Cape Verde and Mozambique as Development Successes in Sub-Saharan Africa

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Outline

- Motivation
- An Interpretative Framework: How Globalization & Governance interact with Convergence
- Empirical Analysis: Diversification-Convergence: Assessing Success in SSA
- Conclusions
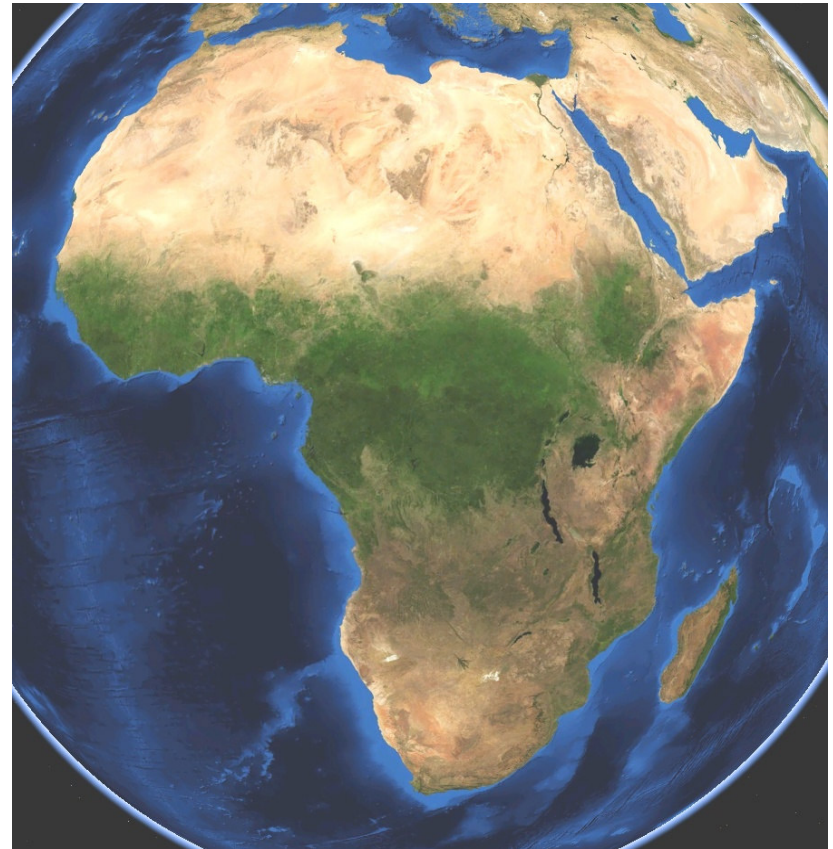
1- Sub-Saharan Africa and the Crisis

- Notwithstanding SSA's improved economic situation over the last ten years, absolute poverty was still widespread when unprecedented energy and food price volatility brought worldwide expansion to a halt.

- Growth enhancing policies need to be assessed against progress on MDGs – through improved multilateral surveillance (IMF and G20).

- African Peer Review Mechanism and sub regional cooperation also key.

MDGs, Constituencies for Reform and Development Ideologies in SSA

- Reaching the MDGs in 2015 presupposes sustained pro-poor economic growth in addition to better governance and more aid.

- There have not been enough constituencies for reform in SSA.

- ECOWAS and SADC have been less active in their sub-region than AfDB, ECA, IMF or World Bank.

- Alternatives to both the "one size fit all" and "each case is unique" development ideologies are urgently needed.
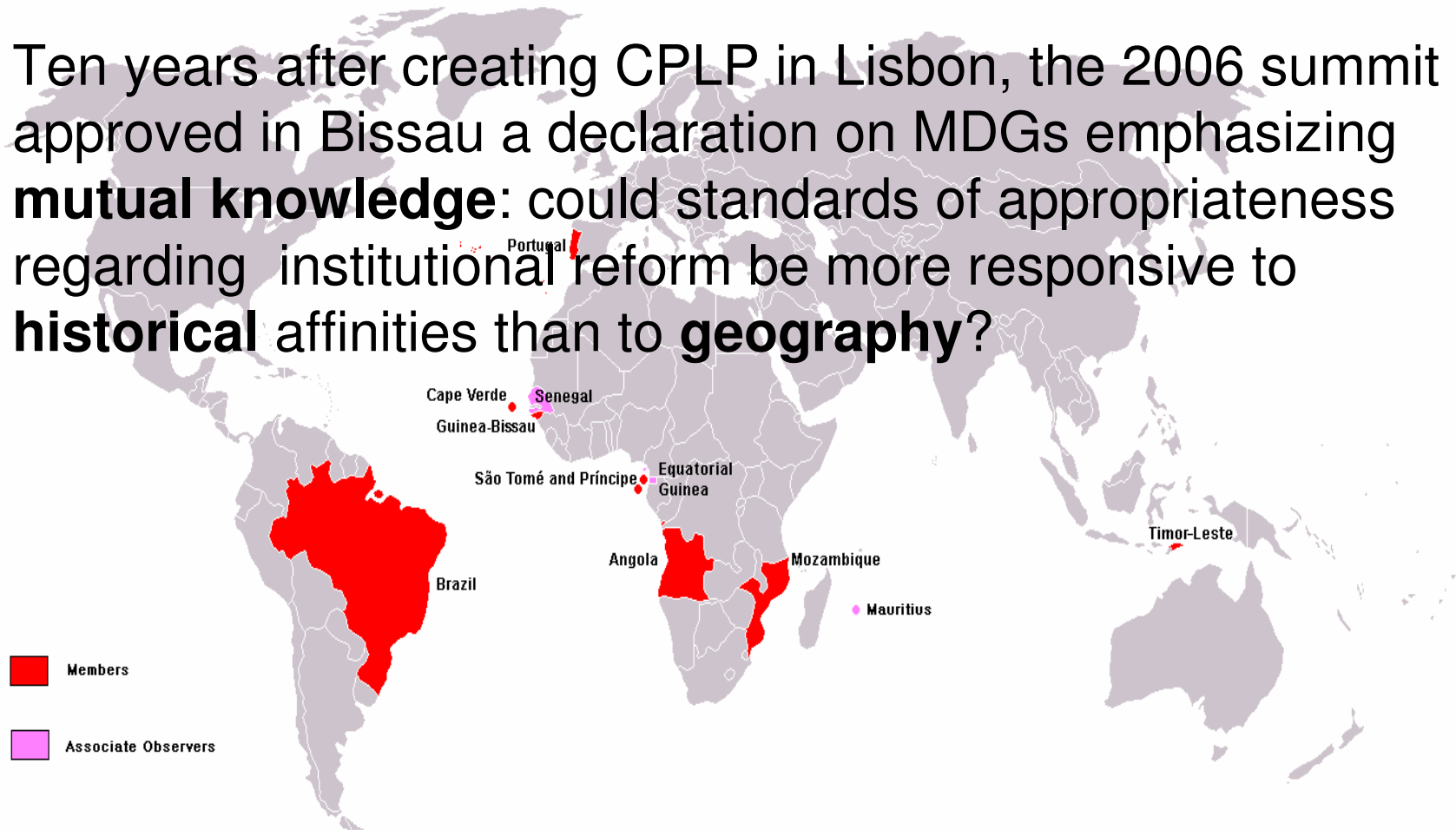
International cooperation beyond OECD

- The EU attests to the advantages of regional integration among like-minded countries – especially in the wake of the Lisbon treaty.

- Given the slow motion of the EU, regional cooperation may neither produce knowledge of effective policies or institutions nor create conditions for their implementation.

- Moreover, outside of the OECD, mutual knowledge (produced from within a cooperative framework) is more limited and the data harder to compare.

Management of diversity in the history of the Portuguese empire is forgotten

- The departure of the Crown to Brazil in 1807 and the liberal revolution of the 1820s influenced the transition of Brazil from empire to republic in 1890.

- The successive revolutions in 1910, 1918, 1926 and 1974 influenced the diverse initial experiences of PALOP with political and economic freedom. The presumption that political and economic freedom may be incompatible and the experience with successive IMF adjustment programs is also be relevant. Yet **diversity still feared by CPLP**.

Mutual Knowledge among Community of Portuguese-speaking Countries (CPLP)

Ten years after creating CPLP in Lisbon, the 2006 summit approved in Bissau a declaration on MDGs emphasizing **mutual knowledge**: could standards of appropriateness regarding institutional reform be more responsive to **historical** affinities than to **geography**?

Portugal

Cape Verde   Senegal

Guinea-Bissau

São Tomé and Príncipe   Equatorial Guinea

Timor-Leste

Angola   Mozambique

Brazil   Mauritius

■ Members

■ Associate Observers

EU, PALOP, CPLP cooperation

The five Portuguese-speaking African countries (CPV, MOZ, Angola, Guinea-Bissau, Sao Tome e Principe) formed a group known as **PALOP** in 1979.

PALOP held ten summits until 1992, when the first **Regional Indicative Programme with the EU** was signed .

A Memorandum of Understanding with the European Commission was signed on the eve of the **2007 Europe-Africa summit** in Lisbon, extended to **CPLP**.
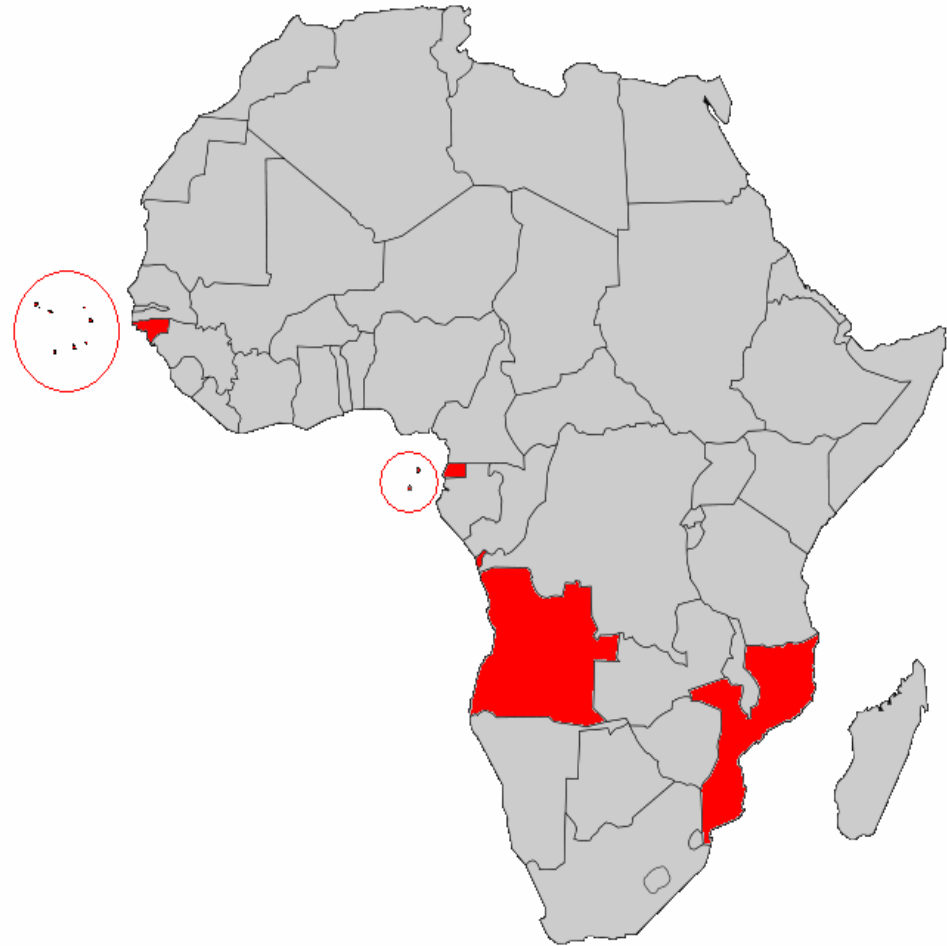
Why Cape Verde & Mozambique?

