSA but less export-oriented firms, less technology licensed to foreigners, higher taxes and a heavier regulatory framework than the benchmarks.

Mozambique has better infrastructures (water, electricity, internet) and less corruption than SADC, PALOP, SSA but less developed financial markets, a state where rule of law is less grounded, less export-oriented firms and less technology licensed to foreigners than the benchmarks.

#### 4. Empirical Analysis

In this section, we study 2-way relationship between diversification and convergence motivated by the insights provided by our interpretative framework and those of relevant trade diversification literature. In particular, the empirical finding that economic development, measured by per capita income, entails more diversification. The observation is that as economies become more diversified as incomes increase before reaching a turning point, which Imbs and Wacziarg (2003) estimate to be around US\$ 9000 per capita, beyond which they before less diversified. In other words, development occurs when a country learns how to do new things and focus on those that it already does well, such as producing new goods, choosing promising export markets, upgrading product quality and moving into services exports. We note, in passing, that another strand of literature argues that diversification should focus on exporting more sophisticated products as these entail higher productivity levels conducive to higher growth levels (e.g. Hausmann et al, 2007). In this case, a country becomes what it exports, i.e. countries converge to the level of income implied by their exports.<sup>22</sup> The common point in both approaches, however, is that product development is undoubtedly an important engine of growth for developing countries.

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<sup>&</sup>lt;sup>22</sup> We hope to explore the issue of export sophistication in future work, especially once data issues are resolved. See Cabral (2009) and note 16 above.

With this in mind, in this section we seek to identify macro-level policy and institutional combinations underpinning successful export diversification and economic convergence in ECOWAS and SADC. Just as important, we also expect to establish context-based objective metrics that will subsequently allows us to better assess the relative performance of Cape Verde (CPV) and Mozambique (MOZ) on both counts in conjunction with evidence of a case-study nature. This indirect approach to study trade-related development success in these two countries is unavoidable as the severe lack of data prevents us from analysing them empirically. Our study covers the period 1960-2004 and uses annual data obtained from various sources (see appendix 1 for full details, including summary statistics, on variables used in our estimations).

Before proceeding to the econometric analysis, we draw the reader's attention to the graphs that allow for a rapid cross-country comparison of key variables used in our analysis for both ECOWAS and SADC (Figure 4.1a, b). We also depict the relation between diversification and convergence for CPV and MOZ over time and also with respect to their respective regional averages (Figure 4.2a, b). The insights obtained from these graph, as well those from the LOWESS plots (Figures 4.3a, b - 4.5 a, b) will help us to better understand and interpret our results, especially with respect to variables identified as being highly significant in our econometric analysis.<sup>23</sup>

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<sup>&</sup>lt;sup>23</sup> LOWESS, or locally weighted scatter plot smoothing, is a method that fits simple regression models to localized subsets of the data. The objective is to build up a function that describes, point by point, the deterministic part of the data's variability. For further details, see Cleveland's (1979) seminal contribution and also subsequent developments by Cleveland and Devlin (1988). Note that we only present those LOWESS plots in which there is clear and interpretable relationship between the variables under consideration. The others are available from the authors upon request.

The first LOWESS plot clearly depicts the expected (negative) relation between diversification and convergence when using the country means, i.e. mean *ygap* and mean *neq5* for each country (Figure 4.3a, b). When all observations are taken into account, the same is true for SADC but there is no discernible relation between the two variables for ECOWAS. It is also clear that the strong negative relation exhibited by SADC is largely attributable to South Africa's high level of diversification. Once we exclude South Africa from the sample, we observe that the relation in now ambiguous and not dissimilar to that of ECOWAS. Regarding government deficits, we observe that lower budget deficits are associated with increased convergence, especially when they are less than 6% of GDP for ECOWAS and around 8% for SADC (Figure 4.4a, b). As for the relation between political and economic freedoms, it is clearly positive in both regions but more so for SADC based on the visual inspection of the LOWESS plot obtained using all observations (Figure 4.5a, b). When one uses country averages instead, we see that there is an unequivocal positive relation between freedoms in SADC while it is somewhat "u-shaped" in ECOWAS, which possibly reflects the fact that the region aggregates countries with dissimilar characteristics on this score.

Turning to our empirical analysis, we adopt a system equation approach mainly because we believe that it is better suited to model interdependence between variables. We also seek to address the problem of endogeneity due to simultaneity bias and so make use of the standard Three-Stage Least Square method (3SLS). This method incorporates uses all the information provided by the exogenous right-hand-side (RHS) variables to instrument the endogenous (LHS) left-hand-side variables. As such, it avoids the potential pitfall of having to find "good" instruments within a single equation context. Notwithstanding this advantage, we recognize that 3SLS may be more sensitive to the existence of spurious correlations or multi-

collinearities among the regressors in one equation, thereby "contaminating" the remaining equations. In our sample, this does not seem to be an issue, however. In order to assess the robustness our method, we also estimated the diversification-convergence relation using alternative estimation techniques, namely Ordinary Least Squares (OLS) and Two-Stage Least Square (2SLS). In general, the results obtained are broadly consistent with those presented below (see appendix 2).

As for our variables, we measure the distance of a country's GDP per capita  $(ypc_{it})$  compared to that of the United States  $(ypc_{USA,t})$  in order to capture economic convergence. Specifically, the income gap is calculated as  $ygap_{it} = 1 - (ypc_{it}/ypc_{USA,t})$ , which implies that the income gap narrows as  $ypc_{it}$  increases. We measure export diversification using the number equivalent index  $(neq5_{it})$ , which is calculated as the inverse of the Herfindahl Index (5-digits, SITC rev.2). Together with additional control variables, we expect these two variables to be a meaningful characterization of each country's diversification-convergence, which will be affected by the interaction between policy and institutional variables. Accordingly, we specify the following two-equation simultaneous system for our analysis:

(1) 
$$ygap_{it} = \alpha_{l}.neq S_{it} + \delta_{l}.(Policy_{it}) + \beta_{l}.(Institutions_{it}) + \gamma_{l}.Z_{lit} + \varepsilon_{l}.it$$

(2) 
$$neq5_{it} = \alpha_2. ygap_{it} + \delta_2.(Policy_{it}) + \beta_2.(Institutions_{it}) + \gamma_2.Z_{2it} + \varepsilon_{2.it}$$

where i = 1,..., N countries and t = 1960-2004. For each country,  $Policy_{it}$  and  $Institutions_{it}$  respectively represent economic policy variables (inflation, government deficit and degree of openness) and institutional ones (political and economic freedom, age of constitution, age of democracy, number of prior transitions to dictatorship, amongst others).  $\{Z_i\}$  denotes a set of control variables (see appendix 1) where the economic variables (such as capital and labour

endowments) are used together with geographic variables (such as distance or landlockedness).<sup>24</sup>

Regarding our estimation strategy, we first estimate the log-log equivalent of equations (1) and (2) for each region in order to identify the determinants of diversification and convergence at the regional level. Then, we re-estimate these two equations for regional subsamples that capture two different diversification-convergence scenarios. The first subsample, denoted as the HIGH-regime, comprises countries that simultaneously exhibit high diversification and high convergence while the second, the LOW-regime, comprises those that exhibit the opposite combination. We expect that this strategy will allow us to highlight differences and commonalities in performance across regimes and regions.

We identify the criteria used to divide the sample from the visual inspection of the partial relation between income gap and number equivalent index averages (see Figures 4.3a, b, bottom panel). We define HIGH-regime as those observations satisfying the condition {ygap < 0.945 & neq5 > 4.5} and LOW-regime as those where {ygap >= 0.945 & neq5 <= 4.5} in the case of ECOWAS. In effect, we are isolating the upper-left and bottom-right quadrants for further analysis. Moreover, we identify Senegal (SEN) as potential regional benchmark with which to compare CPV given its high intra-regional diversification-convergence combination. We adopt the same conditions for SADC to facilitate inter-regional comparisons and identify Mauritius (MUS) and South Africa (ZAF) as potential benchmarks. Our estimation results are

<sup>&</sup>lt;sup>24</sup> Our initial estimation process revealed that the inclusion of certain key variables of interest, such as the real effective exchange rate and measures of exchange market pressure (EMP), dramatically reduced the number of observations that were available to be used in our models. Regrettably, we subsequently dropped these variables from our analysis but hope to incorporate them again in future work entailing larger samples. Meanwhile the evidence on EMP from Lopes (2009) is summarized in notes 18 through 20 above and in Figures 3.3 and 3.4 in the text.

given in Table 1a, b which includes both the full sample and two sub-samples for ease of comparison.

#### (Insert Table 4.1 a, b here)

With respect to ECOWAS, we find a 2-way relationship between convergence and diversification but only under the HIGH-regime. Moreover, the estimated coefficient of the impact of diversification on convergence is relatively and highly significant (-0.646 at 1% level). Under the LOW-regime, the relation is only 1-way as more convergence always increases diversification but not the other way round. For the region as whole, diversification increases with more convergence but more diversification actually leads to *less* convergence. This result is unexpected but plausible given the ambiguous relationship between these two variables in ECOWAS, as depicted in Figure 4.3a (top panel), and non-linearities that characterise many of the partial relations between variables. The impact of convergence on diversification is also weaker when compared to the HIGH-regime as the estimated coefficient is about half as large (-0.398 *vs.* -0.751). Together, these results appear to indicate that a critical level of diversification is needed before one observes a 2-way relationship, *ceteris paribus*.

For SADC, the two-way relationship between convergence and diversification occurs under the HIGH-regime and, significantly, also for the full sample. These finding contrasts with the one obtained for ECOWAS, where only the HIGH-regime exhibited such behaviour. It is probably due to the influence that highly diversified countries such as South Africa and, perhaps to a lesser extent, Mauritius, exert on the region.<sup>25</sup> It may also be due to the fact that

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<sup>&</sup>lt;sup>25</sup> Indeed, our initial OLS and 2SLS scoping estimations indicated that the determinants of diversification and convergence are broadly similar for ECOWAS and SADC when South Africa is excluded from the latter sample. These results are available from the authors upon request.

SADC is almost 70% more diversified than ECOWAS (6.47 vs 3.83 mean *neq5*). In contrast, the two-way relation is *positive* under the LOW-regime: more diversification leads to *less* convergence and less convergence leads to more diversification. This result implies that SADC countries experiencing low levels of diversification may well need to specialize in order to ensure more convergence. This could be the rationale for MOZ's move towards lower diversification, albeit accompanied by higher GDP per capita growth rates, as discussed below.

## (Insert Figure 4.6a, b here)

In order to better interpret our empirical findings, as well as to highlight possible differences and commonalities in performance, we also look at how key model variables differ across HIGH and LOW regimes for each country (see Figure 4.6a, b). Note that we use each country's of GDP per capita growth rate in lieu of its rate of convergence to the income frontier as the latter measure would also reflect changes in the United States' GDP per capita. Interestingly, almost all of the highly diversified countries in ECOWAS register *negative* GDP per capita growth rates with the exception of CPV. Indeed, it is striking that CPV exhibits not only the highest GDP per capita growth rate in ECOWAS but also one that is fairly consistent across both regimes. This finding accords with our findings in section 3 and is also reflected in our estimates, as the CPV dummy contributes towards more convergence under the full sample. Moreover, its effect for the CPV dummy is almost on par as that of the benchmark (SEN). Note also that while CPV is not as diversified as SEN, it has increased its number equivalent appreciably between regimes as a result of its positive diversification trend over time.

For SADC, GDP per capita growth rates are positive under the HIGH-regime with the exception of Madagascar (MDG), MOZ and Zimbabwe (ZWE). In the case of MOZ, however, the move towards less diversification is accompanied by positive GDP per capita growth, which appears to be a notable reversal of fortunes. Indeed, MOZ's growth under the LOW-regime compares very favourably with that of MUS, which is highly diversified and so has no observations falling in the LOW-regime sub sample (see Figure 4.6b).

Turning to the other policy variables, we find that more inflation leads to more convergence under the full-sample and LOW-regime. In the case of the latter, more inflation also leads to diversification as does a higher budget deficit. This result could mean that increased diversification is associated with less macroeconomic stability but this intuition needs to be confirmed. For the HIGH-regime, we find no relation between inflation and diversification while increased budget deficits lead to *less* diversification and have no effect on convergence. A greater degree of openness leads to less diversification and more convergence under this regime and has no impact whatsoever on the others. Our reading of Figure 4.6a reinforces these findings: inflation is generally lower under the HIGH-regime for countries experiencing both regimes (with the exception of CIV) while government deficits are higher but only moderately so in most cases and always less than 10% of GDP. For CPV, the result of government deficit consolidation as diversification increased is very clear as is the dramatic lowering of its inflation rate. Diversification coupled with convergence also appears to go hand in hand with an average degree of openness in the range of 60-80% of GDP based on CIV, CPV and SEN's performance on this score.

The results obtained for policy variables in SADC differ from those in ECOWAS when compared on a sample by sample basis. We find that more inflation leads to *less* convergence and *less* diversification under the LOW-regime, as does greater openness. Greater openness is

also associated with *less* diversification in the full sample. Increased government deficits, lead to more convergence and *less* diversification for the same sample but increase diversification under the HIGH-regime. Our reading of Figure 4.6b is that more inflation, larger budget deficits and being less open are a greater concern for countries under the LOW-regime. Regarding MOZ, the shift towards less diversification is accompanied by lower inflation but also higher deficits and it appears that there is scope for it to increase its degree of openness. With the exception of the sole effect mentioned above, we note that the effect of policy variables is not as pronounced under the HIGH-regime as in the others, which we take to be a sign of policy credibility.

As for the institutional variables, convergence increases as political and economic freedom increases in ECOWAS. Also, there is more convergence as the age of democracy increases, and this holds true for the LOW-regime. However, an increased number of democracies in the system unexpectedly reduces convergence. Under the HIGH-regime, diversification increases with more political and more economic freedom. In the other two cases, diversification is associated with more economic freedom only. Indeed, we observe that the effect of economic freedom is pervasive across all samples and its effect is largest precisely under the HIGH-regime. In the full sample, being an older democracy also leads to less diversification as do a larger number of prior transitions to dictatorship in the LOW-regime. There is also more convergence under an English legal tradition. While these results are interesting, they clearly need to be further explored.<sup>26</sup>.