Widespread recognition that both countries are actively seeking to overcome adverse developmental conditions due to:

Geography - Cape Verde is a small island state with little natural resources and a difficult climate.
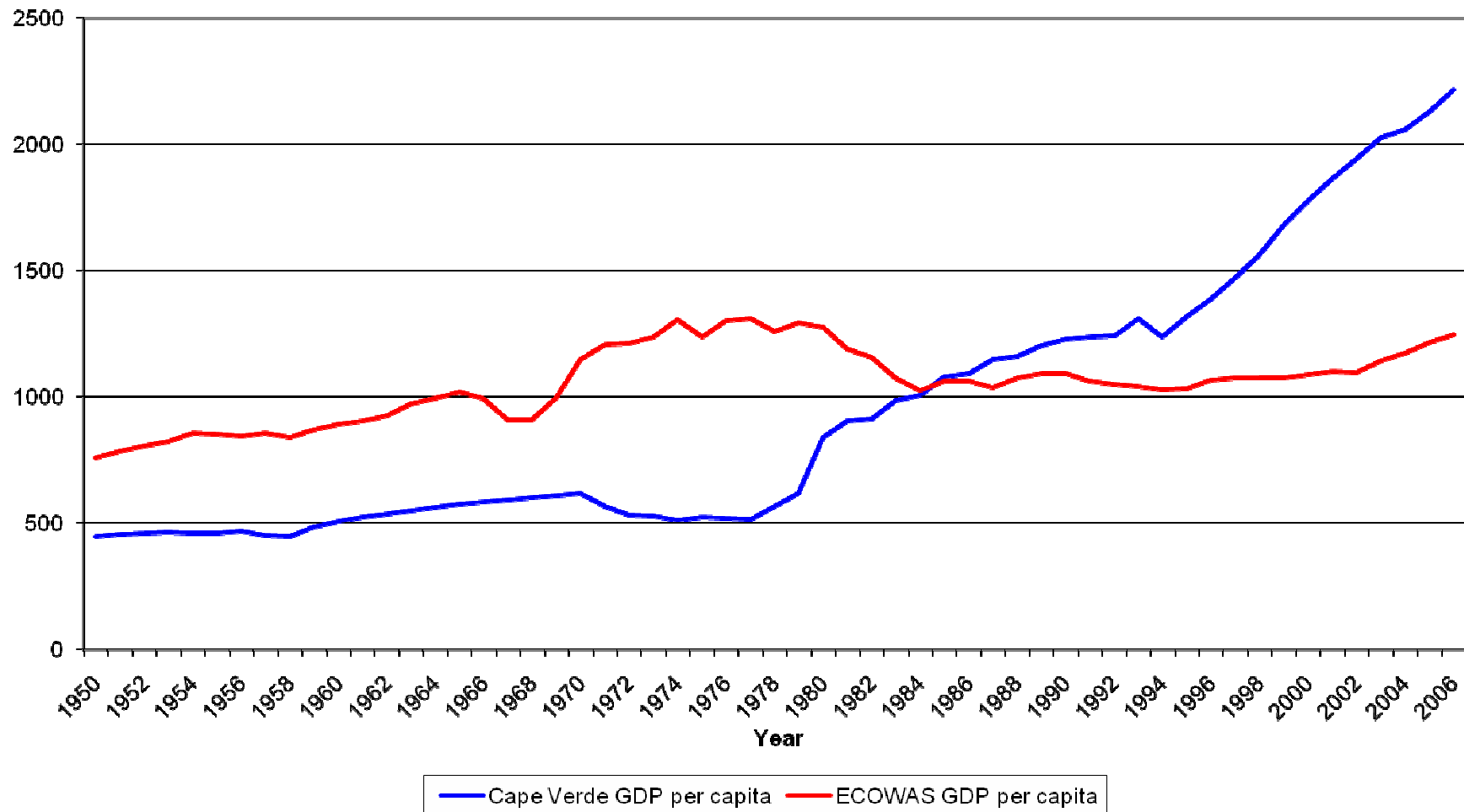
History - Mozambique fought a protracted civil war following its independence from Portugal in the mid 1970s.

Relative sizes in 2003 (Maddison database)

	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%

Cape Verde and ECOWAS - YCAP 1990GK$

Mozambique and SADC– YCAP 1990 GK$

Legend:
— Mozambique GDP per capita
— SADC GDP per capita
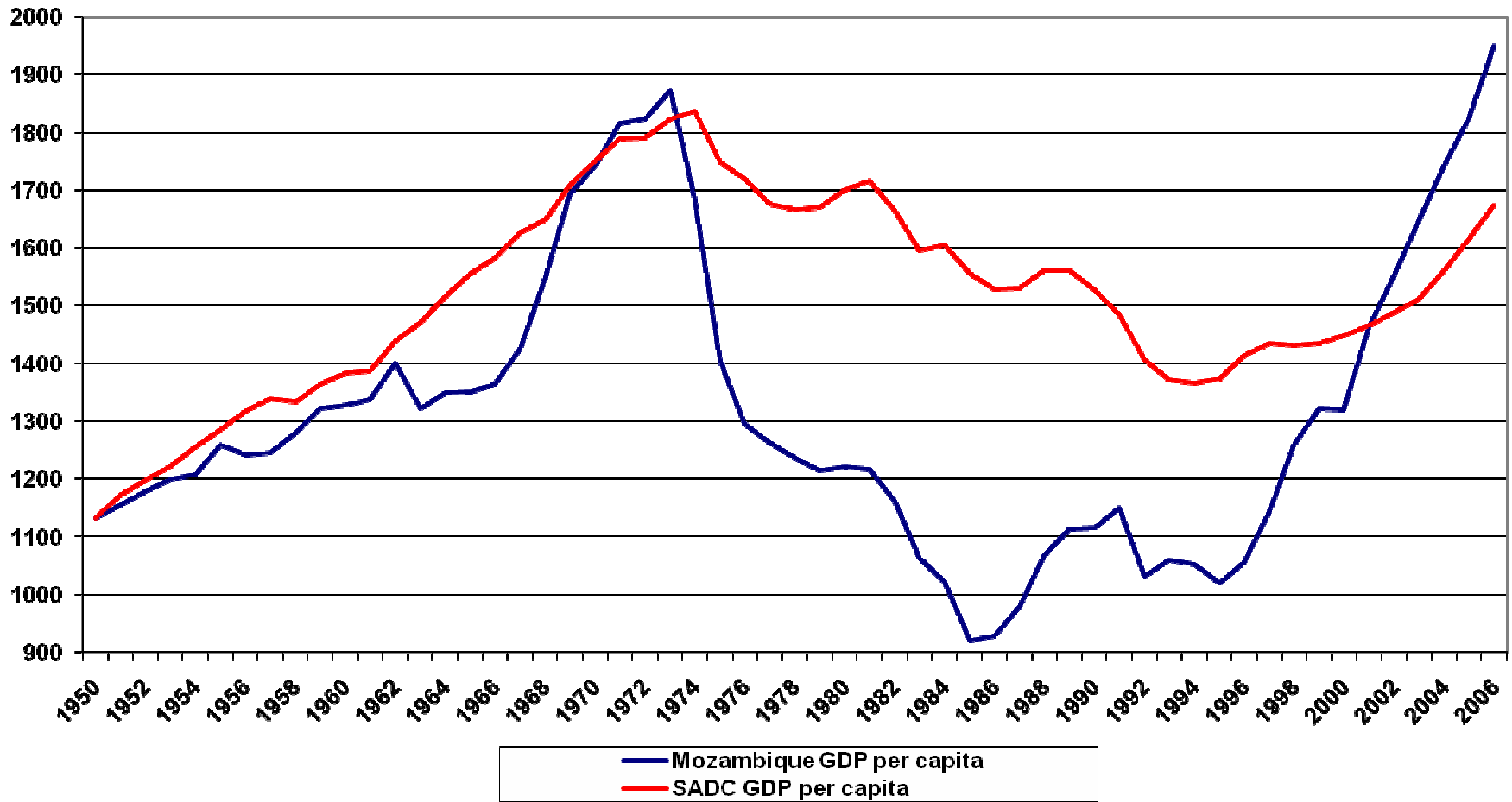
Foreign Trade and Economic Growth

- From 1976 to 2005, a new good was exported by Cape Verde every 5 ½ years; from 2001 to 2005, a product ceased to be exported from Mozambique every 2. Yet **in both ECOWAS and SADC diversification is associated with convergence**.

- The growth pattern in PALOP is more volatile than SSA, with more in the 1950s and the last decade.

- The GDP growth differential is 2% for Cape Verde relative to ECOWAS while Mozambique is slightly below SADC. ECOWAS and SADC show that **real appreciation hinders growth**.

2. Number equivalent 5 digit Herfindahl Index (% p.a.)

Cape Verde vs. ECOWAS, Mozambique vs SADC

	1961-1965	1966-1970	1971-1975	1976-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	_1976-2005_
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

PALOP vs SSA – YCAP 1990 GK K$
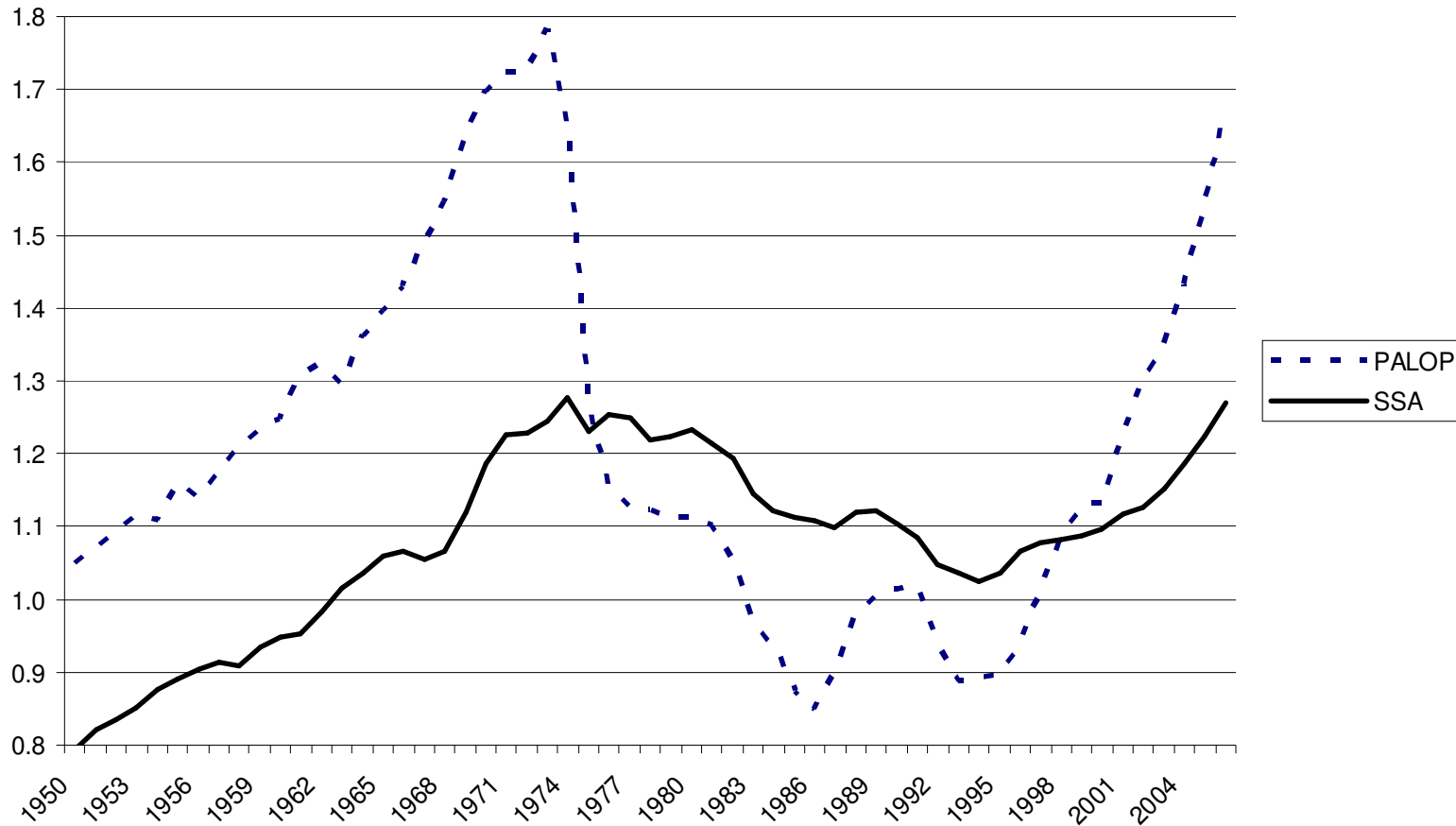
ECOWAS, SADC, PALOP, SSA comparisons

- *Macroeconomic Policy and Financial Reputation*, building on Macedo et al (2009b) for PALOP (slides from Lopes, 2009);

- *MDGs and Governance Indicators*, based on Macedo et al. (2007b) (slides from World Bank Enterprise Surveys).

- *Foreign Trade and Economic Growth*, dealing with **ygap** and **neq5** interaction in ECOWAS and SADC (own slides and Cabral, 2009 for SSA);

Macroeconomic Policy and Financial Reputation

- Following Eichengreen et al (1996), exchange market pressure (EMP) was calculated as a weighted sum of the nominal depreciation rate, changes in foreign reserves and changes in the interest rate differential (Appendix 1) but these variables were subsequently dropped.

- Results in annex 2 using monthly data since the mid 1990s suggest that fixers have better financial reputation than floaters, but in terms of conditional EMP mean and volatility Mozambique is close to Seychelles, who pegs to the dollar.

Conditional mean EMP
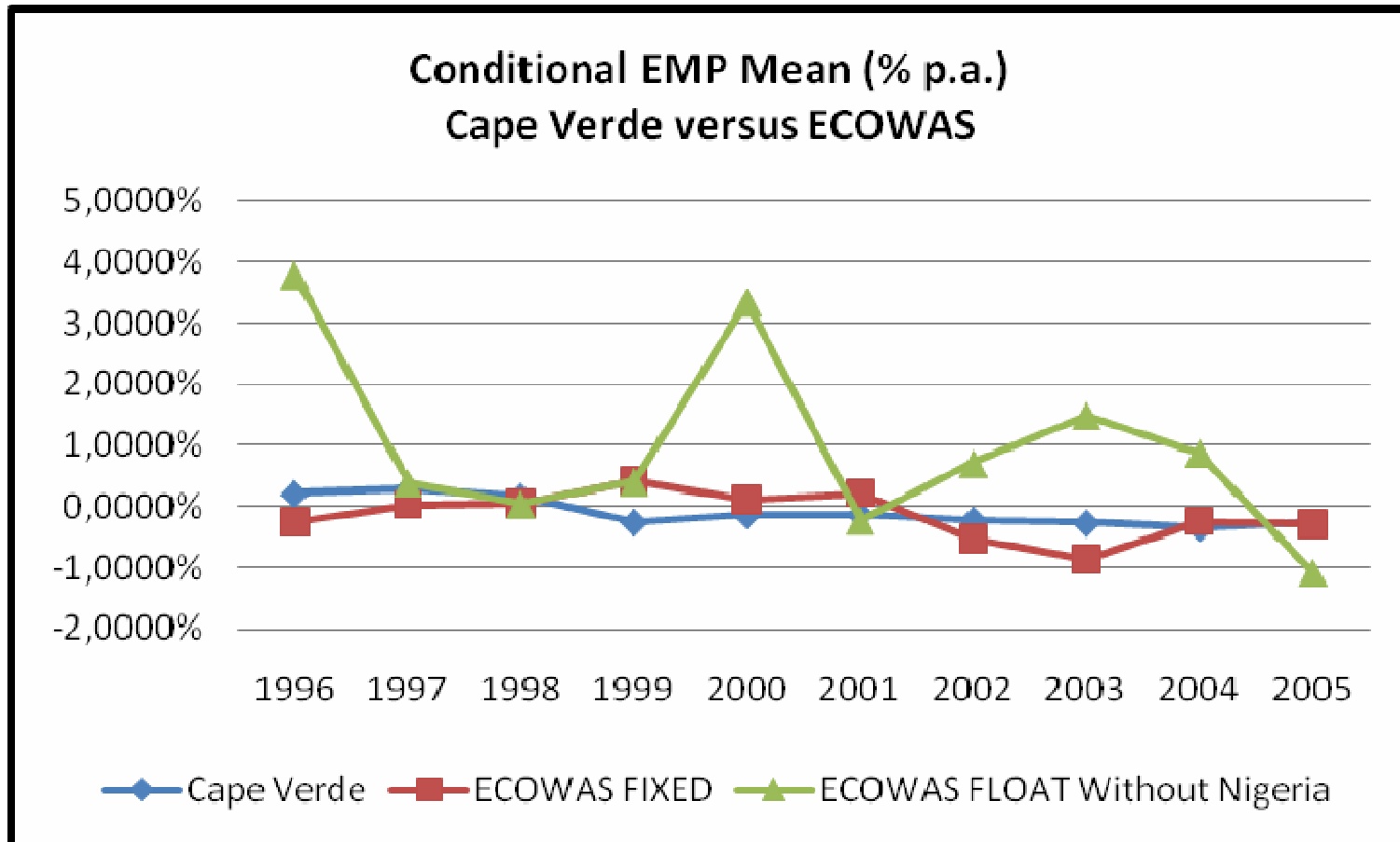
Conditional mean EMP
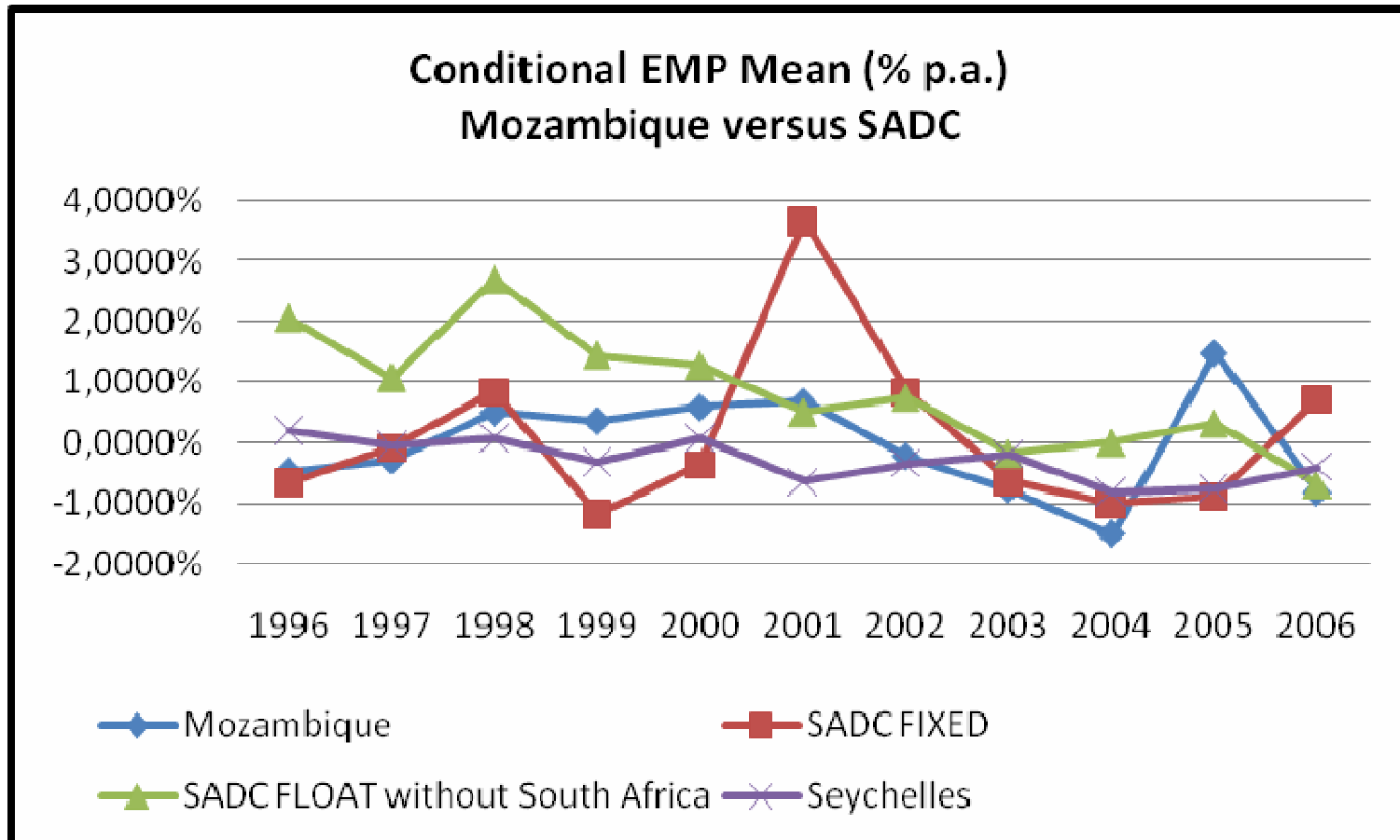
Conditional EMP Volatility

Conditional EMP Volatility (st.dev. % p.a.)
Cape Verde versus ECOWAS
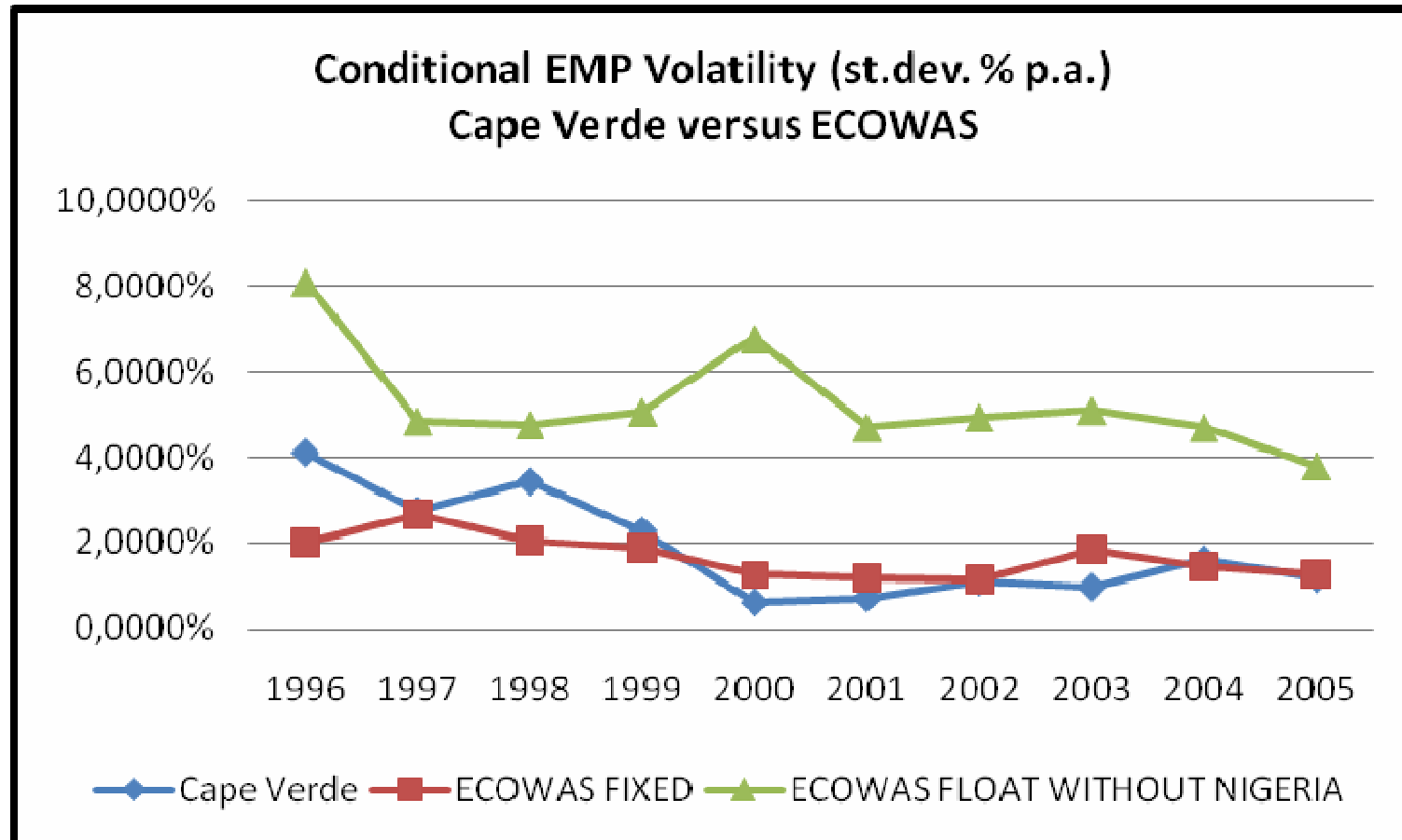
Conditional EMP Volatility
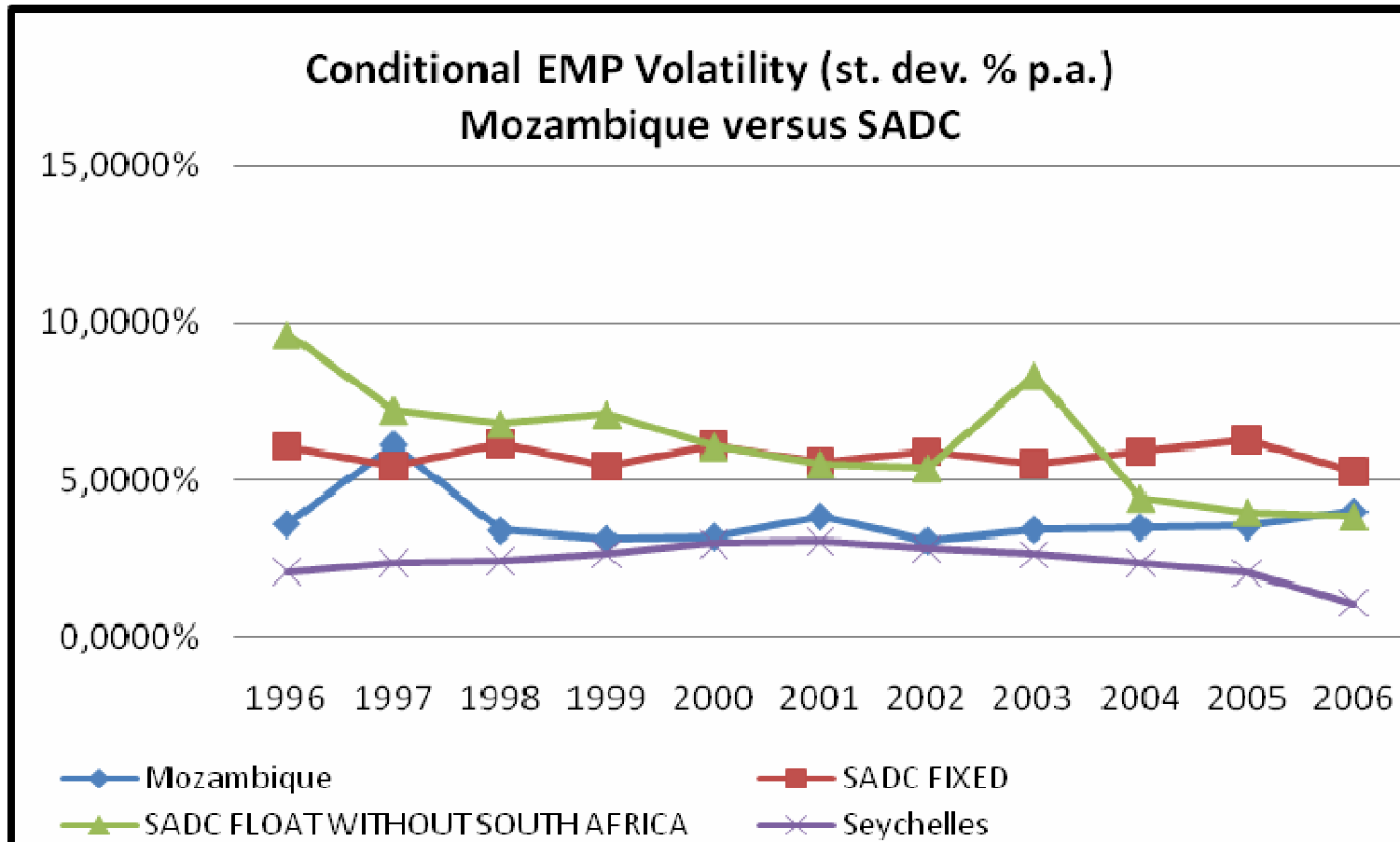
3. World Bank Governance Indicators (1996-2007)

	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

MDGs and Governance Indicators

- The information on MDGs is drawn from Macedo et al (2007b) and the 2009 *African Economic Outlook*: data before the crisis show the percentage of satisfactory outcomes among PALOP increased from 26% to 31% and Cape Verde is better placed than Mozambique.