For now, we take away the insight that a positive relation must exist between economic and political freedoms, which may have to exceed some critical threshold, in order for there to be

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<sup>&</sup>lt;sup>26</sup> This task requires a better understanding of how freedoms interact with one another and how they relate to alternative legal, political and constitutional arrangements, a task initiated in Macedo et al (2007a).

an environment conducive to convergence (full sample). In addition, economic freedom may be a necessary, but not sufficient condition, to underpin successful diversification in ECOWAS. The insight applies to SADC: an increase in both political *and* economic freedoms increases convergence in both the LOW and HIGH regimes. This does not happen in the full sample, possibly because of a composition effect (we have the combined effect of two opposing effects associated with more economic freedom, which leads to more diversification under the LOW-sample and less under the HIGH). Moreover, an increase in both freedoms increases diversification under the LOW-regime but has the opposite effect under the HIGH. Here again, the full sample exhibits mixed results.

To finalize, we note that most of our control variables display the expected signs, even though this is not the main focus of our analysis. For example, more capital and more oil both lead to more convergence while landlockedness has the opposite effect in ECOWAS. Others, such as the total labour force and population density, have unexpected signs, which need to further explore in future work.

## 4. Conclusions

The present research seeks to identify whether the interaction between globalization and governance (G&G) was positive in Cape Verde and Mozambique. Such interaction hinges on linkages between cultural, institutional and economic factors which in turn depend on the orientation and predictability of economic policies. Economic success under globalization is sustained by good governance and the political and economic freedom citizens and residents enjoy. It also involves market perceptions regarding outcomes such as trade diversification and narrowing of the income gap with the frontier. The narrative of long term development in

Cape Verde and Mozambique identified successful policy and institutional reform experiences in sub-regional cooperation agreements such as ECOWAS and SADC. Efforts at monitoring the MDGs not only across SSA but also in PALOP complement the context for export diversification and financial reputation detailed in annexes 1 and 2.

To identify macro-level policy and institutional combinations underpinning successful export diversification and economic convergence in ECOWAS and SADC, the empirical analysis establishes context-based objective metrics that assess the relative performance of Cape Verde and Mozambique in conjunction with evidence of a case-study nature. Given the severe lack of data over the period 1960-2004, this indirect approach to study trade-related development success in these two countries is unavoidable. We apply Three-Stage Least Squares and other estimation techniques, with broadly consistent results, to two main variables: the distance of a country's GDP per capita compared to that of the United States in order to capture economic convergence (ygap) and the inverse of the Herfindahl Index (neq5) as a measure of export diversification. Together with additional control variables, these two variables are a meaningful characterization of each country's diversification-convergence, which will be affected by the interaction between policy and institutional variables.

We first identify the determinants of diversification and convergence at the regional level. Then, we re-estimate the model for sub-samples that capture two different diversification-convergence scenarios in each sub region. The first sub-sample, denoted as the HIGH-regime, comprises countries that simultaneously exhibit high diversification and high convergence  $\{ygap < 0.945 \& neq5 > 4.5\}$  while the second, the LOW-regime, comprises those that exhibit the opposite combination $\{ygap >= 0.945 \& neq5 <= 4.5\}$ . This strategy allows us to highlight

differences and commonalities in performance across regimes and regions including regional benchmarks, viz Senegal for ECOWAS and Mauritius and South Africa for SADC.

The principal differences are that ECOWAS HIGH-regime countries are becoming more diversified whilst those of SADC are becoming less diversified. Opening up to trade is also an important driver of both convergence and diversification for the former, especially in the range of 45-75% of GDP, but not for the latter. In SADC HIGH-regime countries, economic and political freedom drive convergence, suggesting effective institutional arrangements.

As for the commonalities or lessons present in the HIGH-regimes, we find that: 1) the expected 2-way relationship always exists; 2) convergence always entails macroeconomic stability (inflation < 9%, budget deficits < 7% of GDP); 3) political and economic freedoms are always greater, on average, when compared to the other cases; 4) freedoms always affect diversification policy as do government deficits, albeit in different directions across both sub regions. However, increasing deficits always counteract prevailing diversification stance in both sub regions, which we take to be a sign of regime credibility. The comparison across sub regions, meanwhile, serves to highlight the importance of institutions irrespective of the sample chosen: economic freedom always affects diversification in ECOWAS while both freedoms affect it in SADC, where they affect convergence too.

Based on the estimated impact that Cape Verde and Mozambique have on their respective sub regions, we conclude that these lessons also apply - reinforcing the perception that Cape Verde and Mozambique are example of development successes in SSA and in its west and Southern sub regions. As such, these two case studies of positive G&G interaction in SSA reflect on the potential for cooperative governance and peer-review mechanisms outside of its usual domain among OECD and EU member countries.



#### References

African Economic Outlook, Paris: African Development Bank and OECD Development Centre May 2008

Amaral, Luciano (2009), "Old but New Questions back to the passage from Ancien regime to Liberalism", in Macedo et al. (2009a).

Angel-Urdinola, Diego and Quentin Wodon, "Assessing Absolute and Relative Poverty Trends with Limited Data in Cape Verde." *Growth and Poverty Reduction: Case Studies from West Africa* edited by Quentin Wodon, World Bank Working Paper No. 79) (2007): pp. 95-197Bastos, Paulo and Manuel Cabral (2007) "The Dynamics of International Trade Patterns", Review of World Economics, volume 143, Number 2/July 2007.

Bliss, Christopher and Jorge Braga de Macedo (1990), editors, *Unity with diversity in the European economy: the Community's southern frontier.* Cambridge University Press, Cambridge.

Bonaglia, F., and K. Fukasaku (2003). 'Export Diversification in Low-Income Countries: An International Challenge After DOHA. *OECD Development Centre Technical Papers* 209. Paris: OECD.

Bonaglia, Federico, Jorge Braga de Macedo and Maurizio Bussolo (2009), How globalisation improves governance, in Linda Yueh (editor), *The Law and Economics of Globalisation*, Edward Elgar pp. 193-224

Borges de Macedo, Jorge (1996), "Mares Abertos e Mares Fechados. Da Dialéctica do Confronto aos Problemas da Cooperação", *Actas dos 2.º Cursos Internacionais de Verão de Cascais*, Vol. 1, pp. 185-194, Cascais: Câmara Municipal de Cascais.

Bourguignon, Francois et al (2008), MDG at mid point, Brussels, September

Branson, William, Jorge de Macedo and David Richardson (1987), Ford Foundation Proposal: Measurement and Estimation of Changes in International Competitiveness, NBER, May

Cabral, Manuel (2009), Determinants of Export Diversification and Sophistication in Sub-Saharan Africa, paper for NBER project, preliminary draft, 3 December

Cadot O., C. Carrère and V. Strauss-Kahn (2007). Export diversification: what's behind the hump?. Centre for Economic Policy Research Discussion Paper No. 6590.

Causa, Orsetta and Daniel Cohen (2006), *The ladder of competitiveness and how to climb it*, Paris: OECD Development Centre

Cleveland, W.S. (1979). "Robust Locally Weighted Regression and Smoothing Scatterplots". *Journal of the American Statistical Association* 74 (368): 829–836.

Cleveland, W.S., Devlin, S.J. (1988). "Locally-Weighted Regression: An Approach to Regression Analysis by Local Fitting". *Journal of the American Statistical Association* 83 (403): 596–610.

De Benedictis L., Gallegati M. and M. Tamberi (2006). Overall specialization and development: countries diversify!, *The Review of World Economics* (2009),145(1).

Eichengreen, B., Rose, A. K. and C. Wyplosz (1996) "Speculative Attacks on Pegged Exchange Rates: An Empirical Exploration with Special Reference to the European Monetary System", in Canzoneri, M.B., Ethier W.J. and V. Grilli (eds.) *The New Transatlantic Economy*, Cambridge University Press, Cambridge.

Eichengreen, Barry and David Leblang (2006), "Democracy and Globalization", NBER Working Paper No. 12450, August and BIS Working Paper No 219, December.

Feyrery, James (2008), Trade and Income: Exploiting Time Series in Geography, Dartmouth College, December 2.

Flandreau, Marc and Frédéric Zummer, *The Making of Global Finance 1880-1913*, Paris: OECD Development Centre Studies, 2004.

Garoupa, Nuno and Jose Tavares (2009), "Institutions and Portuguese economic History: Implications and (Brief) Applications", in Macedo et al (2009a).

Gisselquist, Rachel and Robert Rotberg (2008), Index of African Governance, Harvard

Goujon, Anne and Annababette Wils, "The Importance of Education in Future Population. Global Trends and Case Studies on Cape Verde, Sudan, and Tunisia", IIASA WP-96-138, November 1996

Hausmann R., J. Hwang and D. Rodrik (2007). What you export matters. *Journal of Economic Growth*, 12(1): 1-25.

Hausmann, R. and D. Rodrik. (2003). "Economic development as self-discovery." *Journal of Development Economics*. 72: 603-633.

Hausmann, R., and B. Klinger. 2006. "Structural Transformation and Patterns of Comparative Advantage in the Product Space." Working Paper No. 128 Center for International Development, Harvard University.

Hausmann, R., Hwang J. and D. Rodrik (2007). "What you export matters," Journal *of Economic Growth*, Springer, vol. 12(1), pages 1-25, March.

Helpman E. and P. Krugman (1985). *Market structure and foreign trade*. The MIT Press, Cambridge (Mass).

Herzer, D., and F. Nowak-Lehmann D. 2006. "What Does Export Diversification Do for Growth? An Econometric Analysis." *Applied Economics* 38: 1825–38.

Hoeffler, A. E. 2002. "The Augmented Solow Model and the African Growth Debate." *Oxford Bulletin of Economics and Statistics* 64(2): 135–58.

Huang, Fali (2006), "The coevolution of Economic Development and Political Development", mimeo Singapore Management University.

Hummels, D., and P. J. Klenow. 2005. "The Variety and Quality of a Nation's Exports." *American Economic Review* 95(3): 704–23.

IDA, "L'IDA en Action – Le Mozambique: du reddressement d'après-guerre à la relance de la croissance.", Avril 2007

Imbs, J., and R. Wacziarg. 2003. "Stages of Diversification." *American Economic Review* 93(1): 63–86.

IMF, "Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI)—Status of Implementation", September 2008.

Kanbur, Ravi (2004), "The African Peer Review Mechanism (APRM): An Assessment of Concept and Design", *Politikon*, November.

Koren M. and S. Tenreyro (2007). Volatility and Development. *Quarterly Journal of Economics*, 122(1): 243-287.

Krugman P. and Venables A.J. (1990). Integration and the competitiveness of peripheral industry, Bliss and Macedo (1990)

Lledó, v., Peiris, S. and E. Kvintradze, IMF, "Republic of Mozambique: Selected Issues",IMF Country Report No. 07/258, July 2007

Lopes, Jose Mario (2009), Exchange Market Pressure in African countries, incomplete draft for NBER project, presented at INOVA seminar, 13 November

Lourenço, Jaime and Foy, Colm, "Cap Vert: Gouvernance et Développement.", Centre de Développement de l'OCDE, Document de travail No. 225, Novembre 2003

Macedo, Jorge Braga de (1986), Collective Pegging to a Single Currency: The West African Monetary Union, in *The Real Exchange Rate and Adjustment in Developing Countries*, edited by Sebastian Edwards e Liaquat Ahamed, Chicago: The University of Chicago Press, 1986, pp.333-362

Macedo, Jorge Braga de (2001), "Globalization and Institutional Change: A Development Perspective", in *Globalization Ethical and Institutional Concerns*, edited by Louis Sabourin and Edmond Malinvaud, Tha Pontifical Academy of Social Sciences, Acta 7, Vatican City, pp. 223-267.

Macedo, Jorge Braga de (2003), Peer review and public private partnership among developing countries, report to the OECD Secretary General, January

http://www.globalcentres.org/programs/globalgov/bellagio03/Background\_5\_reportsgnxt.pdf

Macedo, Jorge Braga de (2009), Economic Advice and Regime Change in Portugal, in Francesco Franco (editor), *Challenges Ahead for the Portuguese Economy*, Lisbon: ICS, pp. 201-229

Macedo, Jorge Braga de and Luís Brites Pereira (2006), The Credibility of Cabo Verde's Currency Peg, Nova Economics Working Paper no 494, September

Macedo, Jorge Braga de and Luís Brites Pereira (2007), Diferencialidade Portuguesa na Globalização, *Negócios Estrangeiros*, 11(2), July, pp. 223-236.

Macedo, Jorge Braga de, Barry Eichengreen and Jaime Reis (1996), editors, *Currency Convertibility: The Gold Standard and Beyond*, London: Routledge.

Macedo, Jorge Braga de, Joaquim Oliveira Martins and Luís Brites Pereira (2007a), "How Freedoms interact with globalization", presented at conference on globalization and democracy, Princeton University, September 27-28, revision in progress

Macedo, Jorge Braga de, Luís Brites Pereira, Joaquim Pina and João Jalles (2007b), "Relatório sobre CPLP e Objectivos de Desenvolvimento do Milénio", IICT, October

Macedo, Jorge Braga de, Luciano Amaral, Álvaro Ferreira da Silva and António Castro Henriques (2009a) editors *Nove Ensaios na tradição de Jorge Borges de Macedo*, Lisboa: Tribuna da História em colaboração do CG&G e IICT, 314 pp.