- The 28 indicators for which both Cape Verde and Mozambique had at least 10 answers in the 2006 and 2007 *World Bank Enterprise Surveys* are compared to ECOWAS, SADC, PALOP and SSA.

World Bank Enterprise Surveys

- Cape Verde has more developed financial markets, greater macroeconomic stability, lower corruption and a state where rule of law is more grounded but less export-oriented firms, less technology licensed to foreigners, higher taxes and a heavier regulatory framework.

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

7. International Trade (=5, **best**/<u>worst</u>)

country/ comparator	CV	MZ	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

8. Infrastructure (=5, **best**/<u>worst</u>)

country/ comparator	CV	MZ	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

9. Finance, Competition, Education (**best**/<u>worst</u>)

country/ comparator	CV	MZ	SSA	SAD	ECW	LOP	code
Credit Line	<u>47</u>	**13**	24	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

10. Institutions - stability, corruption, rule of law (**best**/<u>worst</u>)

country/ comparator	CV	MZ	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	<u>0</u>	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

11. Quality of regulation (**best**/<u>worst</u>)

country/ comparator	CV	MZ	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	**74**	<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

2 - An Interpretative Framework

- A nation's resource endowments and its productivity determine its economic well-being and how fast it can grow.

- 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.

- A country's endowments may also determine how much it trades with the rest of the world in terms if goods, services and assets, taking advantage of **Globalization**.

- Moreover, a country with good **Governance** may likely increase its endowment and well-endowed countries may afford investing more resources to build well-functioning institutions.

- Bonaglia, Macedo, Bussolo (2009) describe **G&G** interaction.

How G&G interact with convergence

- Waves of **globalization** in16th, 19th and 20th-21st centuries interacted with different forms of **governance** responses: G&G interaction is **context-specific**, as defined by space (geography) and time (history).

- The two-way interaction between **democracy** and globalization found over the entire 1870-2000 period turns out to be sensitive to regional context and **convergence.**

- Macedo et al. (2007a) add the gap in per capita income relative to the frontier to Bonaglia et al. (2009) G&G interaction and test a **three-way interaction** model on the Eichengreen and Leblang (2006) data for 1970-2004 measuring democracy by the political and economic **freedom** it allows citizens.

Globalization, Freedoms and Convergence: a summary of three way interactions
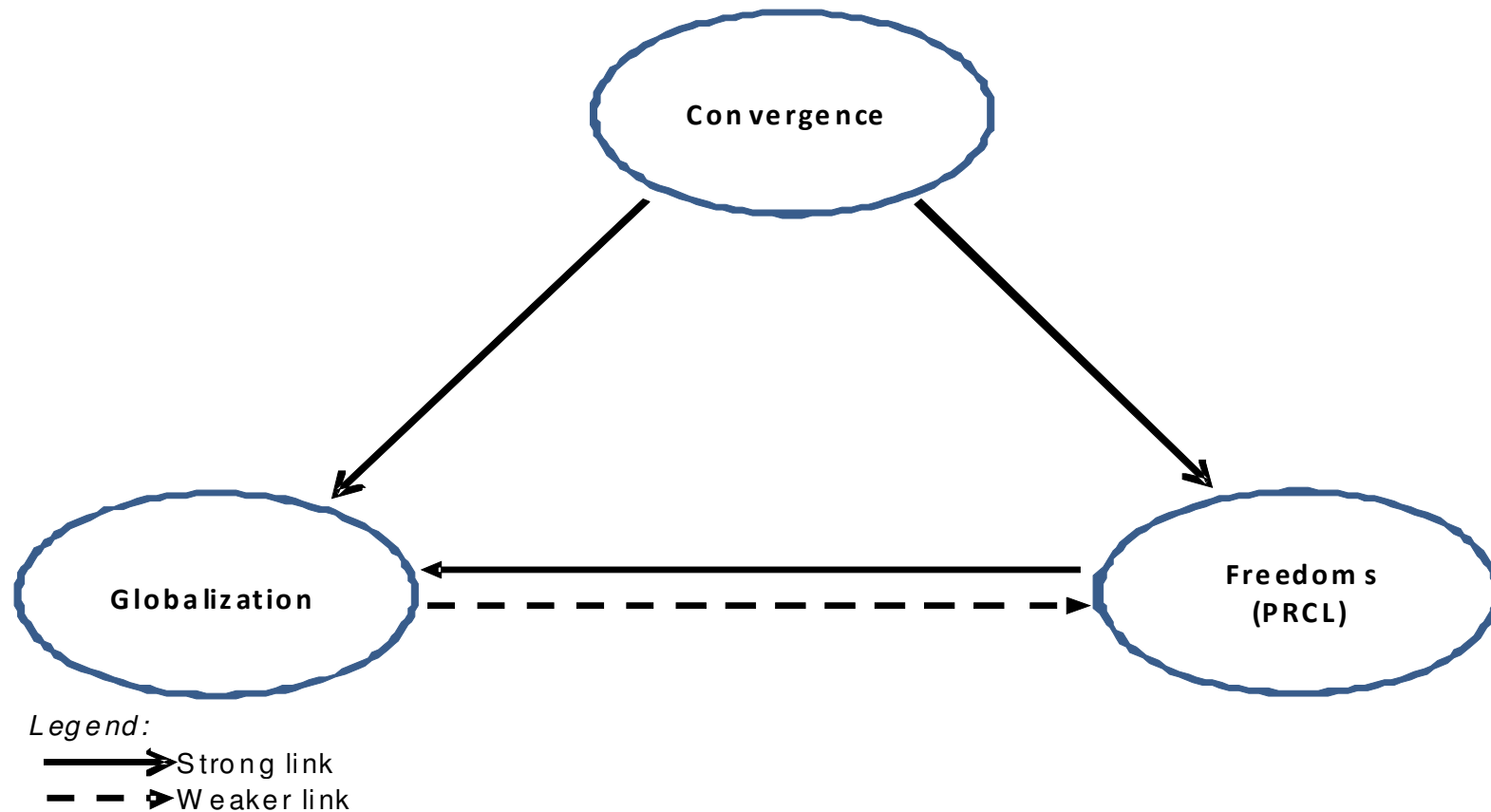
Source: Macedo, Oliveira-Martins, Pereira (2007a)

How do we assess success?

- Study the bi-directional relationship between diversification and convergence, given the insights of our interpretative framework;

- 1) Seek to identify policy and institutional determinants of successful export diversification-economic convergence combinations for ECOWAS and SADC, and

- 2) Seek to assess to what extent these apply to Cape Verde and Mozambique;

3 - Empirical Analysis

- **Model:** Meaningful characterization of each country's diversification-convergence, which is affected by policy and institutional variables, given control variables;

- **Economic convergence:** use Income gap, given by $ygap_{it} = 1 - (ypc_{it} / ypc_{USA,t})$, so that gap narrows as ypc_{it} increases.

- **Export diversification:** use the number equivalent index ($neq5it$), which is calculated as the inverse of the Herfindahl Index (5-digits, SITC rev.2);

Comparative descriptions ECOWAS, SADC

- Next slides show Number Equivalent of Exports (**neq5**) and Income Gap to Frontier (**ygap**) as proxies for globalization and convergence in CPV/ECOWAS and MOZ/SADC, comparative graphs of ygap and other variables.

- Comparative indicators are listed in Appendix 1 (Inflation in consumer prices; Government Budget Balance % GDP; Exports plus Import % GDP; Political Freedom; Economic Freedom; Life expectancy at birth are also shown in figures).

ECOWAS: Relation between Income Gap & Number Equivalent

ECOWAS

INCOME GAP TO FRONTIER vs. NUMBER EQUIVALENT MEASURE

Lowess smoothing, bandwidth = 0.8
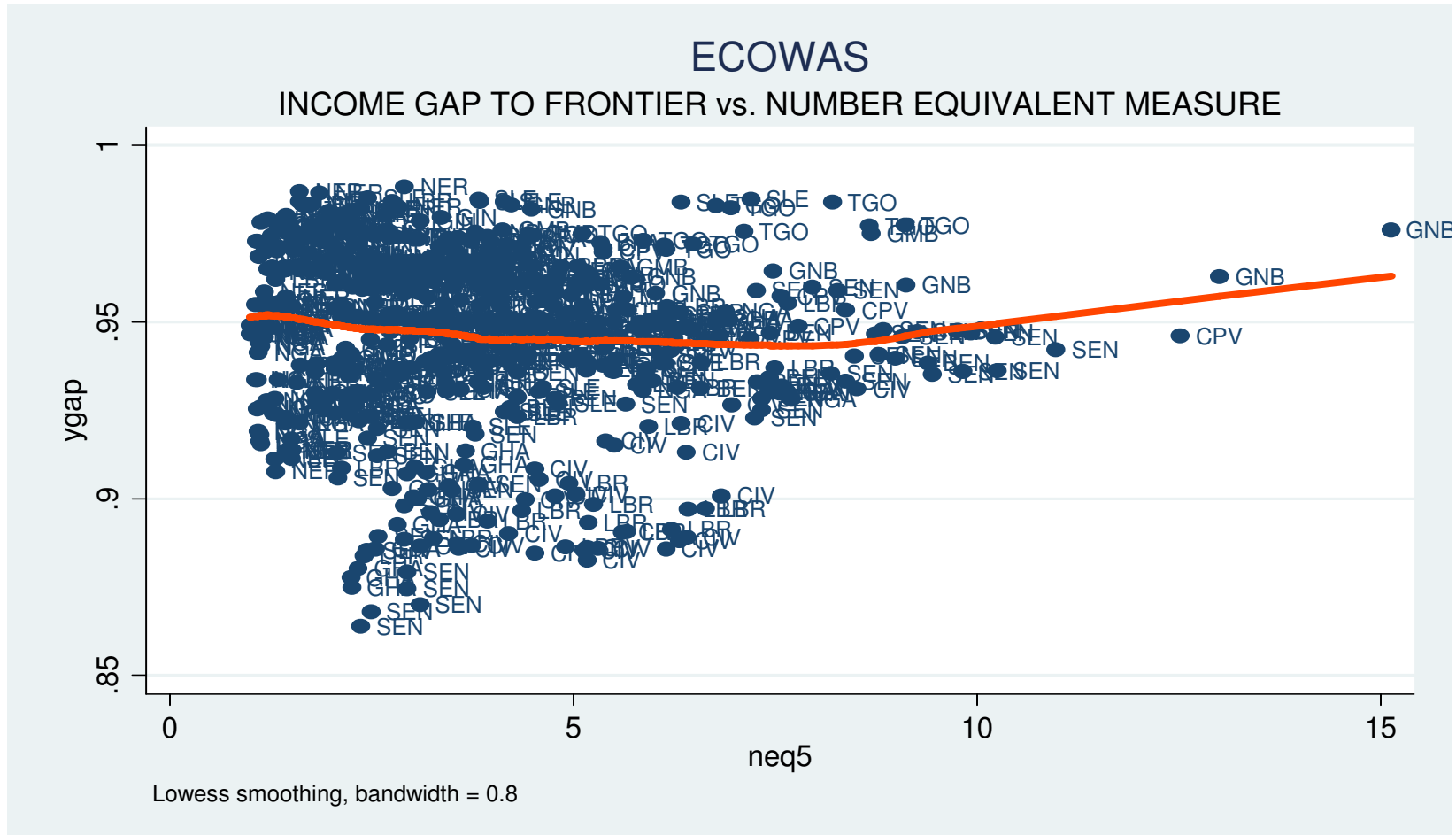
ECOWAS country means: Income Gap & Number Equivalent
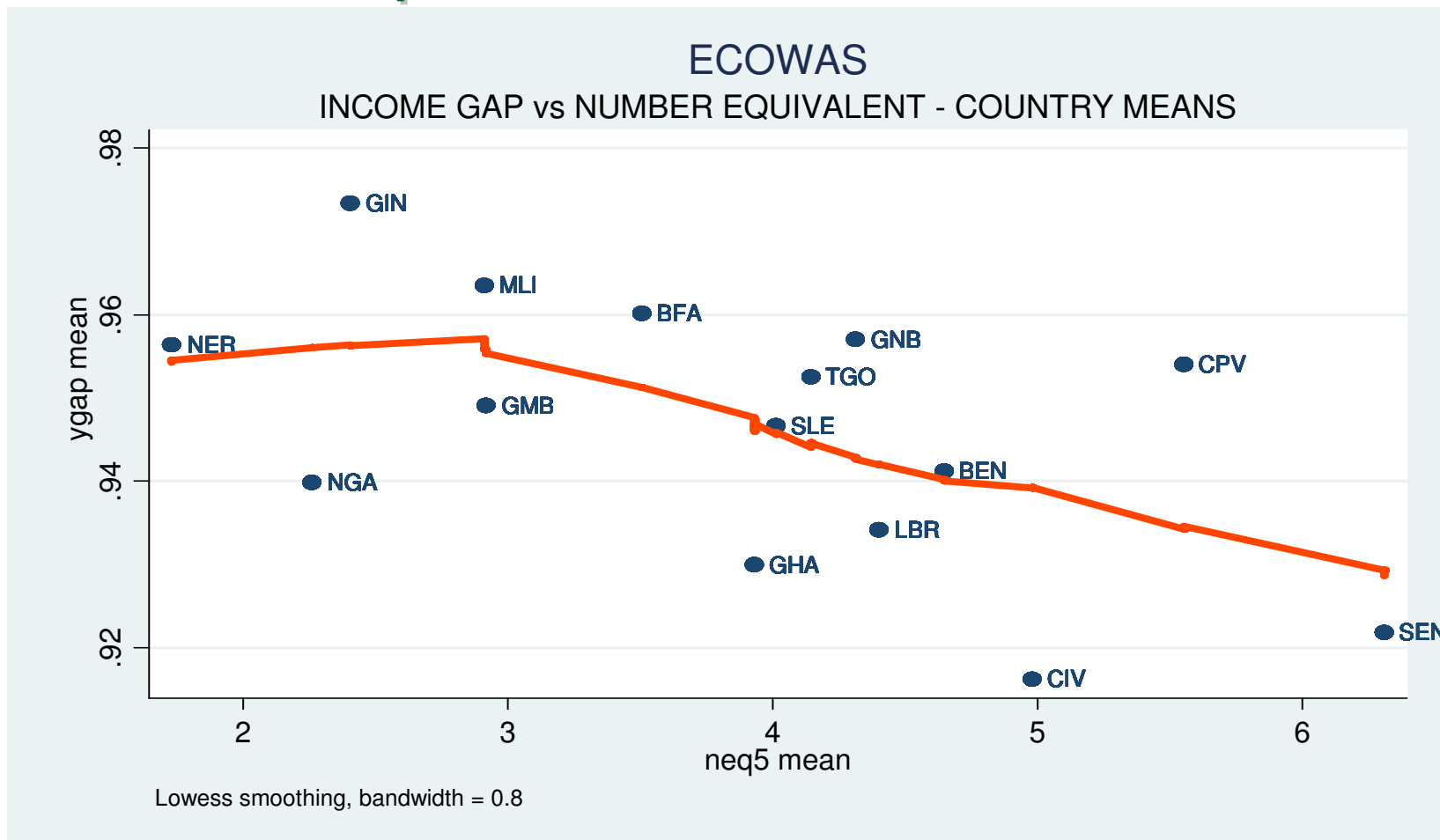
ECOWAS
INCOME GAP vs NUMBER EQUIVALENT - COUNTRY MEANS

Lowess smoothing, bandwidth = 0.8

SADC: Relation between Income Gap & Number Equivalent

SADC
INCOME GAP vs. NUMBER EQUIVALENT

Lowess smoothing, bandwidth = 0.8

SADC country means: Income Gap & Number Equivalent

SADC
INCOME GAP vs NUMBER EQUIVALENT - COUNTRY MEANS

Lowess smoothing, bandwidth = 0.9
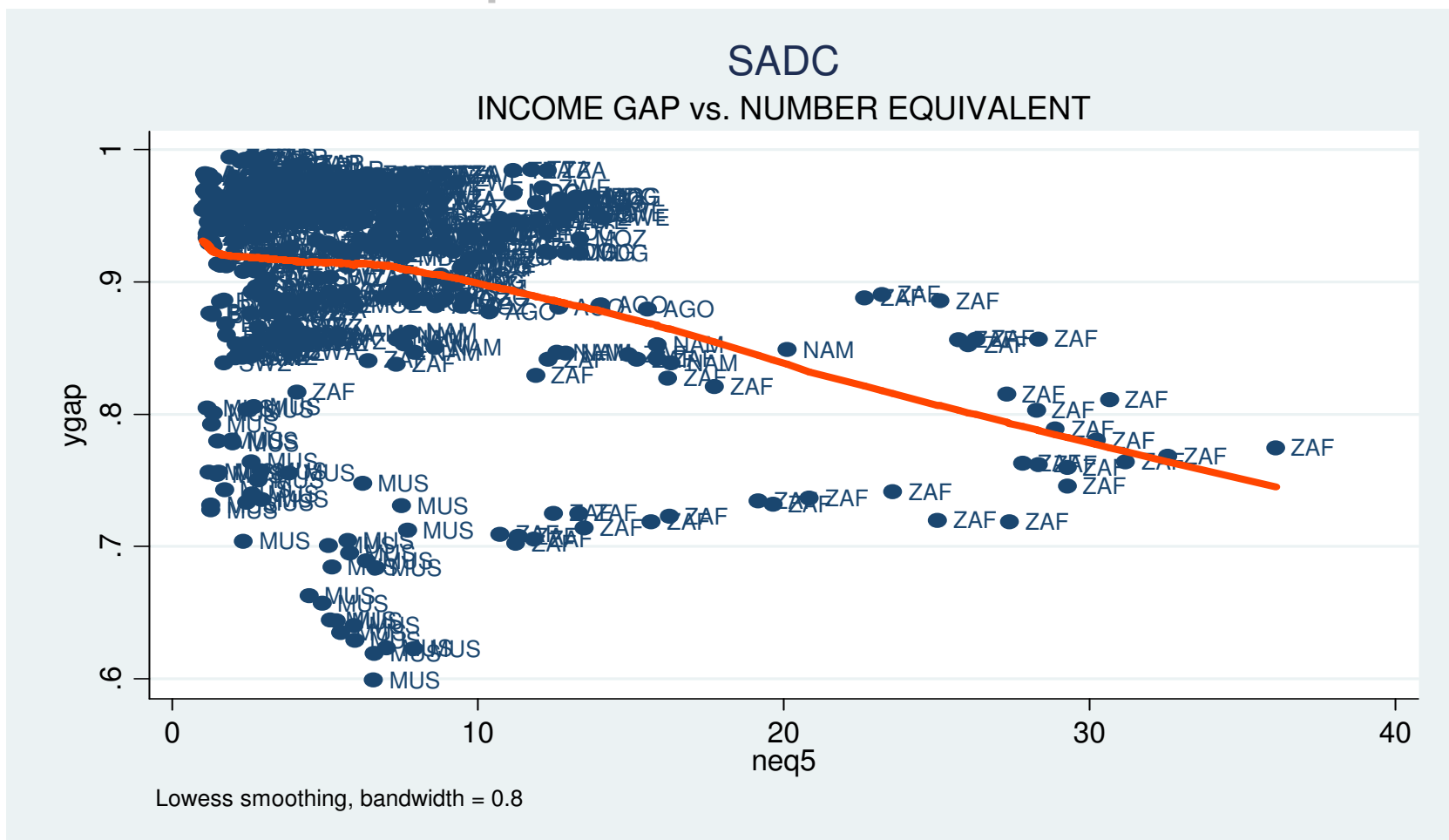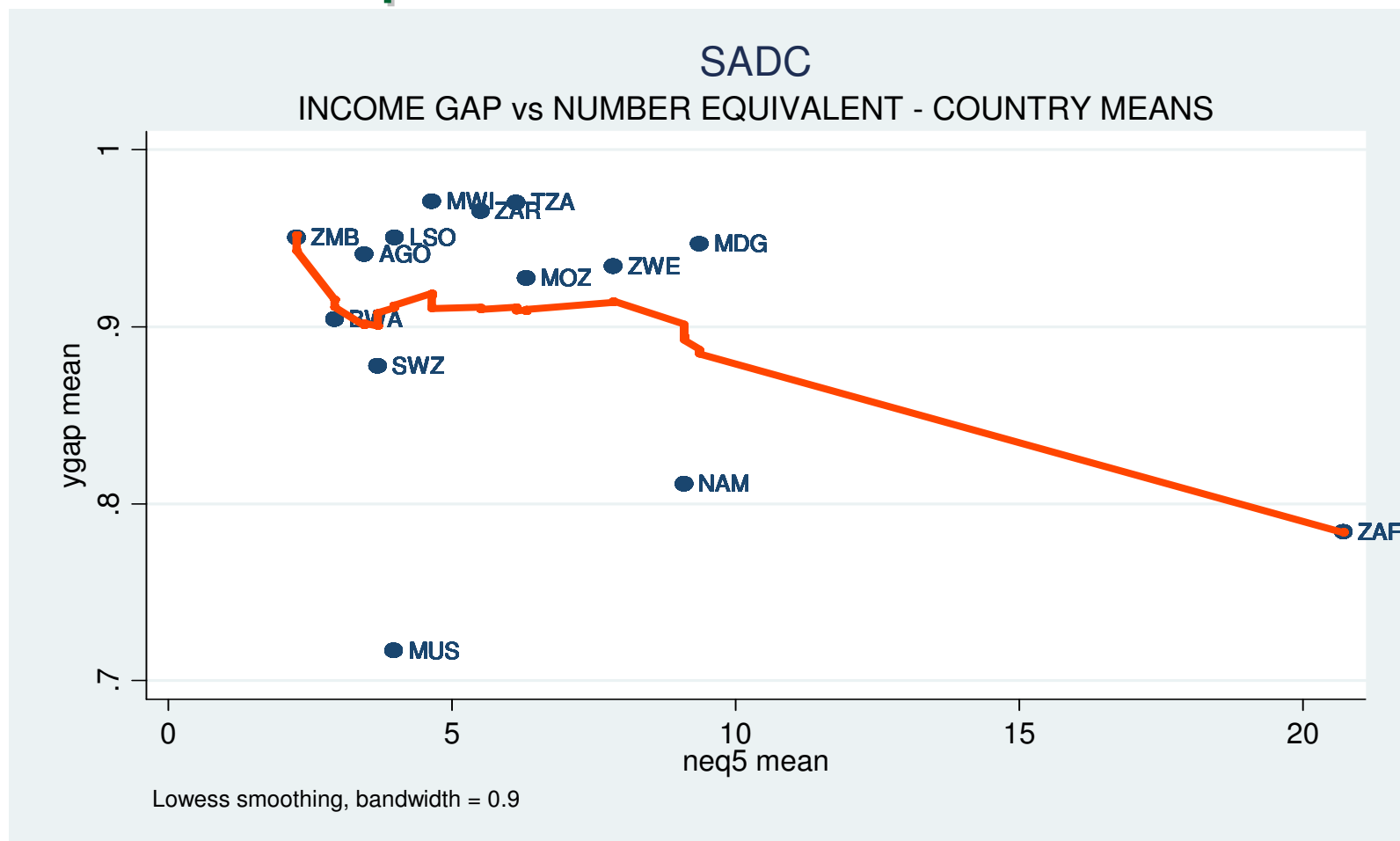
ECOWAS, Cape Verde: Income Gap & Government Deficit – Country Means