Macedo, Jorge Braga de, Luís Brites Pereira and Afonso Mendonça Reis (2009b) Comparing Exchange Market Pressure across Five African Countries, *Open Economies Review*: Volume 20, Issue 5, Page 645

Macedo, Jorge Braga de, Joaquim Oliveira Martins and Bruno Rocha (2009c), "Are complementary reforms a "luxury" in developing countries?", Workshop FRDB/IZA "Tracking Structural Reforms" Milano - 13 March

Maddison, Angus (2001). The world economy: a millennial perspective, Paris: OECD

Maddison, Angus (2007) Contours of the World Economy 0-2030 AD, Oxford University Press

Nye, Joseph (2002). "A Whole New Ball Game" Financial Times Dec 28

OECD (2003), Globalisation and Governance: Main Results of the OECD Development Centre Programme of Work 2001/2002, Paris: OECD, May

Parteka A. (2007). Employment and export specialisation patterns versus GDP *per capita* performance: unifying approach. Università Politecnica delle Marche, Quaderno di Ricerca (Working Paper) 302 (downloadable from http://www.dea.univpm.it/quaderni/pdf/302.pdf)

Parteka, Aleksandra and Massimo TamberI (2008), "What Determines the degree of Export Diversification, mimeo of paper presented in the European Trade Study Group conference in Warsaw, 11-13 September 2008

Persson, Torsten and Guido Tabellini (2006), "Democratic capital the nexus of political and economic change", NBER Working Paper No. 12175.

PNUD (2004), "La Situation du Développement Humain au Cap Vert", Rapport national sur le développement humain, 2004

Przeworski, Adam, M. Alvarez, J.A. Cheibub and F. Limongi (2000), *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990*, Cambridge: Cambridge University Press.

Reinhart, Carmen and Kenneth Rogoff (2009), *This time is different: eight centuries of financial folly*, Princeton University Press, Princeton

Rodrik, D. 2005. "Policies for Economic Diversification." CEPAL Review 87: 7–23.

Tibana, Roberto J. The composite indicator of economic activity in Mozambique (ICAE): Filling in the knowledge gaps to enhance public-private partnership (PPP), *OECD Development Working Paper* n°227, November 2003.

United Nations Department of Economic and Social Affairs (2008), *Trends in Sustainable Development: Africa Report*, United Nations: New York

World Bank (2009), World Development Indicators, World Bank: Washington, D.C.

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- 1 Income Gap to Frontier, Country and U.S. GDP per capita, constant 2000 US\$;
- 2 Number Equivalent Index at 1,2,3,4,5 digit SITC;
- 3 Inflation in consumer prices;
- 4 Government Surplus/Deficit % GDP;
- 5 Degree of openness, Exports plus Import % GDP;
- 6 Political Freedom;
- 7 Economic Freedom;
- 8 Life expectancy at birth)

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Table 2.1: Relative sizes in 2003

	GDP	POP	YCAP
CPV/ECOWAS	0,3%	0,2%	168%
ECOWAS/SSA	32,0%	30,5%	105%
MOZ/SADC	9,2%	10,5%	88%
SADC/SSA	40,7%	24,5%	166%
SSA/AFRICA	63.6%	85.6%	74%
AFRICA/WORLD	3.2%	13.6%	24%
CPLP/WORLD	2.9%	3.6%	82%
PALOP/CPLP	3.6%	14.2%	25%

Source: Maddison database

Table 3.1 Annual change in number equivalent Herfindahl Index Cape Verde vs. ECOWAS, Mozambique vs SADC

	cupe verue vs. 1200 vms, mozambique vs binde											
	1961-	1966-	1971-	1976-	1981-	1986-	1991-	1996-	2001-	<u> 1976-</u>		
	1965	1970	1975	1980	1985	1990	1995	2000	2005	<u>2005</u>		
ECOWAS	0,11	-0,02	-0,02	0,05	0,04	-0,01	-0,12	0,21	-0,03	0,02		
Cape Verde				0,77	0,48	-0,47	0,19	0,27	-0,16	0,18		
SADC	-0,87	-0,32	-0,04	0,29	-0,11	0,04	0,02	-0,05	-0,01	-0,1		
Mozambique	0,75	0,1	0,14	-0,17	0,21	-0,34	-0,62	-0,05	-0,48	-0,07		

Source: calculated from annex 1, graphs 7-8

**Table 3. 2: MDGs in PALOP 2009 vs 2007** 

Indic	1 pov	2 schl	3 rat	4 <5m	5 mm	6 dis	7 wat
A	S	R	S	R	R	R	С
CV	A	R	A	A	A		A
GB	R	S	S	R	R	R	A
M	S	С	S	S	S	R	S
STP	R	A	A	S	R		A
% sat	20%	40%	40%	20%	20%	0%	80%
A	R	S	S	S	S	R	S
CV	R	A	A	S	A		С
GB	S	A	A	S	S	S	A
M	S	С	С	S	S		S
STP	R	R	S	S	R	S	
% sat	0%	60%	60%	0%	20%	0%	40%

| % sat | 0% 60% 60% 0% 20% 0% 40% Source: Macedo et al (2007); note: satisfactory=achieved+on course

<b>Table 3.3:</b>	Millennium	Develor	nment	Goals
Table 3.3.	1711110111111111111	DUVUIU		Ovais

			n Developme		
1 Share of poo	rest quintile	in national o	consumption	(%)	
Cape Verde	4.4	1990-2003			
ECOWAS	5.3				
Mozambique	5.5	1991-2004			
SADC	5.0				
2 Net enrolme		rimary educa	ation		
	1991-2006	1991-1999	2000-2006	90's-00's	
Cape Verde	942	953	938	-1,5%	
ECOWAS*	575	508	602	9,5%	
Mozambique	614	470	663	19,3%	
SADC**	808	720	835	11,5%	
* except Sierra Leo		720	033	11,5 /0	
**excluding Angola		due to insuffici	ent data		
3 Ratio of girls					
Cape Verde	95 m ş	95	96	0,6%	
ECOWAS	80	93 75	90 81	7,8%	
Mozambique SADC	79 01	74 92	81	9,0% -1,4%	
	91		91		
4 Children und			,		2006
C V 1	1990	1995	2000	2005	2006
Cape Verde	60	50	42	35	34
ECOWAS	213	207	190	181	179
		90's	00's	90's-00's	
Mozambique		224	154	-7,0%	
SADC		155	143	-1,2%	
5 Maternal mo		per 100,000	live births 2	005	
Cape Verde	210				
ECOWAS	1027				
Mozambique	520				
SADC	819				
6 Tuberculosis	incidence ra	te per year p	er 100,000 p	opulation	
		90's	00's	90's-00's	
Cape Verde		1642	1672	0,0%	
ECOWAS		2076	2817	0,7%	
Mozambique		2854	4330	1,5%	
SADC		3066	4708	1,6%	
7 Proportion of	f population	using an imp	proved drink	ing water s	ource
Cape Verde		79	80	1,0%	
ECOWAS		52	57	4,2%	
		1995	2000	2006	
Mozambique		39	41	42	
SADC		57	60	63	
8 Debt service	as a percenta				
0 = 0.00 00= 1.000	1990-1994	1995-1999	2000-2006		
Cape Verde	136	118	82		
ECOWAS	171	179	102		
Mozambique	238	252	33		
SADC*	132	121	71		
*Except Zimbabwe			, 1		
· · · ·	,	Cauraa, sama	on Table 2.2		

Source: same as Table 3.2

Table 3.4: World Bank Governance Indicators (1996-2007)

	CV	ECOWAS	MOZ	SADC
Rule of Law	0.48	-0.75	-0.74	-0.44
Voice and Accountability	0.65	-0.51	-0.08	-0.30
Political Stability, Absence of Violence/Terrorism	0.96	-0.49	0.05	-0.24
Government Effectiveness	0.11	-0.77	-0.33	-0.38
Regulatory Quality	-0.25	-0.65	-0.47	-0.45
Control of Corruption	0.33	-0.66	-0.65	-0.39

Source: same as Table 3.2, data are fitted to a normal distribution centered on zero

**Table 3.5: Economic Freedom Index in PALOP** 

	2009	2008	2007	2006	2005	2004	2003	2002
CV	61	58	57	59	58	58	56	58
MZ	56	57	56	53	56	57	59	58
A	47	47	45	44	-	-	-	-
GB	45	45	45	47	47	42	43	43

Source AEO 2009, p.74 (Heritage Foundation)

**Table 3.6: Corruption Perception Index in PALOP** 

	RANK	INDEX	RANK	INDEX		INDEX
	2008	2008	2007	2007	YEAR	
CV	47	5,5	53	4,7	-	-
STP	121	2,7	118	2,7	-	-
M	126	2,6	111	2,8	2003	2,7
GB	158	1,9	143	2,3	-	-
A	158	1,9	147	2,2	2002	1,7

Source: AEO 2009, pp. 73, 192-193 (Transparency International)

**Table 3.7: International Trade (=5, best/worst)** 

country/ comparator	CV	ΜZ	SSA	SAD	ECW	LOP	code
Exporting Firms	4	6	13	<u>16</u>	11	5	%
Time Imports	11	11	11	<u>10</u>	<u>10</u>	17	Day
Import License Days	<u>6</u>	13	18	21	16	15	Day
Foreign Technology	2	<u>33</u>	11	16	8	12	%
Foreign Shareholder	10	20	19	<u>25</u>	12	14	%

Source: World Bank Enterprise Survey

**Table 3.8: Infrastructure (=5, best/worst)** 

country/ comparator	CV	ΜZ	SSA	SAD	ECW	LOP	code
# Electricity Outages	21	<u>3</u>	14	12	16	10	#/mo
# Internet Outages	4	<u>3</u>	46	32	86	<u>3</u>	#/mo
# Water Outages	13	<u>4</u>	8	6	9	7	#/mo
Transportation	36	37	44	<u>35</u>	49	40	%bad
Access to Land	<u>19</u>	26	34	31	36	28	%bad

Source: World Bank Enterprise Survey

**Table 3.9: Finance, Competition, Education** (best/worst)

country/ comparator	CV	ΜZ	SSA	SAD	ECW	LOP	code
Credit Line		13		24	20	17	%good
Investment Own Funds	51	<u>88</u>	77	74	80	78	%good
Access to Finance	<u>48</u>	62	60	51	68	64	%bad
Number Competitors	4	<u>3</u>	4	4	4	4	#
Education Workers	43	33	34	37	<u>28</u>	32	%bad

Source: World Bank Enterprise Survey

 $\textbf{Table 3.10: Institutions - stability, corruption, rule of law} \ (\underline{best/worst})$ 

country/ comparator	CV	ΜZ	SSA	SAD	ECW	LOP	code
STAB Crime theft and disorder	47	50	41	49	<u>35</u>	45	%bad
CORR Corruption	<u>25</u>	37	46	43	48	42	%bad
CORR Informal Payments	0	2	5	3	5	2	%bad
JUST Sales on Credit	30	<u>19</u>	29	36	25	<u>19</u>	%bad
JUST Government Predictability	59	<u>21</u>	49	50	47	29	%good
JUST Court Impartiality	62	<u>15</u>	44	46	44	30	%good
JUST Legal conflict resolution	29	<u>14</u>	23	21	25	27	%bad

Source: World Bank Enterprise Survey

**Table 3.11: Quality of regulation (best/worst)** 

country/ comparator	CV	ΜZ	SSA	SAD	ECW	LOP	code
Time Senior Mgt Regulations	14	<u>4</u>	7	8	8	7	%bad
Tax administration	41	<u>31</u>	46	36	48	36	%bad
Tax rates	<b>74</b>	<u>53</u>	59	51	61	57	%bad
Licensing Permits	<u>29</u>	30	33	29	33	37	%bad
Labor Regulations	28	17	20	21	<u>16</u>	18	%bad
Customs & Trade Regulations	38	<u>26</u>	33	28	30	33	%bad

Source: World Bank Enterprise Survey

Table 4.1a: Diversification and Convergence in ECOWAS - 3SLS Estimation Results

		LOW-Regime Sub-sample		FULLS		HIGH-Regime Sub-sample		
Variable Type	Variable	lnygap	lnneq5	lnygap	lnneq5	lnygap	lnneq5	
Policy	lnygap lnneq5	-0.0972 (-1.139)	-0.569*** (-3.326)	0.189** (2.409)	-0.398*** (-3.812)	-0.646*** (-3.798)	-0.751*** (-4.000)	
	inflation1	-0.0344** (-2.491)	0.0530* (1.799)	-0.0368*** (-3.400)		(3.776)		
	govdef	0.000174 (0.0435)	0.0457*** (4.744)			-0.00618 (-1.407)	-0.0153** (-2.291)	
	lnopen1					-0.185** (-2.112)	-0.229** (-2.156)	
Institutional	Inprcl	-0.0147 (-0.339) 0.114	-0.157 (-1.646) 0.399*	-0.172*** (-2.723) -0.497***	0.0620 (0.579) 0.840***	-0.0477 (-0.395) 0.201	0.299** (2.157) 1.610***	
	demage	(1.487) -0.0319*** (-3.498)	(1.888)	(-2.606) -0.0312*** (-2.963)	(2.710) -0.0444* (-1.879)	(0.456)	(2.923)	
	demtot		-0.179**	0.00804*** (11.12)		_		
Control	lnk	-0.107***	(-2.459)	-0.0879***				
	InItotal	(-4.441)		(-3.290)		0.961*** (4.396)		
	Inpopdens				0.191*** (3.293)			
Dummies	capcont	0.345***	0.666*** (5.132)	0.322***	0.552*** (3.193) 0.322***			
	oil	(7.128)		(4.163) -0.427*** (-7.158) -0.299***	(4.163) -0.427*** (-7.158) 0.438**	-3.601*** (-4.657)		
	sen			(-3.267) -0.370*** (-6.040)	(2.346) 0.504*** (4.982)	-2.827*** (-3.871)	0.473*** (6.759)	
	legaleng			-0.108** (-2.347)		-2.418*** (-4.918)		
	Constant	6.254*** (14.00)	2.790*** (3.268)	5.469*** (11.34)	0.904 (1.426)	-5.875** (-2.359)	2.334* (1.828)	
Model Diagnostics	Observations R-squared F test Prob > F	40 0.860 30.87 0	40 0.703 13.95 0	99 0.876 62.61 0	99 0.604 18.63 0	32 0.866 44.60 0	32 0.688 14.27 0	

t-statistics in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 4.1b: Diversification and Convergence in SADC - 3SLS Estimation Results

		LOW-Regime Sub-sample		FULL	Sample	HIGH-Regime Sub-sample		
Variable Type	Variable	lnygap	lnneq5	lnygap	lnneq5	lnygap	lnneq5	
			4. Q. 4. Outlantists		O. T. O. Salastada		4 O CE dedute	
	lnygap		1.340***		-0.782***		-1.067***	
	Inneq5	0.617***	(6.654)	-0.276**	(-9.407)	-0.659***	(-6.012)	
	iiiieq5	(6.624)		(-2.571)		(-5.961)		
Policy	inflation1	0.0533***	-0.0765**	(2.371)		(3.501)		
J		(2.662)	(-2.532)					
	govdef		, ,	-0.0399***	-0.0517***	0.0259	0.0649***	
				(-6.492)	(-4.202)	(1.322)	(2.836)	
	lnopen1	0.779***	-1.160***	-0.276	-0.691***			
		(6.829)	(-7.293)	(-1.622)	(-2.813)			
Institutional	Inprcl	-0.812***	1.070***	-0.147**	-0.182**	-0.396***	-0.323**	
		(-10.64)	(5.112)	(-2.458)	(-1.969)	(-4.609)	(-2.028)	
	lnef	-1.171***	1.751***	0.766***	1.526***	-2.386***	-2.306***	
		(-6.261)	(6.795)	(4.175)	(6.154)	(-6.059)	(-2.991)	
	constage				0.00610**			
	1	0.121***	0.160***		(2.537) -0.0179*			
	demage	0.121***	-0.169*** (-4.294)		(-1.686)			
	demtot	(5.235) 0.0127***	-0.0160***		(-1.000)	-		
	demot	(8.015)	(-3.998)					
Control	lnk	(0.013)	(-3.770)	-0.412***				
001101				(-9.979)				
	Inltotal			0.379***	0.419***			
				(6.551)	(4.502)			
Dummies	landlock			0.152*	0.859***			
				(1.806)	(4.352)			
	mus			-0.833***		-0.972***	-1.578***	
				(-5.429)		(-4.263)	(-9.644)	
	moz			-0.728***	-1.313***			
				(-4.403)	(-4.507)			
	legaleng				-0.750***			
	Comptont	1 056***	-2.137**	6.939***	(-3.485) -1.130	0.400***	10.55***	
	Constant	1.856***				9.409***		
		(3.672)	(-2.285)	(5.027)	(-0.488)	(12.76)	(5.822)	
Model Diagnostics	Observations	39	39	156	156	51	51	
model Diagnostics	R-squared	0.850	0.645	0.893	0.530	0.847	0.745	
	Ftest	48.47	19.68	150.1	30.28	76.55	38.08	
	Prob > F	0	0	0	0	0	0	

0 0 0 0 t-statistics in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



## **FIGURES**

Figure 3.1 PALOP vs SSA - GDP per capita 1990 international K\$

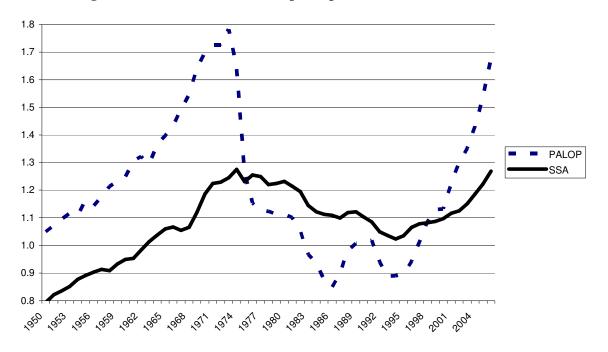


Figure 3.2a Cape Verde and ECOWAS GDP per capita in international \$

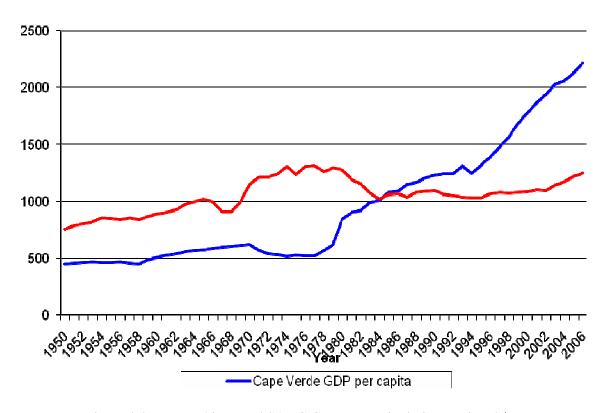


Figure 3.2a Mozambique and SADC GDP per capita in international \$

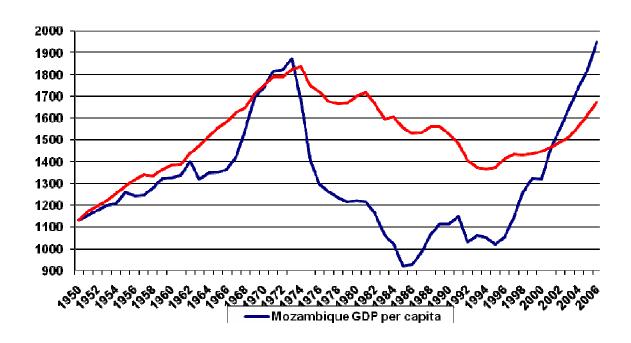
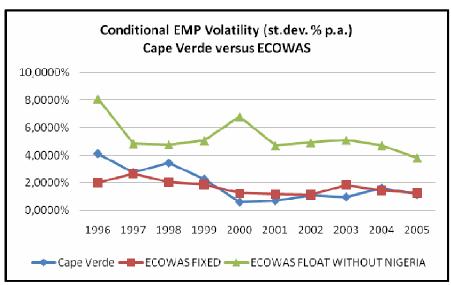


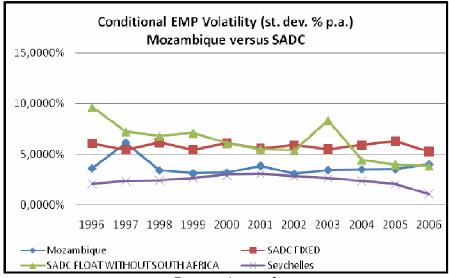
Figure 3.3a Conditional volatility of Exchange Market Pressure Cape Verde vs

ECOWAS



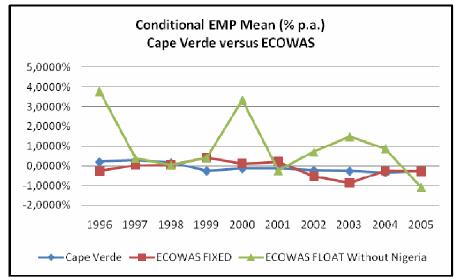
Source: Annex 2

Figure 3.3b Conditional volatility of Exchange Market Pressure Mozambique vs. SADC



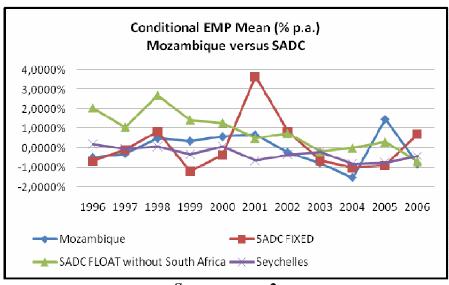
Source: Annex 2

Figure 3.4a Conditional mean of Exchange Market Pressure Cape Verde vs ECOWAS



Source: Annex 2

Figure 3.4a Conditional mean of Exchange Market Pressure Mozambique vs. SADC



Source: annex 2

Figure 3.5a GDP per capita Growth vs Real Effective Exchange Rate Growth in ECOWAS

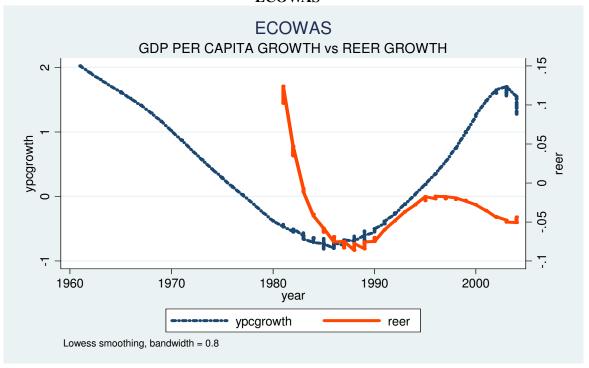
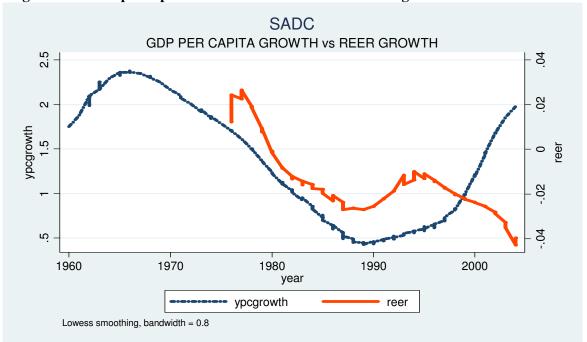
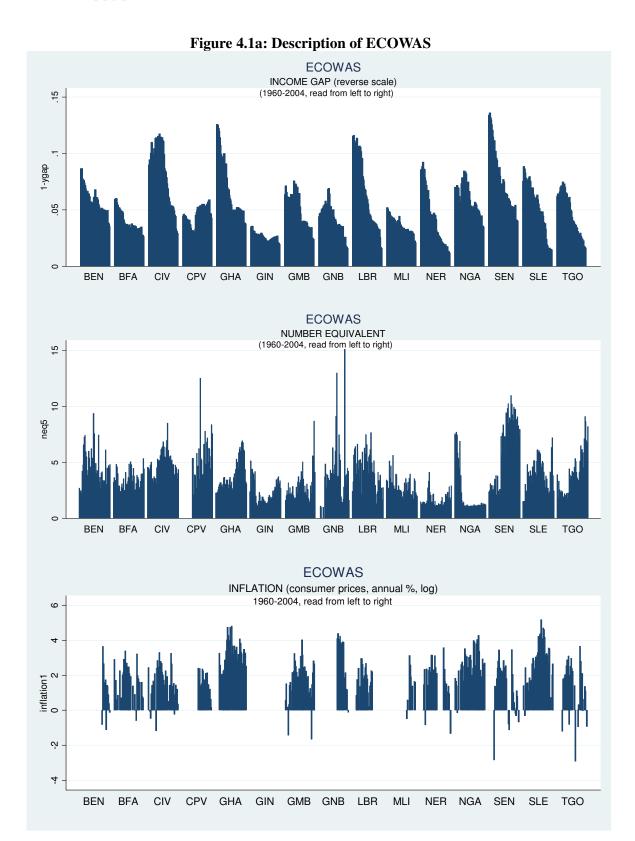


Figure 3.5b GDP per capita Growth vs Real Effective Exchange Rate Growth in SADC





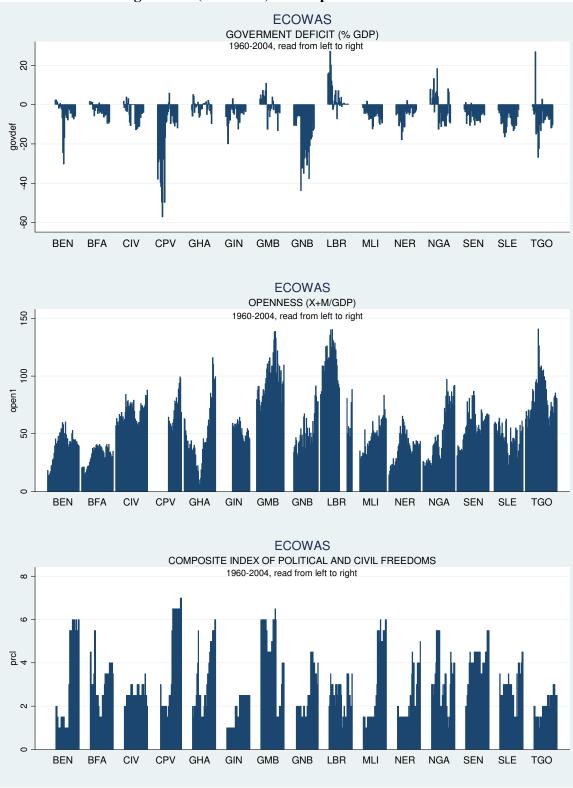
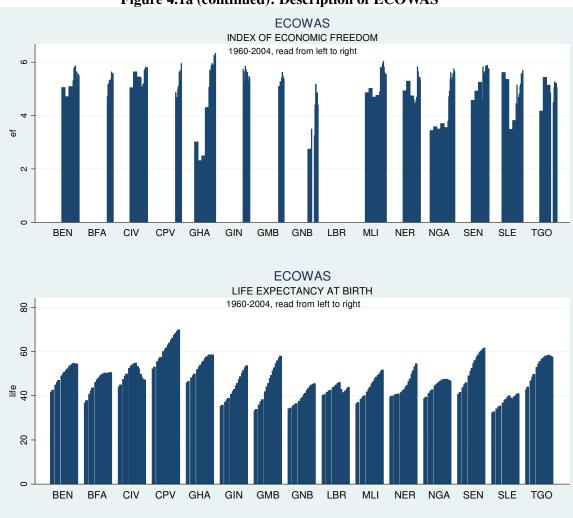
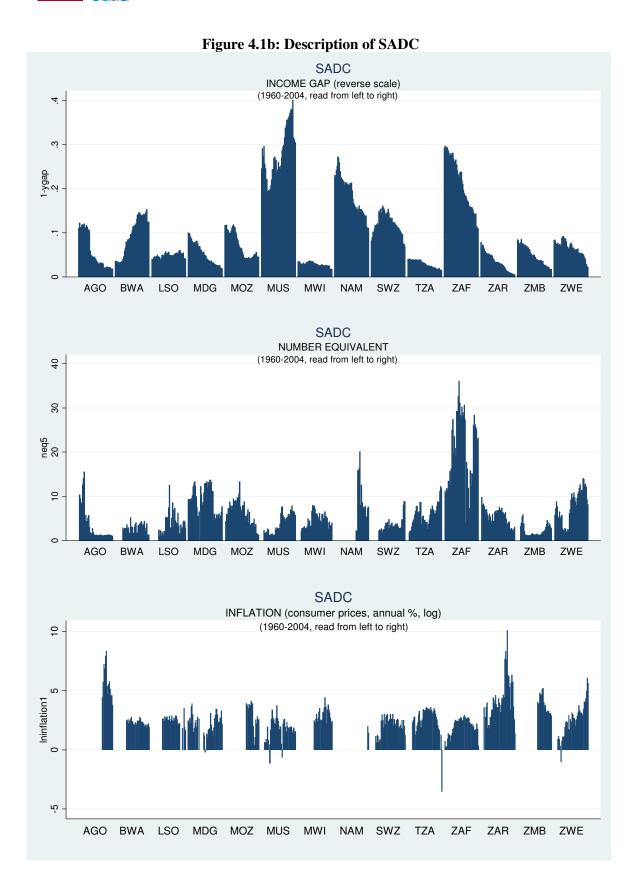