ECOWAS
INCOME GAP vs GOVERNMENT DEFICIT - COUNTRY MEANS

Lowess smoothing, bandwidth = 0.8
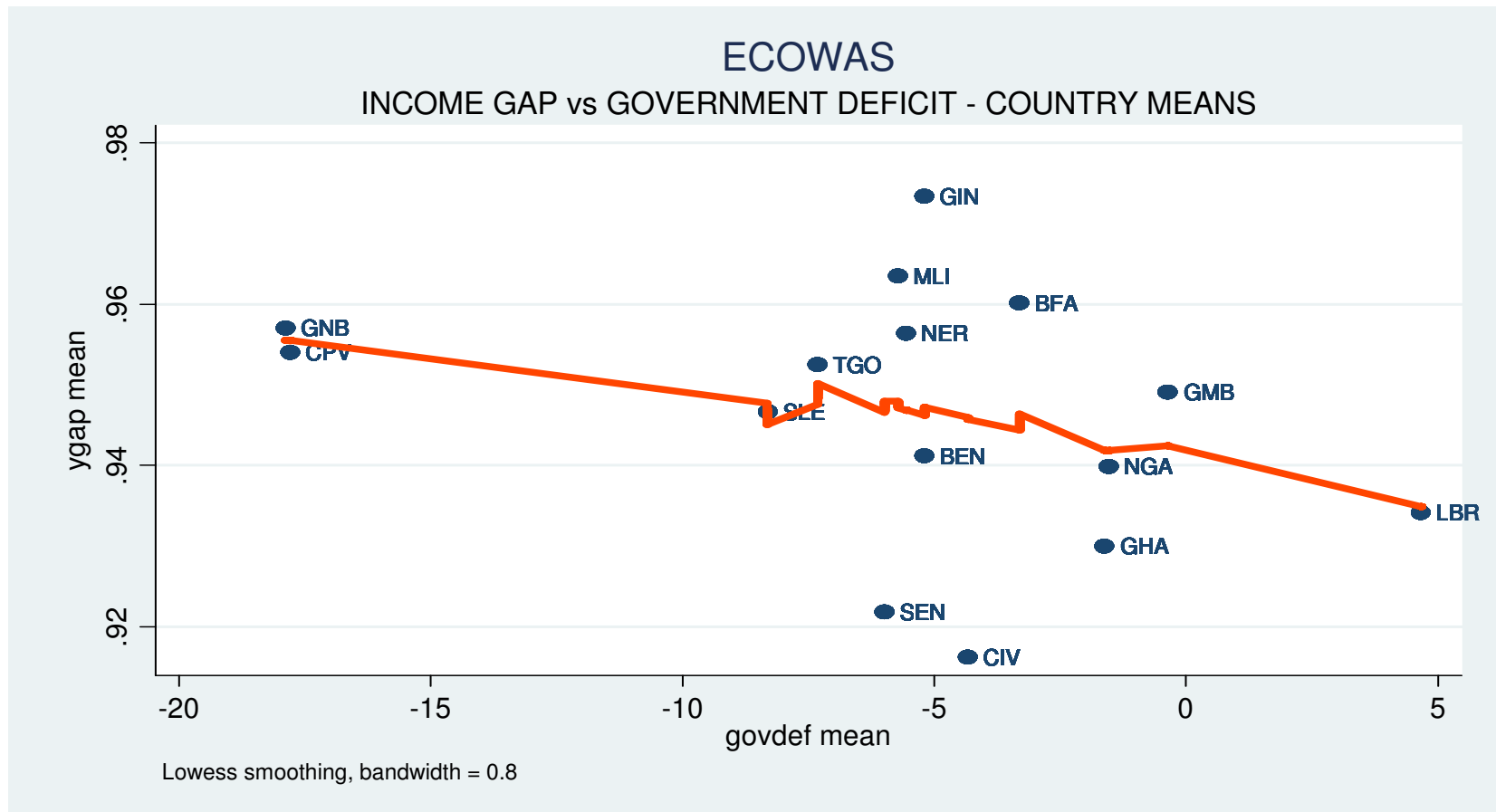
ECOWAS Income Gap & Government Deficit – Time Means

ECOWAS
INCOME GAP vs GOVERNMENT DEFICIT - TIME MEANS

Lowess smoothing, bandwidth = 0.8

SADC, Mozambique: Income Gap & Government Deficit – Country Means

SADC

INCOME GAP vs GOVERNMENT DEFICIT - COUNTRY MEANS

Lowess smoothing, bandwidth = 0.8

SADC: Income Gap & Government Deficit – Time Means

SADC

INCOME GAP vs GOVERNMENT DEFICIT - TIME MEANS

Lowess smoothing, bandwidth = 0.8
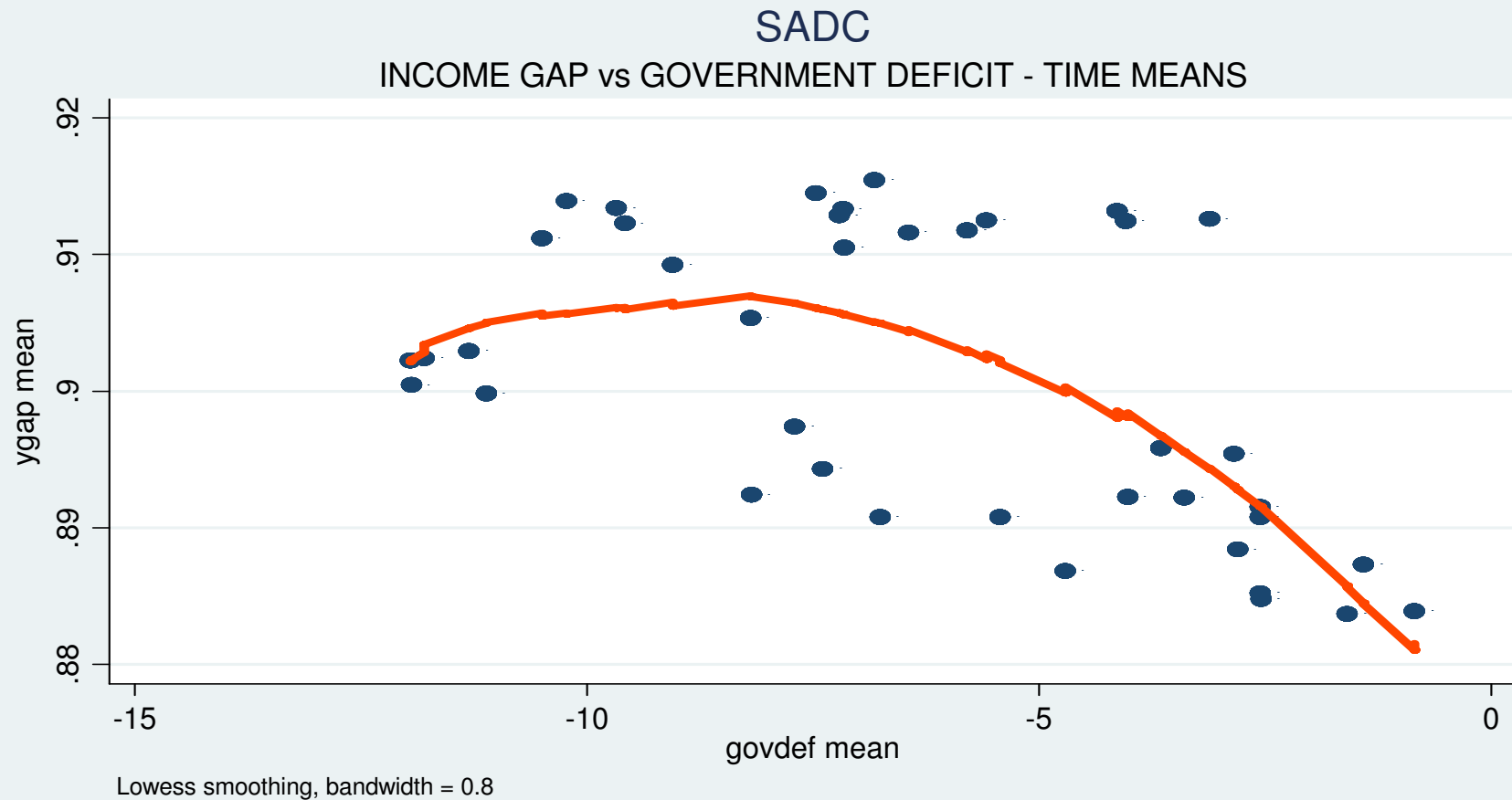
ECOWAS, Cape Verde: Freedoms

ECOWAS

ECONOMIC vs POLITICAL FREEDOM - COUNTRY MEANS

Lowess smoothing, bandwidth = 0.8
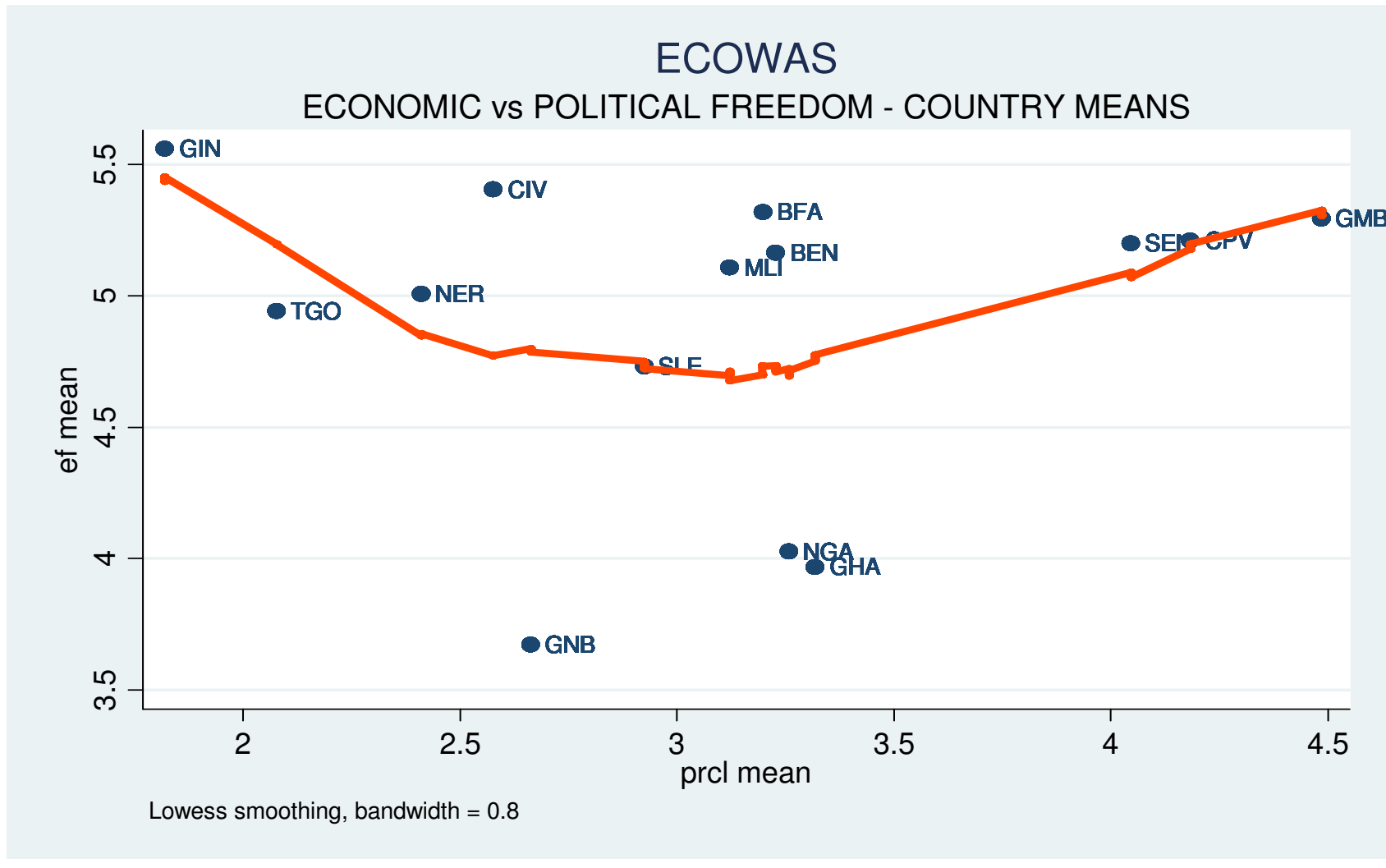
SADC, Mozambique: Freedoms

SADC

ECONOMIC vs POLITICAL FREEDOM - COUNTRY MEANS

Lowess smoothing, bandwidth = 0.8

ECOWAS: GDP per capita and Real Effective Exchange Rate (% p.a.)

ECOWAS
GDP PER CAPITA GROWTH vs REER GROWTH

Lowess smoothing, bandwidth = 0.8
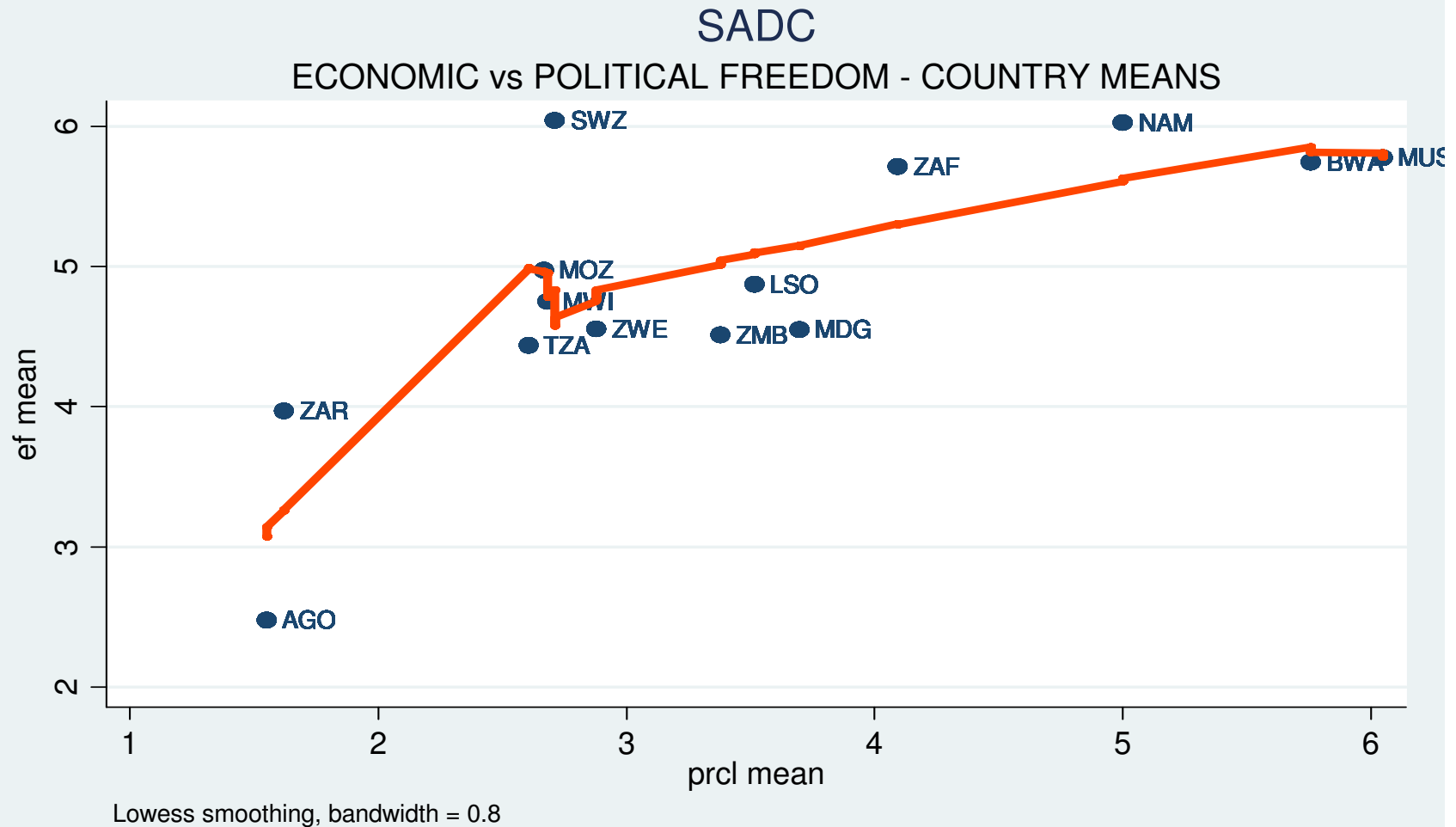
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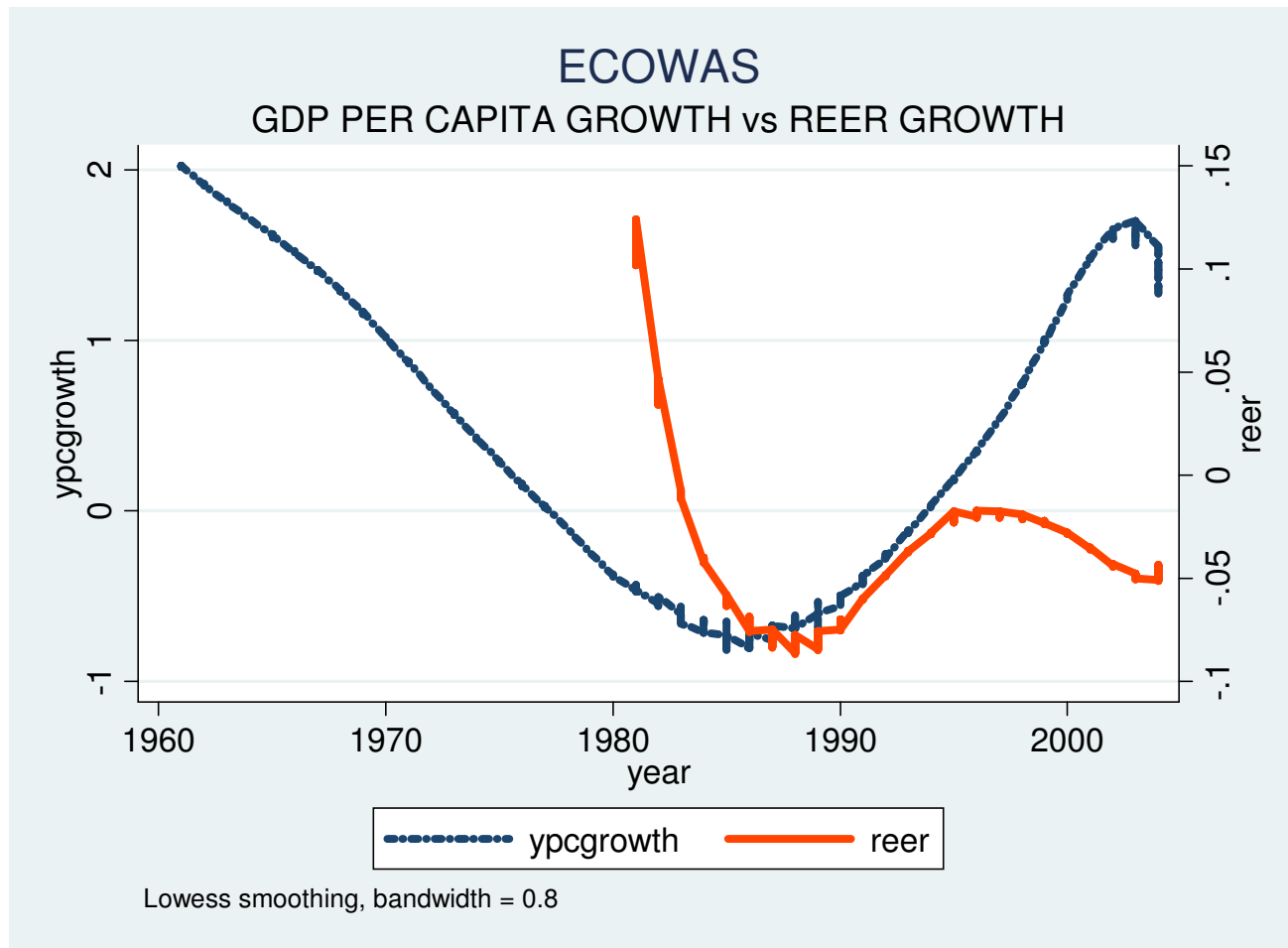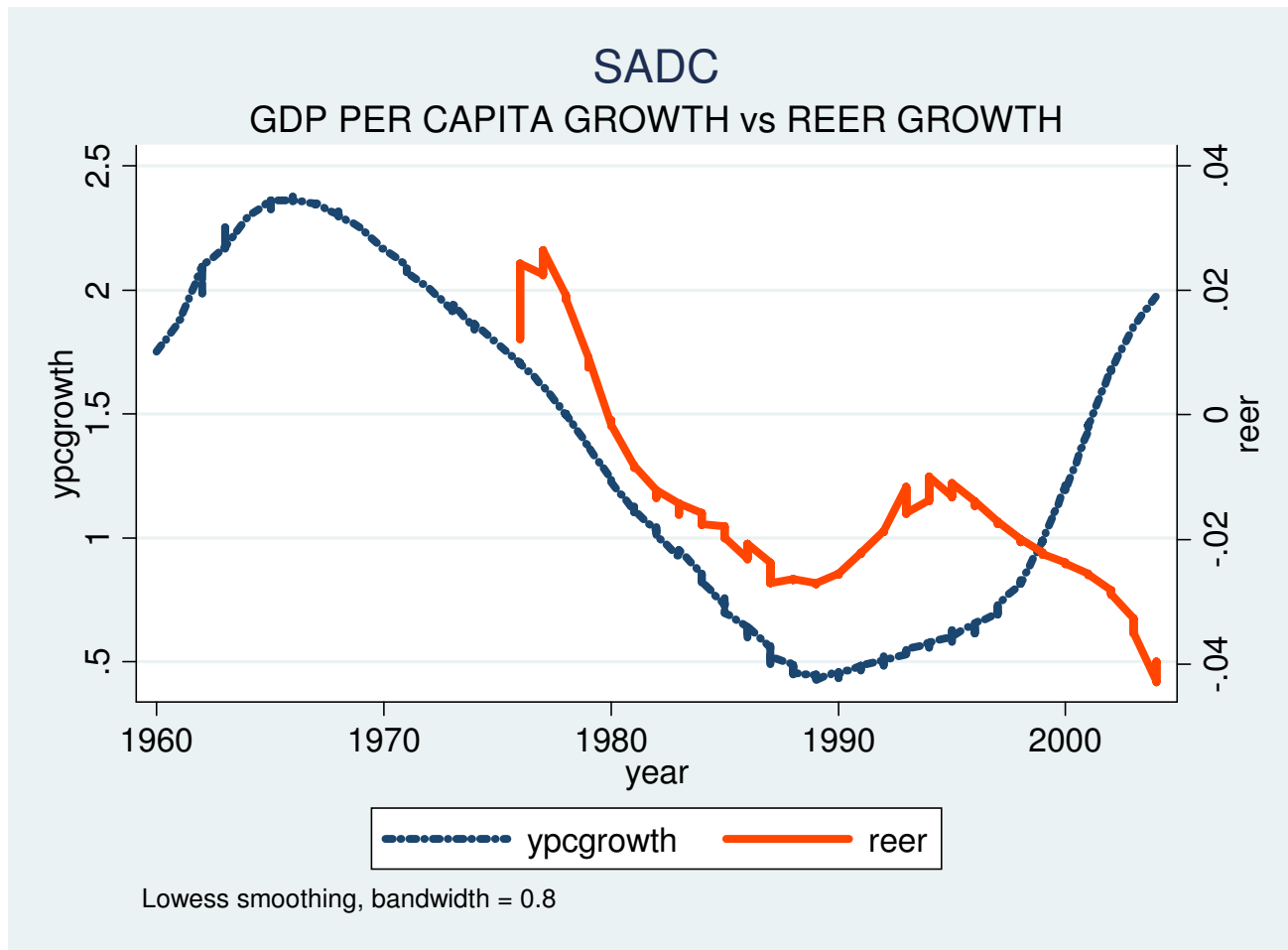
Modelling Strategy

- A system equation approach is better suited to model interdependence between variables.

- To address the problem of endogeneity due to simultaneity bias we use Three-Stage Least Squares (3SLS).

- We also estimate the diversification-convergence relation using alternative techniques (OLS, 2SLS) and obtain broadly consistent results (appendix 2).

Model

(1) $ygap_{it} = a_1.neq5_{it} + \delta_1.(Policy_{it}) + \beta_1.(Institutions_{it}) + \gamma_1.Z_{1it} + \varepsilon_{1 \cdot it}$

(2) $neq5_{it} = a_2. ygap_{it} + \delta_2.(Policy_{it}) + \beta_2.(Institutions_{it}) + \gamma_2.Z_{2it} + \varepsilon_{2 \cdot it}$

- **Sample:** Panel data *t = 1960-2004* and *i = 1,…, N* countries;

- **Explanatory variables:** policy (*inflation, government deficit and degree of openness*) and institutional (*political and economic freedom, age of constitution, age of democracy, number of prior transitions to dictatorship*). {*Zi*} is a set of control variables.