Figure 4.1a (continued): Description of ECOWAS





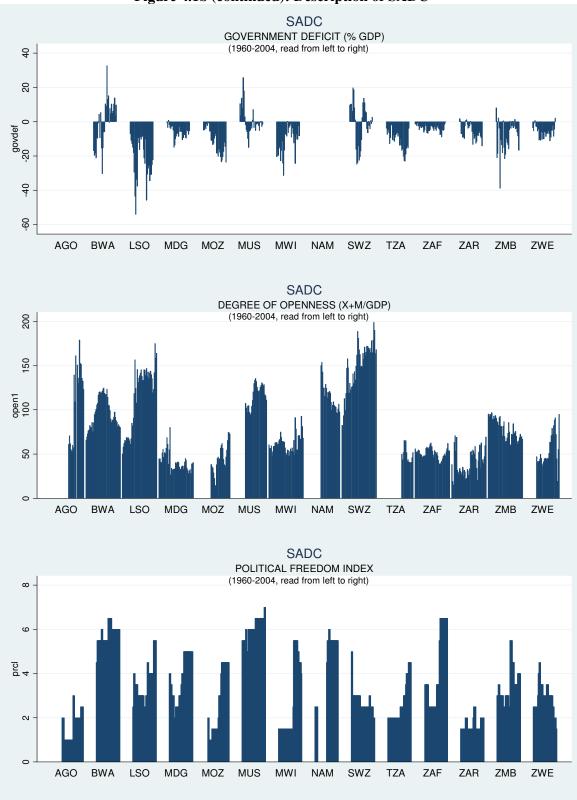
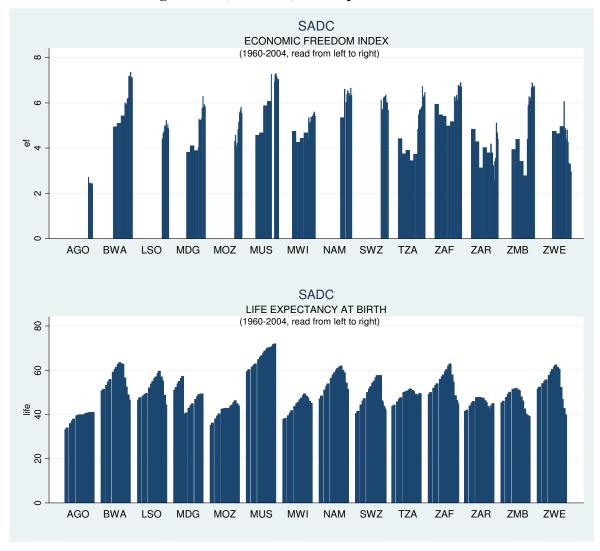


Figure 4.1b (continued): Description of SADC

Figure 4.1b (continued): Description of SADC



N

1960

1970

**CAPE VERDE** INCOME GAP TO FRONTIER & NUMBER EQUIVALENT 97 7 9 96. ygap 92 94 1970 1960 2000 1980 1990 year ygap neq5 CAPE VERDE vs. ECOWAS INCOME GAP TO FRONTIER 86. 96. 95 1970 2000 1960 1980 1990 **ECOWAS** CAPE VERDE vs. ECOWAS NUMBER EQUIVALENT 7 10 ω 9

1980 year

**ECOWAS** 

1990

--- CPV

Figure 4.2a: Cape Verde: Relation between Income Gap and Number Equivalent

2000

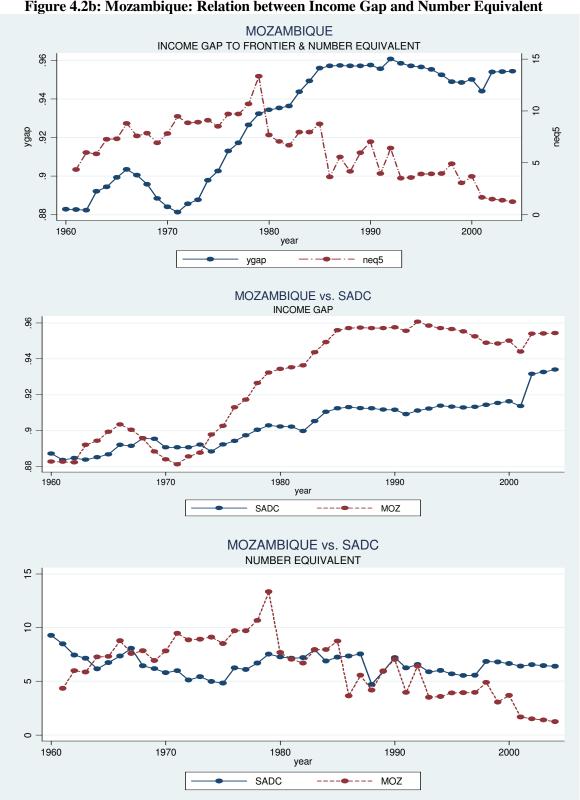


Figure 4.3a: Relation between Income Gap and Number Equivalent in ECOWAS

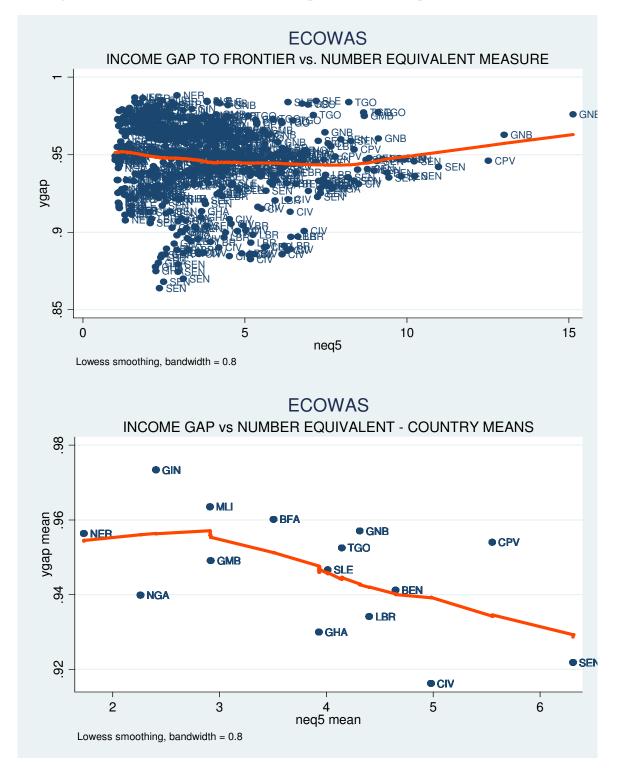


Figure 4.3b: Relation between Income Gap and Number Equivalent in SADC

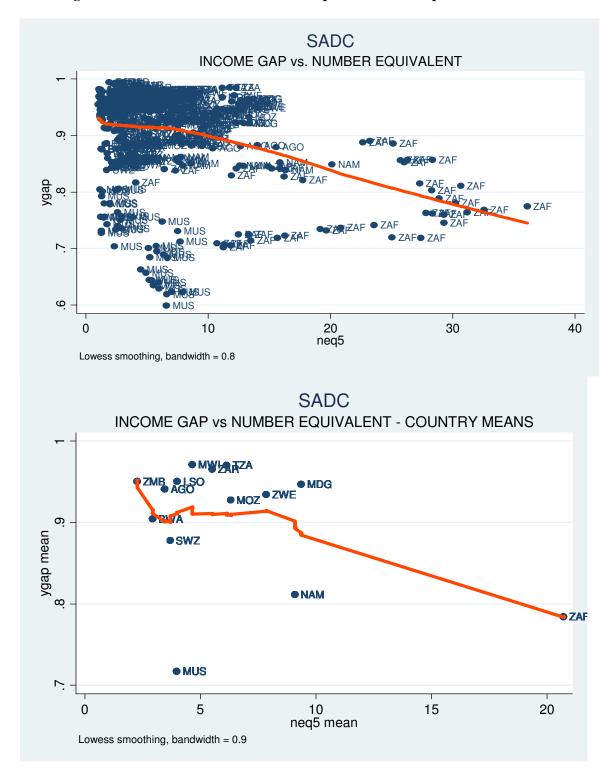
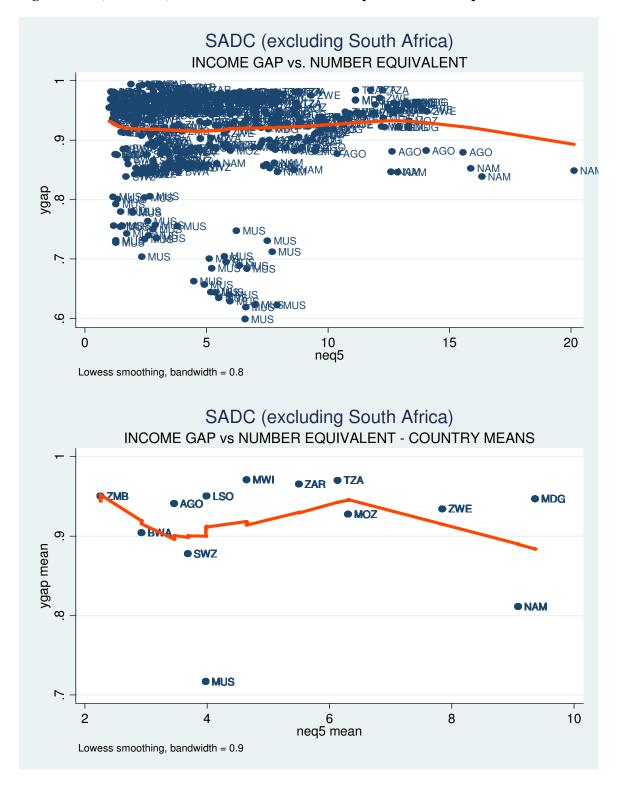


Figure 4.3b: (continued): Relation between Income Gap and Number Equivalent in SADC



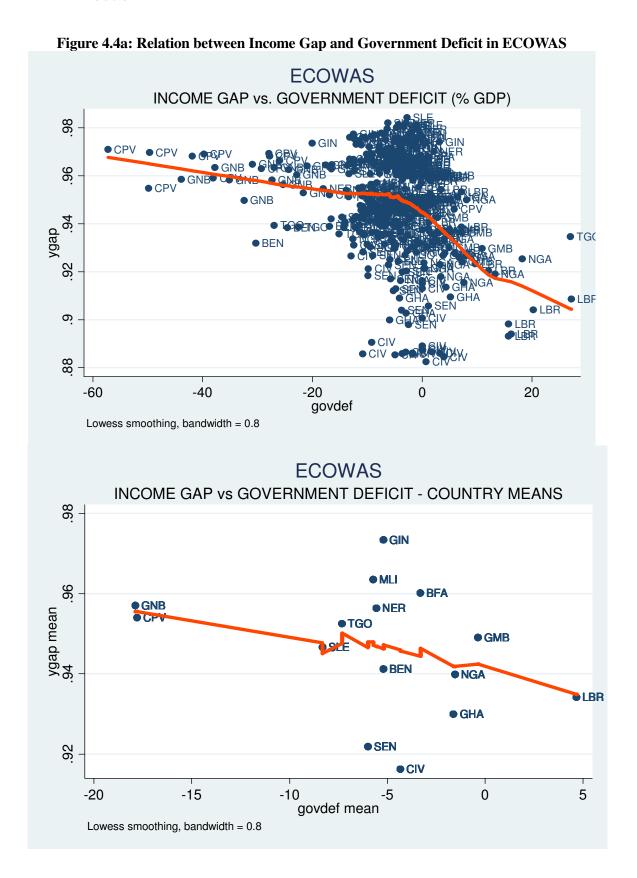
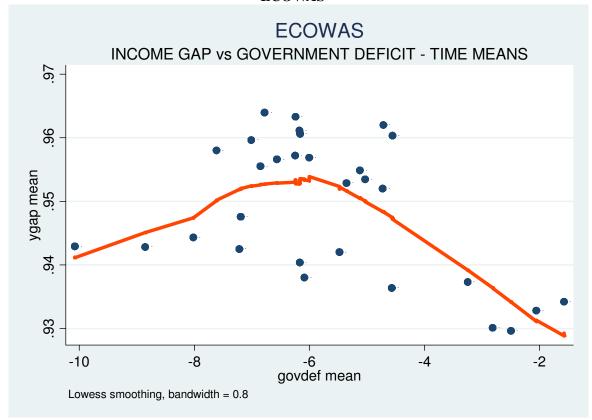


Figure 4.4a (continued): Relation between Income Gap and Government Deficit in ECOWAS



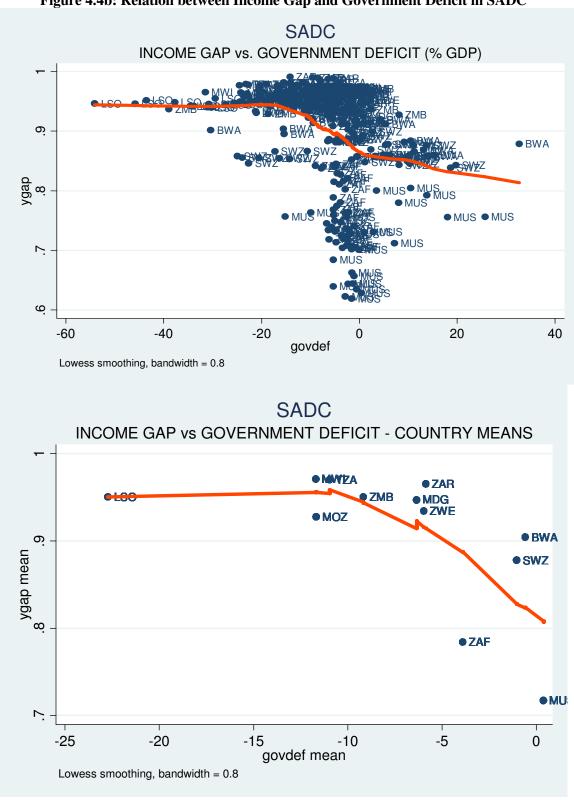


Figure 4.4b: Relation between Income Gap and Government Deficit in SADC

Figure 4.4b (continued): Relation between Income Gap and Government Deficit in SADC

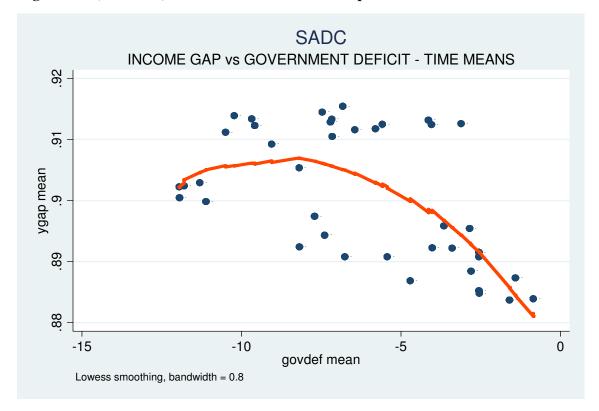


Figure 4.5a: Relation between Economic and Political Freedoms in ECOWAS

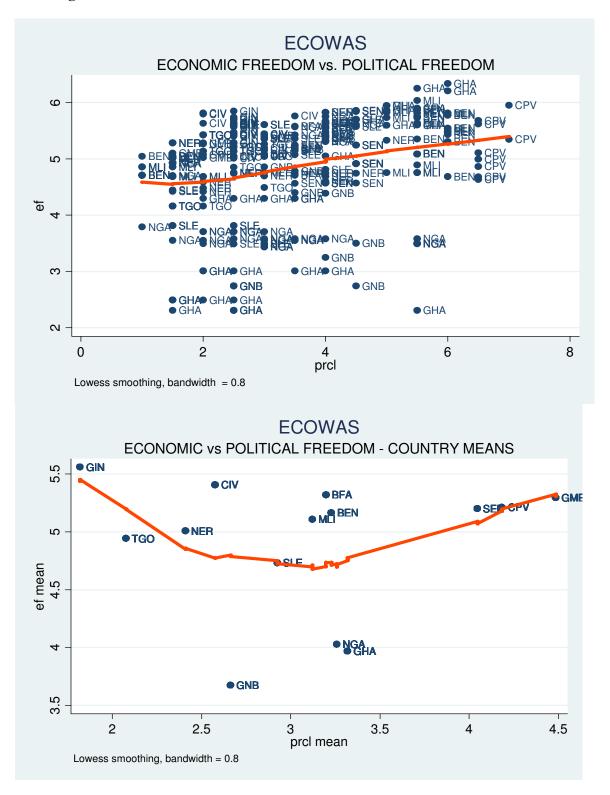


Figure 4.5a (continued): Relation between Economic and Political Freedoms in ECOWAS

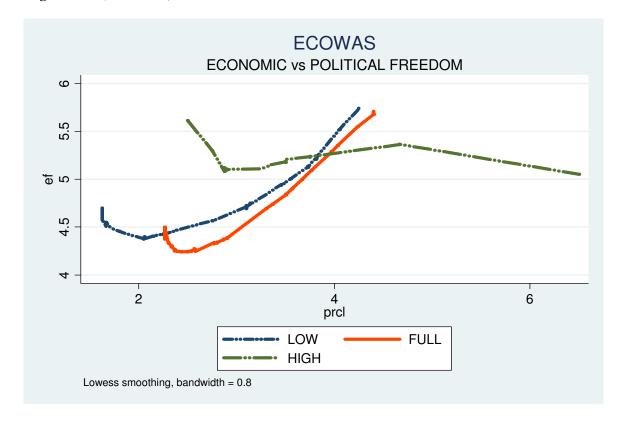


Figure 4.5b: Relation between Economic and Political Freedoms in SADC

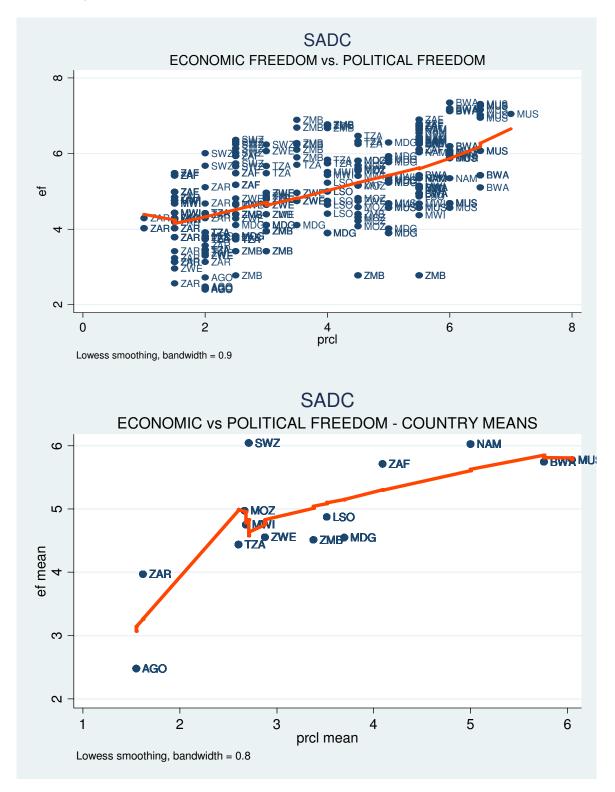


Figure 4.5b (continued): Relation between Economic and Political Freedoms in SADC

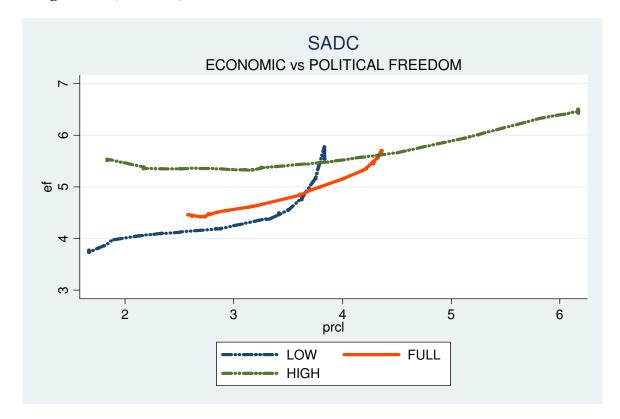
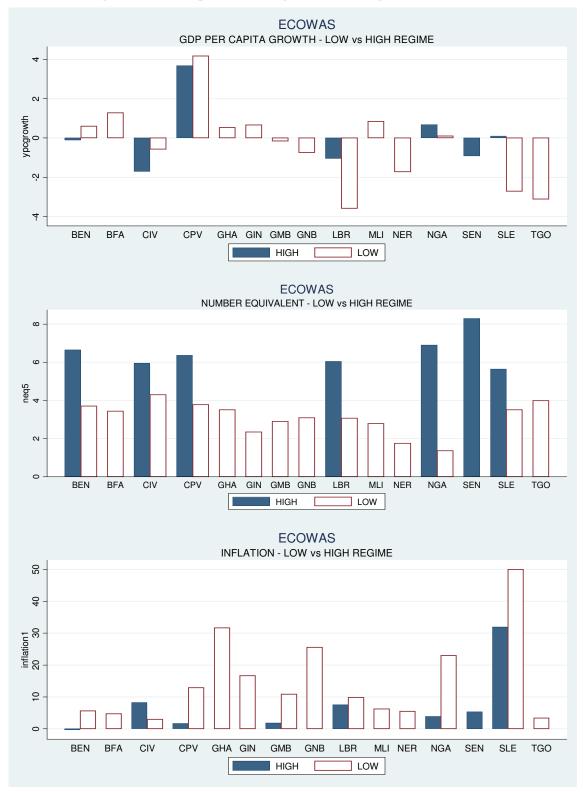


Figure 4.6a: Comparison of High and Low Regimes in ECOWAS



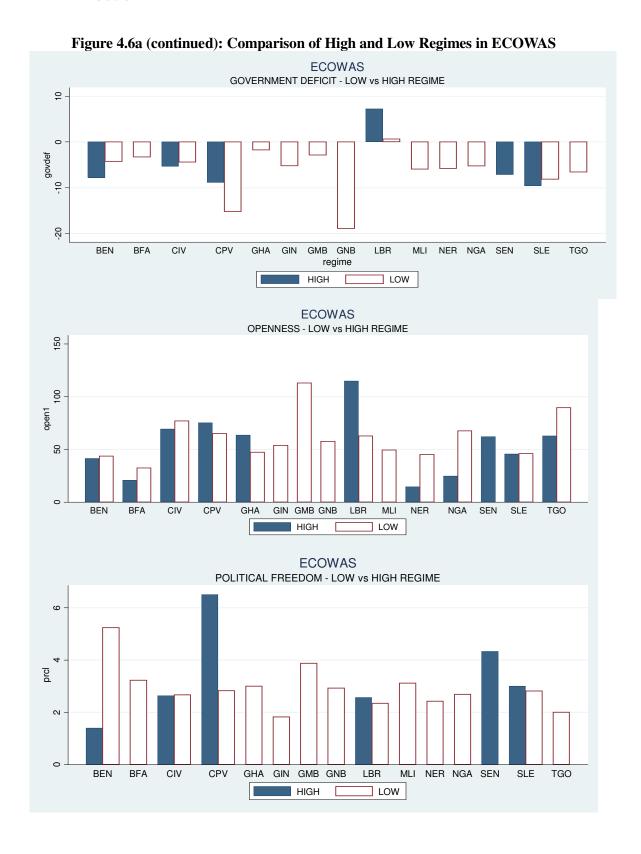
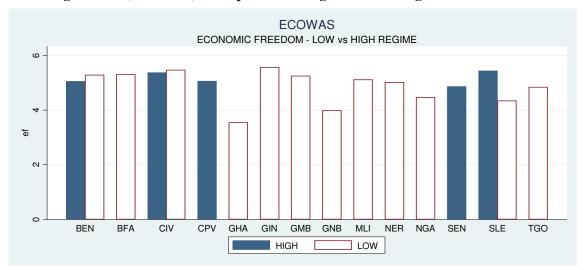
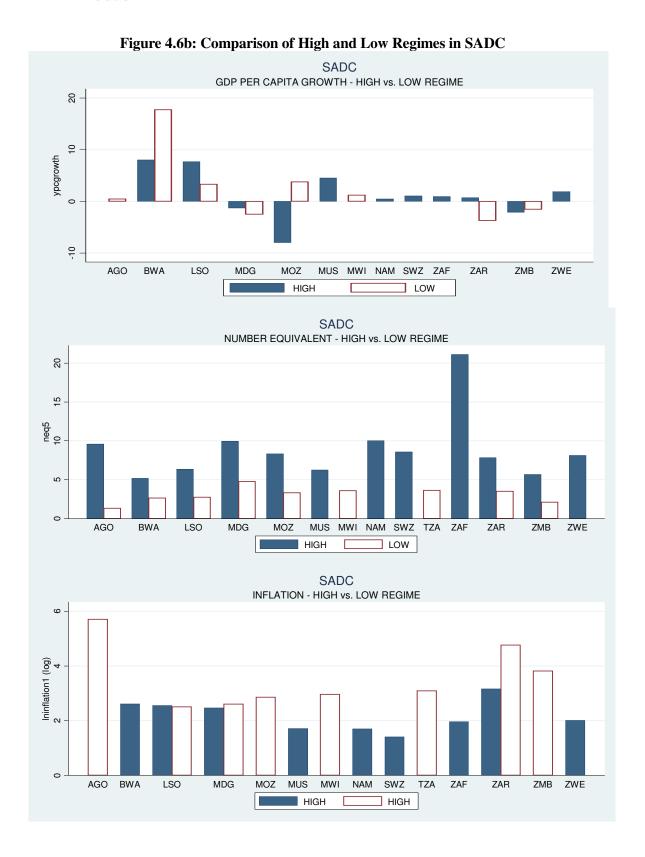


Figure 4.6a (continued): Comparison of High and Low Regimes in ECOWAS





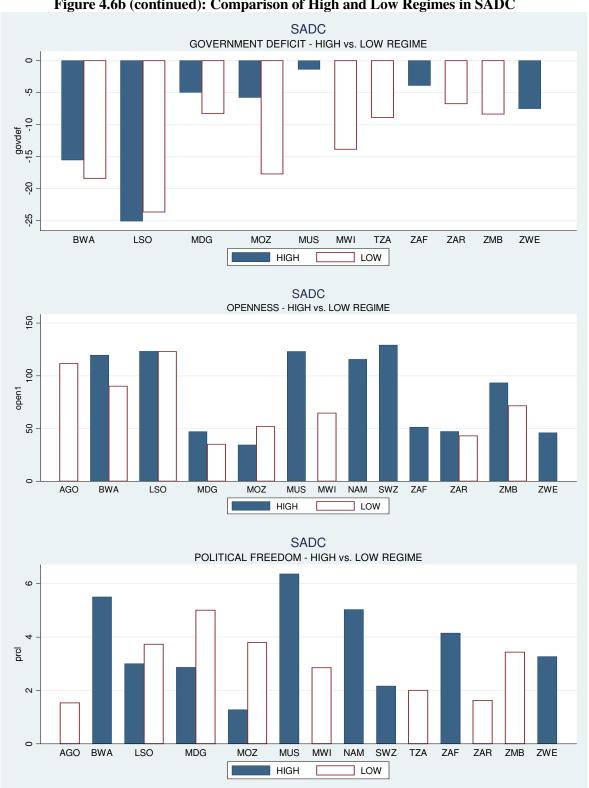
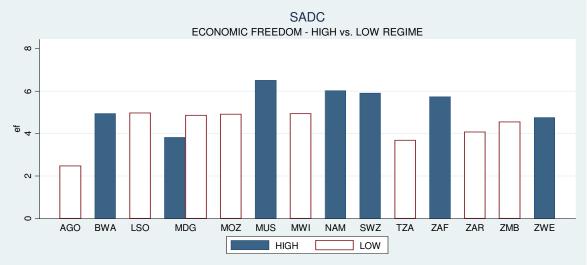


Figure 4.6b (continued): Comparison of High and Low Regimes in SADC

Figure 4.6b (continued): Comparison of High and Low Regimes in SADC



## **APPENDIX 1**

# **Data Description**

Variable Type	Variable	Description	Source
Policy	ygap	Income Gap to Frontier (Country and U.S. GDP per	World Bank &
Toney	Jeup	capita, constant 2000 US\$) – see text for definition	Own calculations
	ypc	GDP per capita (constant 2000 US\$)	World Bank
	neq 1,2,3,4,5	Number Equivalent Index (1,2,3,4,5 digit SITC rev2)	OECD
	inflation1	Inflation, consumer prices (annual %)	World Bank
	govdef	Government Surplus/Deficit (% GDP)	World Bank
	open1	Exports plus Import (% of GDP)	World Bank
	reer	Real Effective Exchange Rate (% change)	IMF - IFS
	emp	Exchange Market Pressure (% change)	Own calculations
Institutions	pr	Index of Political Rights	Freedom House
	cl	Index of Civil Liberties	Freedom House
	ef	Index of Economic Freedom	Fraser Institute
	constage	Constitutional Age	Polity
	demage	Age of Democracy	Eichengreen &
	demtot	Number of other Democracies in System	Leblang (2006) Polity
	dictrans	Number of Other Democracies in System  Number of Prior Transitions to Dictatorship	Polity
	uicuans	Number of Prior Transitions to Dictatorship	Polity
Controls	k	Gross capital formation (constant 2000 US\$)	World Bank
Economic	ltotal	Labour Force, total	World Bank
Geographic	land	Land (sq. km)	World Bank
	landagri	Agricultural land (% of land area)	World Bank
	landarbl	Arable land (% of land area)	World Bank
	disteur	Minimum distance to the European Union	CEPII
Demographic	poptotal	Population, total	World Bank
<b>C</b> 1	popdens	Population density (people per	World Bank
	popurban	Urban dwellers (% Population)	World Bank
	life	Life expectancy at birth, total (years)	World Bank
Dummies	landlock	Landlocked countries	United Nations
Economic	oil	Net Oil Exporter	United Nations
	capcont	Capital Controls	IMF - EAER
	legaleng	British Legal Origin	Polity
	cpv	Cape Verde	IFS Country Codes
	gha	Ghana	IFS Country Codes
	mus	Mauritius	IFS Country Codes
	moz	Mozambique	IFS Country Codes
	IIIOL	nio Zumoiquo	11 5 Country Codes
	cen	Senegal .	IES Country Codes
	sen zaf	Senegal South Africa	IFS Country Codes IFS Country Codes

The acronyms of the different variables used in the regressions are given above. The data are annual and cover the period 1960-2004 but some variables have shorter spans (e.g. data on political and civil liberties, economic freedom) as these only became available later. Regarding the indices of freedoms, we rank them as follows:

pr & cl	ef
7 = maximum political rights	10 = maximum economic liberties
1 = minimum political rights	0 = minimum economic liberties

We know that PR and CL are highly correlated and so we replace these with the average of both (hereafter, PRCL). This composite indicator performed better in estimations and in addition, also has the advantage as being interpretable as an index of political freedom, given that it captures its two mains constituent components. We also note that these measures must be used and interpreted with caution due to well known issues, most of which derive form the process of index construction itself. This caveat should be borne in mind when reading some of our results.

We use Eichengreen and Leblang's (2006) measure, "Age of Democracy,", which counts for each country *i* at time *t* the number of uninterrupted year up to time *t* that country *i* has been democratic, i.e. its measures the length of time a country has been a democracy. We also employ data from the POLITY project, which codes countries' level of democracy as a function of institutional rules. POLITY is also the source of information on constitutional age. POLITY defines constitutional change as occurring either when there is a political transition or when the absolute value of the score changes by at least three points. This allows for constitutional changes in both democracies and dictatorships. Capital controls are measured in the manner of the International Monetary Fund's Annual Report on Exchange Arrangements and Exchange Restrictions (EAER), supplemented with historical sources introduced by Eichengreen and Leblang's (2006). EAER seeks to capture whether there are

explicit legal restrictions on capital transitions. For data on the real effective exchange rate, we use the IMF's International Financial Statistics, given as an index form based on 2005=100 and where an increase reflects an appreciation. A real effective exchange rate index represents a nominal effective exchange rate index adjusted for relative movements in national price or cost indicators of the home country and selected countries. A nominal effective exchange rate index, meanwhile, represents the ratio (expressed on the base 2005=100) of an index of a currency's period- average exchange rate to a weighted geometric average of exchange rates for the currencies of selected countries.

Following Eichengreen et al (1996), Exchange Market Pressure (EMP) is calculated as a weighted sum of the nominal depreciation rate, changes in foreign reserves and changes in the interest rate differential, i.e.

$$EMP_{t} = \Delta e_{t} + \eta_{r} \Delta r_{t} + \eta_{i} \Delta (i_{t} - i_{t}^{*})$$

where the weights for reserves r and for the interest rate differential  $\Delta(i_t - i_t^*)$  are computed as follows:

$$\eta_r = -stdev(\Delta e_t) / stdev(\Delta r_t)$$

$$\eta_i = stdev(\Delta e_t) / stdev(\Delta (i_t - i_t^*))$$

The data used to calculate the EMP measures, namely exchange rates, interest rates and foreign reserves (excluding gold), are drawn from the IMF's International Financial Statistics and from national central banks' websites when the first source does not have all the data.

**Table A1.1 - Summary Statistics** (all variables)

### **ECOWAS**

			ECOWAS			
Variable	Obs.	Mean	Median	Std. Dev.	Minimum	Maximum
ygap	675	0.95	0.95	0.02	0.86	0.99
ypc	612	356.70	284.39	217.94	56.47	1266.81
ypcgrowth	597	0.23	0.66	7.32	-50.49	90.47
neq5	637	3.83	3.46	2.09	1.00	15.12
inflation1	574	12.83	6.89	20.09	-34.40	178.70
govdef	450	-5.70	-4.65	9.19	-57.26	27.17
open1	592	59.01	54.58	26.57	6.32	140.86
reer	144	-0.04	-0.01	0.26	-1.88	0.79
averageempusd	106	0	0	0.04	-0.13	0.21
pr	490	2.87	2.00	1.78	1.00	7.00
cl	490	3.23	3.00	1.34	1.00	7.00
prcl	490	3.05	2.50	1.50	1.00	7.00
ef	295	4.81	5.05	0.90	2.31	6.34
constage	596	13.11	7.00	19.98	0.00	105.00
demage	660	0.72	0.00	2.16	0.00	14.00
demtot	660	64.72	54.50	26.48	36.00	110.00
dictrans	626	0.39	0.00	0.73	0.00	3.00
k	415	4.35e+08	3.00e+08	5.04e+08	4.90e+06	3.60e+09
ltotal	375	4.97e+06	2.66e+06	8.95e+06	88445.88	5.00e+07
disteur	675	4889.93	5020.85	302.59	4244.89	5283.33
landagri	660	42.49	41.81	17.32	13.04	81.40
land	660	335343.33	192530.00	415989.64	4030.00	1.27e+06
landarbl	660	12.39	9.43	9.89	1.34	46.15
poptotal	675	1.01e+07	4.49e+06	2.06e+07	196351.00	1.38e+08
popdens	660	42.83	35.96	31.32	2.49	157.07
popuchs	576	0.11	0.10	0.08	0.00	0.39
life	240	47.50	46.90	7.75	32.28	69.84
IIIe	240	47.50		1.13	32.26	09.04
	(20	0.0	SADC	0.00	0.6	0.00
ygap	630	0.9	0.94	0.08	0.6	0.99
ypc	507	945.54	459.1	1040.85	81.01	4264.32
ypcgrowth	493	1.13	1.07	5.69	-27.14	23.75
neq5	554	6.47	4.96	5.75	1	36.09
inflation1	495	109.59	12.14	1114.9	-9.62	23773.13
govdef	370	-7.37	-6.15	10.29	-54.09	32.68
open1	502	80.63	68.23	40.54	14.33	198.91
reer	129	-0.02	-0.02	0.2	-0.91	1
averageempusd	106	0.01	0.00	0.04	-0.08	0.18
pr	441	3.38	3	1.85	1	7
cl	441	3.41	3	1.56	1	7
prcl	441	3.4	3	1.65	1	7
ef	316	4.91	4.84	1.10	2.39	7.35
constage	509	13.06	8	16.35	0	81
demage	600	1.76	0	5.53	0	37
demtot	600	65.02	55.5	26.72	35	110
dictrans	572	0.15	0	0.36	0	1
k	466	2.03E+09	4.35E+08	4.85E+09	2.26E+06	2.79E+10
ltotal	350	5.60E+06	4.28E+06	5.69E+06	170025.2	2.28E+07
disteur	630	8253.78	8491.14	978.51	6257.08	9571.16
landagri	616	50.26	46.94	20.09	9.68	87.97
land	616	688990	662465	596625.63	2030	2.27E+06
landarbl	616	9.62	6.77	11.76	0.61	49.26
poptotal	630	1.02E+07	6.74E+06	1.14E+07	326000	5.69E+07
popdens	616	55.93	18.2	121.74	0.75	607.58
popurban	497	0.14	0.13	0.13	0	0.78
life	237	50.9	49.25	8.69	33.19	71.97
1110	,	- 0.7		,		

**Table A1.2 - Correlations** (final model variables only)

	lnygap	lnneq5	inflation1	govdef	lnopen1	lnprcl	lnef	constage	demage	demtot	dictrans	lnk	Inpopdens
lnygap	1	_			_	_							
Inneq5	-0.126	1											
inflation1	0.08	-0.012	1										
govdef	-0.128	-0.043	-0.011	1									
lnopen1	-0.396	-0.027	-0.016	-0.017	1								
lnprcl	-0.242	0.18	-0.042	0.035	0.212	1							
lnef	-0.264	0.296	-0.09	0.069	0.321	0.362	1						
constage	-0.225	0.176	-0.038	0.102	0.246	0.022	0.148	1					
demage	-0.189	0.073	-0.013	0.009	0.143	0.376	0.282	0.008	1				
demtot	0.244	0.064	0.044	-0.148	0.162	0.26	0.282	-0.01	0.24	1			
dictrans	0.042	0.003	-0.018	-0.04	-0.183	0.202	-0.046	-0.121	0.266	0.241	1		
lnk	-0.392	0.335	-0.035	0.15	-0.084	0.096	0.221	0.427	0.031	0.123	0.243	1	
Inpopdens	0.107	0.144	-0.013	-0.129	-0.104	0.24	0.074	-0.046	0.283	0.246	0.19	-0.029	1

### **APPENDIX 2**

### **OLS and 2SLS Estimation Results**

**Table A2.1a: Determinants of Diversification in ECOWAS** 

Variable Type	Variables	OLS Pooled Inneq5	OLS Random Effects Inneq5	OLS Between Effects Inneq5	OLS Fixed Effects Inneq5
Policy	lnygap govdef	-0.263*** (-3.550) -0.0109***	-0.241*** (-2.812) -0.0106***	-0.793*** (-3.626)	-0.214** (-2.711)
Institutions	Inprel	(-2.971) 0.0484	(-2.677) 0.0651		0.0875
	Inef	(0.908) 0.264** (2.217)	(1.203) 0.380*** (3.418)		(1.069) 0.516** (2.282)
	demage	-0.0353* (-1.945)	-0.0482** (-2.367)		-0.0483*** (-3.787)
	demtot	0.200 studest	0. 17 Chuluk		-0.00773* (-2.029)
Control	lnpopdens lnltotal	0.208*** (4.100)	0.176*** (2.678)		1.164**
	Indisteur	7.313*** (6.185)	7.262*** (3.515)		(2.333)
Dummies	landlock	0.811*** (3.717)	0.766** (2.115)		
	cpv gha	0.609*** (4.280) -1.200***	0.760*** (4.196) -1.225***	-0.861***	
	sen	(-20.55) 1.267***	(-13.54) 1.292***	(-3.362)	
	legaleng	(8.722) -0.123** (-1.984)	(5.502)		
	Constant	-61.19*** (-5.967)	-60.95*** (-3.426)	4.423*** (5.035)	-15.48** (-2.168)
Model Diagnostics	Observations R-squared Adjusted R-squared F test Prob > F	223 0.853 0.844 318.2	223	592 0.635 0.574 10.44 0.00236	228 0.171 0.149 30.54 9.52e-07
	Number of countries R-squared within model R-squared between model	Ü	14 0.151 0.954	15	14
	R-squared overall model		0.848		
	Wald Chi2 Prob > W		973.2 0	.001 ** 005 * 01	

Table A2.1a (continued): Determinants of Diversification in ECOWAS

Variable Type	Variables	2SLS Random Effects Inneq5	2SLS Between Effects Inneq5	2SLS Fixed Effects Inneq5
• •		•	•	•
Policy	lnygap	-0.138 (-1.599)	-0.945*** (-3.910)	-0.358** (-2.501)
Institutions	Inprel	0.149** (2.473)	(-3.910)	0.130** (2.216)
	Inef	0.374*** (3.226)		0.351*** (2.852)
	demage	-0.0342** (-1.991)		-0.0334* (-1.816)
	demtot	( " ' '		-0.00852*** (-2.929)
Control	Inpopdens	0.210** (2.409)		,
	Inltotal	, , ,		1.463*** (4.074)
	Indisteur	7.244*** (4.097)		, ,
Dummies	landlock	0.750** (2.345)		
	сру	0.599** (2.536)		
	gha	-1.290*** (-7.445)	-1.409*** (-5.242)	
	sen	1.275*** (5.474)	` ′	
	Constant	-61.34*** (-4.051)	5.183*** (5.256)	
Model Diagnostics	Observations	200	315	183
	R-squared Adjusted R-squared	12	0.721	0.227 0.138
	Number of countries R-squared within model R-squared between model	13 0.153 0.966	14 0.0278 0.764	13
	R-squared overall model F test Prob > F	0.860 0	0.328 0.000370 0.721	0 0.138

**Table A2.1b Determinants of Diversification in SADC** 

Variable Type	Variables	OLS Pooled Inneq5	OLS Random Effects Inneq5	OLS Between Effects Inneq5	OLS Fixed Effects Inneq5
Policy	lnygap	-0.132***		-0.315	
Tolley	, 8	(-2.839)		(-1.626)	
	lnopen1	-0.468*** (-7.422)			
Institutions	lnef	0.803*** (5.081)	0.886*** (4.988)	2.278*** (3.327)	0.619*** (4.274)
	dictrans		-0.328*** (-3.793)		
Physical	lnk				0.148*
	Inpopdens				(1.839) -4.949*** (-3.108)
	Inltotal			0.471*** (4.570)	4.155** (2.635)
	landlock			` /	, ,
	mdg	0.633***	0.972*		
	moz	(5.062) -0.275**	(1.847)	-0.805*	
		(-1.997)		(-1.912)	
	tza	0.584*** (7.243)			
	zaf	1.197***	1.557**		
	241	(9.883)	(2.364)		
	zwe	0.854***	0.963***		
	~	(9.927)	(2.668)		40.4011
	Constant	2.619*** (4.926)	0.0189 (0.0657)	-7.705*** (-3.539)	-48.18**
		(4.926)	(0.0637)	(-3.339)	(-2.538)
Model Diagnostics	Observations	254	290	217	237
	Number of countries		14	14	13
	R-squared	0.641		0.789	0.142
	Adjusted R-squared R-squared within model	0.630	0.0964	0.696	0.127
	R-squared between model		0.672		
	R-squared overall model	67.00	0.555	0.420	10.21
	F test Prob > F	67.08 0		8.439 0.00410	10.31 0.00122
	Wald Chi2	U	49.57	0.00410	0.00122
	Prob > W		1.70e-09		

Table A2.1b (continued): Determinants of Diversification in SADC

		2SLS Random Effects	2SLS Between Effects	2SLS Fixed Effects
Variable Type	Variables	lnneq5	lnneq5	Inneq5
Policy	lnygap	-0.380***	-0.242*	-0.310**
		(-3.976)	(-2.164)	(-2.091)
Institutions	lnef	0.936***	2.505***	1.196***
		(5.791)	(3.831)	(6.992)
	constage	0.00611***		0.00602**
		(3.427)		(2.006)
Physical	Inpopdens	,		-4.974***
J ~	1 1 1			(-3.415)
	InItotal	0.401***	0.512***	4.415***
	mitotai	(5.909)	(9.075)	(3.587)
	moz	(3.707)	-0.508*	(3.307)
	moz		(-2.273)	
	zwe	0.753**	0.628**	
	ZWC	(2.603)	(2.897)	
	Constant	-4.563***	-9.092***	
	Constant		–	
		(-5.020)	(-5.444)	
Model Diagnostics	Observations	156	156	156
2 mg. rostres	Number of countries	12	12	12
	R-squared			0.350
	Adjusted R-squared		0.899	0.270
	R-squared within model	0.258	0.148	
	R-squared between model	0.850 0.734	0.945 0.663	
	R-squared overall model F test	19.62	20.63	35.51
	Prob > F	0	0.00102	0

**Table A2.2a: Determinants of Convergence in ECOWAS** 

nion 1  ef  en 1  l  age  ot  ans	-0.157*** (-5.848) -0.0764*** (-2.827) -0.0696*** (-10.44) 0.00897*** (22.17) 0.148*** (5.416)	-0.0435*** (-3.658) -0.0833** (-2.166) -0.309*** (-5.831) -0.0504*** (-6.215) 0.192*** (6.243) 0.00828*** (15.00)	-0.340*** (-3.680) -0.414** (-2.475)	-0.00222* (-1.932) -0.0498*** -0.00222*  -0.166** (-2.460) -0.0216** (-3.153) -0.00162** (-2.610)
ction 1  ef  en 1  1  age  ot  ans	-0.0764*** (-2.827) -0.0696*** (-10.44) 0.00897*** (22.17) 0.148***	(-3.658)  -0.0833** (-2.166) -0.309*** (-5.831) -0.0504*** (-6.215) 0.192*** (6.243) 0.00828***	(-3.680) -0.414**	(-1.932) -0.0498*** -0.00222* -0.166** (-2.460) -0.0216** (-3.153) -0.00162**
ef en1  I age ot ans	(-2.827)  -0.0696*** (-10.44) 0.00897*** (22.17) 0.148***	(-3.658)  -0.0833** (-2.166) -0.309*** (-5.831) -0.0504*** (-6.215) 0.192*** (6.243) 0.00828***		(-1.932) -0.0498*** -0.00222* -0.166** (-2.460) -0.0216** (-3.153) -0.00162**
en1  I  age  ot  ans	(-2.827)  -0.0696*** (-10.44) 0.00897*** (22.17) 0.148***	(-2.166) -0.309*** (-5.831) -0.0504*** (-6.215) 0.192*** (6.243) 0.00828***		(-1.932) -0.0498*** -0.00222* -0.166** (-2.460) -0.0216** (-3.153) -0.00162**
l age ot ans	(-2.827)  -0.0696*** (-10.44) 0.00897*** (22.17) 0.148***	(-2.166) -0.309*** (-5.831) -0.0504*** (-6.215) 0.192*** (6.243) 0.00828***		-0.0498*** -0.00222* -0.166** (-2.460) -0.0216** (-3.153) -0.00162**
age ot ans	(-2.827)  -0.0696*** (-10.44) 0.00897*** (22.17) 0.148***	(-2.166) -0.309*** (-5.831) -0.0504*** (-6.215) 0.192*** (6.243) 0.00828***		(-2.460) -0.0216** (-3.153) -0.00162**
ot	-0.0696*** (-10.44) 0.00897*** (22.17) 0.148***	-0.309*** (-5.831) -0.0504*** (-6.215) 0.192*** (6.243) 0.00828***		(-2.460) -0.0216** (-3.153) -0.00162**
ot	(-10.44) 0.00897*** (22.17) 0.148***	-0.0504*** (-6.215) 0.192*** (6.243) 0.00828***		-0.0216** (-3.153) -0.00162**
ans	0.00897*** (22.17) 0.148***	0.192*** (6.243) 0.00828***		-0.00162**
	0.148***	0.00828***		` /
	,			
_				-0.0830*** (-3.922)
odens				-3.145** (-2.720)
al				4.296*** (3.737)
ock	0.0997*** (2.932)	0.209*** (3.945)		, ,
	-0.610*** (-18.17)	-0.497*** (-7.637)	-0.564*** (-4.766)	
		-0.219*** (-4.714)	, ,	
	-0.351*** (-6.363)	-0.452*** (-9.250)		
	-0.379*** (-10.07)	-0.359*** (-7.010)		
eng	-0.212*** (-6.335)	-0.133*** (-3.417)		
tant	3.880***	4.177***	4.975*** (30.59)	-45.71*** (-3.491)
	(32.02)	(1.70)	(2 3.07)	( / 2 )
ared ted R-squared	441 0.732 0.725 154.7	181	444 0.811 0.759 15.73	140 0.917 0.912 64.62 9.04e-06
er of countries	v	13 0.739 0.920 0.849 785 3	15	11
֡	vations ared ted R-squared > F er of countries ared within model ared between model ared overall model	vations 441 ared 0.732 ted R-squared 0.725 154.7 Fer of countries ared within model ared between model ared overall model	Attant     3.880***     4.177***       (65.32)     (44.93)       Avations     441     181       Ared     0.732     154.7       F     0     13       Ared within model     0.739       Ared between model     0.920       Ared overall model     0.849       Chi2     785.3	Attant     3.880***     4.177***     4.975***       (65.32)     (44.93)     (30.59)       Avations     441     181     444       Ared     0.732     0.811       Attack R-squared     0.725     0.759       154.7     15.73       Fer     0     0.000271       Fer of countries     13     15       Ared within model     0.739       Ared between model     0.920       Ared overall model     0.849

Table A2.2a (continued): Determinants of Convergence in ECOWAS

Variable Type	Variables	2SLS Random Effects Inygap	2SLS Between Effects lnygap	2SLS Fixed Effects Inygap
Policy	lnneq5	0.790***	-0.326***	
Toney	imeqs	(5.400)	(-3.613)	
	lnopen1	(= )	( )	-0.0728*** (-4.100)
Institutions	Inprel	-0.234*** (-4.391)		` ,
	lnef	(-4.371)		-0.178*** (-4.876)
	demage		-0.0868** (-2.702)	,
	demtot	0.00622***	0.0150***	-0.00242***
		(6.262)	(3.338)	(-4.113)
Control	lnk	-0.197***		-0.0901***
	Inpopdens	(-6.001)		(-5.150) -3.222*** (-5.026)
	InItotal			4.506*** (7.162)
Dummies	landlock	0.606*** (6.985)		
	oil	-0.401***	-0.530***	
		(-3.704)	(-4.506)	
	cpv	-0.537***	_ ( )	
		(-4.387)		
	sen	-0.494***		
		(-4.256)		
	Constant	6.577***	3.507***	
		(11.71)	(9.792)	
<b>Model Diagnostics</b>	Observations	208	313	118
	R-squared Adjusted R-squared		0.762	0.939 0.930
	Number of countries	10	14	10
	R-squared within model	0.371	0.566	
	R-squared between model	0.913	0.835	
	R-squared overall model F test	0.613 28.90	0.654 11.42	215.7
	Prob > F	28.90	0	0

Table A2.2b: Determinants of Convergence in SADC

Variable Type	Variables	OLS Pooled Inygap	OLS Random Effects Inygap	OLS Between Effects lnygap	OLS Fixed Effects Inygap
Policy	lnneq5	-0.222***	-0.0351		
	open1	(-6.120)	(-1.193)	-0.532**	
	· r			(-2.327)	
	lninflation1				0.0327** (2.304)
Institutions	Inprcl		-0.0549* (-1.704)		-0.166** (-2.545)
	Inef		(11,01)	-1.940*** (-3.707)	(2.0.0)
	demage	-0.00638* (-1.678)		-0.0553** (-2.479)	
	demtot	(-1.078)		(-2.479)	0.00759***
	dictrans	0.262***	0.184***		(5.016)
	dictians	(5.978)	(3.649)		
Physical	lnk	-0.138***	-0.286***		-0.349***
·		(-3.798)	(-9.104)		(-5.390)
	Inpopdens	0.165*** (9.680)			
	Inltotal	0.401***	0.510***		
		(18.00)	(7.454)		
	oil	0.239**			
		(2.392)			
	moz	-0.302***			
		(-4.752)			
	mus	-1.707***	-1.014***		
		(-15.81)	(-6.400)	4.00 % (4.1)	
	zaf	-1.247***	-1.098***	-1.235**	
	C	(-11.66)	(-4.958) 2.281**	(-2.740) 9.321***	10.31***
	Constant	0.642 (0.949)	(2.221)	(7.609)	(8.000)
		(0.949)	(2.221)	(7.009)	(8.000)
Model	Observations	265	253	254	278
Diagnostics		200			
	Number of countries	0.000	13	14	12
	R-squared Adjusted R-squared	0.898 0.894		0.845 0.776	0.657 0.652
	R-squared within model	0.074	0.471	0.770	0.032
	R-squared between model		0.917		
	R-squared overall model F test	640.6	0.891	12.26	13.21
	Prob > F	040.6		0.00109	0.000576
	Wald Chi2	Ü	362.8	0.00107	0.000570
	Prob > W		0		

Table A2.2b (continued): Determinants of Convergence in SADC

		2SLS Random Effects	2SLS Between Effects	2SLS Fixed Effects
Variable Type	Variables	lnygap	lnygap	lnygap
Policy	inflation1	-0.356***	-0.600	-0.101
		(-3.216)	(-1.633)	(-1.098)
Institutions	Inprcl		-5.893***	
			(-3.645)	
	lnef		-1.389*	-0.120***
			(-2.280)	(-3.065)
	demage	-0.591***	( ==== *)	-0.372***
		(-6.474)		(-4.585)
	demtot	-0.591***		-0.372***
	delittot	(-6.474)		(-4.585)
Physical	lnk	-0.591***		-0.372***
riiysicai	IIIK	(-6.474)		(-4.585)
	InItotal	0.561***		0.730***
	IIItotai	*****		
	<b>C</b>	(6.187)	16 40444	(5.226)
	Constant	8.115***	16.42***	
		(4.910)	(4.400)	
Model Diagnostics	Observations	190	178	190
Diagnostics	Number of countries	12	12	12
	R-squared	· <u>-</u>		0.358
	Adjusted R-squared		0.690	0.299
	R-squared within model	0.191	0.0726	
	R-squared between model	0.919	0.775	
	R-squared overall model F test	0.809 24.09	0.235 10.11	22.96
	Prob > F	24.09	0.00426	22.96