ECOWAS vs SADC – High Regime

ECOWAS	SADC
$ygap \downarrow \rightarrow neq5 \uparrow$ $neq5 \uparrow \rightarrow ygap \downarrow$	$ygap \downarrow \rightarrow neq5 \uparrow$ $neq5 \uparrow \rightarrow ygap \downarrow$
$open \uparrow \rightarrow ygap \downarrow$ $govdef \uparrow \rightarrow neq5 \downarrow$ $open \uparrow \rightarrow neq5 \downarrow$	$govdef \uparrow \rightarrow neq5 \uparrow$
$prcl \uparrow \rightarrow neq5 \uparrow$ $ef \uparrow \rightarrow neq5 \uparrow$	$prcl \uparrow \rightarrow ygap \downarrow$ $ef \uparrow \rightarrow ygap \downarrow$ $prcl \uparrow \rightarrow neq5 \downarrow$ $ef \uparrow \rightarrow neq5 \downarrow$
$legaleng \rightarrow ygap \downarrow$	

ECOWAS vs SADC – Full Sample

ECOWAS	SADC
$ygap \downarrow \rightarrow neq5 \uparrow$ $neq5 \uparrow \rightarrow ygap \uparrow$	$ygap \downarrow \rightarrow neq5 \uparrow$ $neq5 \uparrow \rightarrow ygap \downarrow$
$inflation \uparrow \rightarrow ygap \downarrow$	$govdef \uparrow \rightarrow ygap \downarrow$ $govdef \uparrow \rightarrow neq5 \downarrow$ $open \uparrow \rightarrow neq5 \downarrow$
$prcl \uparrow \rightarrow ygap \downarrow$ $ef \uparrow \rightarrow ygap \downarrow$ $ef \uparrow \rightarrow neq5 \uparrow$	$prcl \uparrow \rightarrow ygap \downarrow$ $ef \uparrow \rightarrow ygap \uparrow$ $prcl \uparrow \rightarrow neq5 \downarrow$ $ef \uparrow \rightarrow neq5 \uparrow$
$cpv \rightarrow ygap \downarrow$ $sen \rightarrow ygap \downarrow$ $cpv \rightarrow neq5 \uparrow$ $sen \rightarrow neq5 \downarrow$ $legaleng \rightarrow ygap \downarrow$	$mus \rightarrow ygap \downarrow$ $moz \rightarrow ygap \downarrow$ $moz \rightarrow neq5 \downarrow$ $legaleng \rightarrow neq5 \downarrow$

ECOWAS – Summary of Results

LOW	FULL	HIGH
$ygap \downarrow \rightarrow neq5 \uparrow$	$ygap \downarrow \rightarrow neq5 \uparrow$ $neq5 \uparrow \rightarrow ygap \uparrow$	$ygap \downarrow \rightarrow neq5 \uparrow$ $neq5 \uparrow \rightarrow ygap \downarrow$
$inflation \uparrow \rightarrow ygap \downarrow$ $inflation \uparrow \rightarrow neq5 \uparrow$ $govdef \uparrow \rightarrow neq5 \uparrow$ *Less macroeconomic stability?*	$inflation \uparrow \rightarrow ygap \downarrow$	$open \uparrow \rightarrow ygap \downarrow$ $govdef \uparrow \rightarrow neq5 \downarrow$ $open \uparrow \rightarrow neq5 \downarrow$
$demage \uparrow \rightarrow ygap \downarrow$ $ef \uparrow \rightarrow neq5 \uparrow$ $dictrans \uparrow \rightarrow neq5 \downarrow$	$prcl \uparrow \rightarrow ygap \downarrow$ $ef \uparrow \rightarrow ygap \downarrow$ $demage \uparrow \rightarrow ygap \downarrow$ $demtot \uparrow \rightarrow ygap \uparrow$ $ef \uparrow \rightarrow neq5 \uparrow$ $demage \uparrow \rightarrow neq5 \downarrow$	$prcl \uparrow \rightarrow neq5 \uparrow$ $ef \uparrow \rightarrow neq5 \uparrow$
	$cpv \rightarrow ygap \downarrow$ $sen \rightarrow ygap \downarrow$ $legaleng \rightarrow ygap \downarrow$ $cpv \rightarrow neq5 \uparrow$ $sen \rightarrow neq5 \downarrow$	$legaleng \rightarrow ygap \downarrow$

ECOWAS 3SLS Results

Variable Type	Variable	LOW-Regime Sub-sample		FULL Sample		HIGH-Regime Sub-sample	
		lnygap	lnneq5	lnygap	lnneq5	lnygap	lnneq5
Policy	lnygap		-0.569***		-0.398***		-0.751***
			(-3.326)		(-3.812)		(-4.000)
	lnneq5	-0.0972		0.189**		-0.646***	
		(-1.139)		(2.409)		(-3.798)	
	inflation1	-0.0344**	0.0530*	-0.0368***			
		(-2.491)	(1.799)	(-3.400)			
	govdef	0.000174	0.0457***			-0.00618	-0.0153**
		(0.0435)	(4.744)			(-1.407)	(-2.291)
	lnopen1					-0.185**	-0.229**
						(-2.112)	(-2.156)
Institutional	lnprcl	-0.0147	-0.157	-0.172***	0.0620	-0.0477	0.299**
		(-0.339)	(-1.646)	(-2.723)	(0.579)	(-0.395)	(2.157)
	lnef	0.114	0.399*	-0.497***	0.840***	0.201	1.610***
		(1.487)	(1.888)	(-2.606)	(2.710)	(0.456)	(2.923)
	demage	-0.0319***		-0.0312***	-0.0444*		
		(-3.498)		(-2.963)	(-1.879)		
	demtot			0.00804***			
				(11.12)			
	dictrans		-0.179**				
			(-2.459)				

ECOWAS 3SLS Results contd

		(1)	(2)	(3)	(4)	(5)	(6)
Control	lnk	-0.107*** (-4.441)		-0.0879*** (-3.290)			
	lnltotal					0.961*** (4.396)	
	lnpopdens				0.191*** (3.293)		
Dummies	capcont		0.666*** (5.132)		0.552*** (3.193)		
	landlock	0.345*** (7.128)		0.322*** (4.163)	0.322*** (4.163)		
	oil			-0.427*** (-7.158)	-0.427*** (-7.158)	-3.601*** (-4.657)	
	cpv			-0.299*** (-3.267)	0.438** (2.346)		
	sen			-0.370*** (-6.040)	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	40	40	99	99	32	32
	R-squared	0.860	0.703	0.876	0.604	0.866	0.688
	F test	30.87	13.95	62.61	18.63	44.60	14.27
	Prob > F	0	0	0	0	0	0

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

SADC – Summary of Results

	LOW	FULL	HIGH
	$ygap\uparrow \rightarrow neq5\uparrow$ $neq5\uparrow \rightarrow ygap\uparrow$	$ygap\downarrow \rightarrow neq5\uparrow$ $neq5\uparrow \rightarrow ygap\downarrow$	$ygap\downarrow \rightarrow neq5\uparrow$ $neq5\uparrow \rightarrow ygap\downarrow$
	$inflation\uparrow \rightarrow ygap\uparrow$ $open\uparrow \rightarrow ygap\uparrow$ $inflation\uparrow \rightarrow neq5\downarrow$ $open\uparrow \rightarrow neq5\downarrow$	$govdef\uparrow \rightarrow ygap\downarrow$ $govdef\uparrow \rightarrow neq5\downarrow$ $open\uparrow \rightarrow neq5\downarrow$	$govdef\uparrow \rightarrow neq5\uparrow$
	$prcl\uparrow \rightarrow ygap\downarrow$ $ef\uparrow \rightarrow ygap\downarrow$ $demage\uparrow \rightarrow ygap\uparrow$ $demtot\uparrow \rightarrow ygap\uparrow$ $prcl\uparrow \rightarrow neq5\uparrow$ $ef\uparrow \rightarrow neq5\uparrow$ $demage\uparrow \rightarrow neq5\downarrow$ $demtot\uparrow \rightarrow neq5\downarrow$ $ef\uparrow \rightarrow neq5\uparrow$ $dictrans\uparrow \rightarrow neq5\downarrow$	$prcl\uparrow \rightarrow ygap\downarrow$ $ef\uparrow \rightarrow ygap\uparrow$ $demtot\uparrow \rightarrow ygap\uparrow$ $prcl\uparrow \rightarrow neq5\downarrow$ $ef\uparrow \rightarrow neq5\uparrow$ $demage\uparrow \rightarrow neq5\downarrow$ $constage\uparrow \rightarrow neq5\uparrow$	$prcl\uparrow \rightarrow ygap\downarrow$ $ef\uparrow \rightarrow ygap\downarrow$ $prcl\uparrow \rightarrow neq5\downarrow$ $ef\uparrow \rightarrow neq5\downarrow$
		$mus \rightarrow ygap\downarrow$ $moz \rightarrow ygap\downarrow$ $moz \rightarrow neq5\downarrow$ $legaleng \rightarrow neq5\downarrow$	

SADC 3SLS Results

Variable Type	Variable	LOW-Regime Sub-sample		FULL Sample		HIGH-Regime Sub-sample	
		lnygap	lnneq5	lnygap	lnneq5	lnygap	lnneq5
	lnygap		1.340***		-0.782***		-1.067***
			(6.654)		(-9.407)		(-6.012)
	lnneq5	0.617***		-0.276**		-0.659***	
		(6.624)		(-2.571)		(-5.961)	
Policy	inflation1	0.0533***	-0.0765**				
		(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	lnprcl	-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**		
					(2.537)		
	demage	0.121***	-0.169***		-0.0179*		
		(5.235)	(-4.294)		(-1.686)		
	demtot	0.0127***	-0.0160***				
		(8.015)	(-3.998)				

SADC 3SLS Results contd

Control	lnk			-0.412*** (-9.979)			
	lnltotal			0.379*** (6.551)	0.419*** (4.502)		
Dummies	landlock			0.152* (1.806)	0.859*** (4.352)		
	mus			-0.833*** (-5.429)		-0.972*** (-4.263)	-1.578*** (-9.644)
	moz			-0.728*** (-4.403)	-1.313*** (-4.507)		
	legaleng				-0.750*** (-3.485)		
	Constant	1.856*** (3.672)	-2.137** (-2.285)	6.939*** (5.027)	-1.130 (-0.488)	9.409*** (12.76)	10.55*** (5.822)
Model Diagnostics	Observations	39	39	156	156	51	51
	R-squared	0.850	0.645	0.893	0.530	0.847	0.745
	F test	48.47	19.68	150.1	30.28	76.55	38.08
	Prob > F	0	0	0	0	0	0

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

ECOWAS, Cape Verde: Income Gap & Gvt. Deficit – Regimes, Country Means

ECOWAS

INCOME GAP vs GOVERNMENT DEFICIT - COUNTRY MEANS
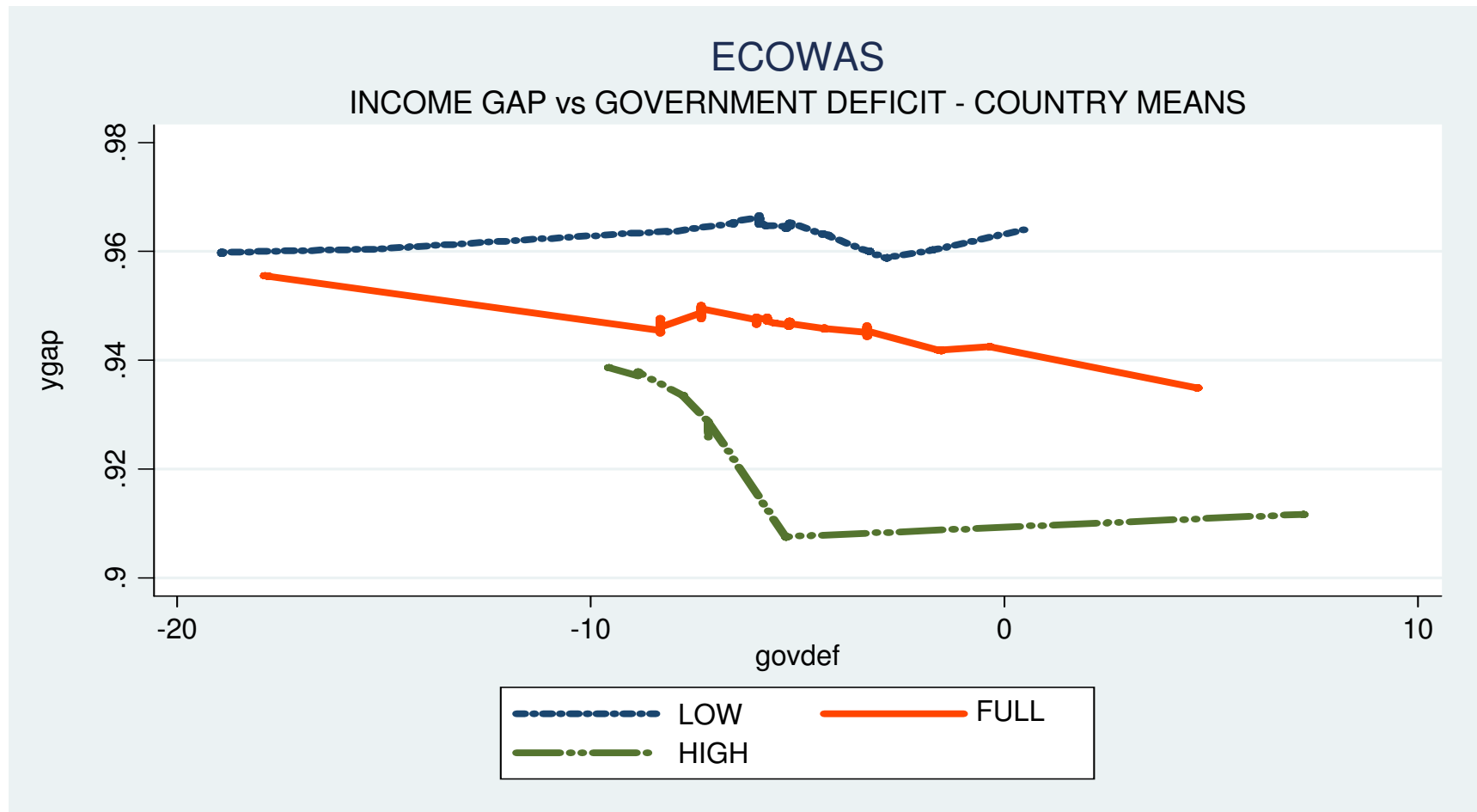
ECOWAS, Cape Verde: Income Gap & Inflation – Regimes, Country Means
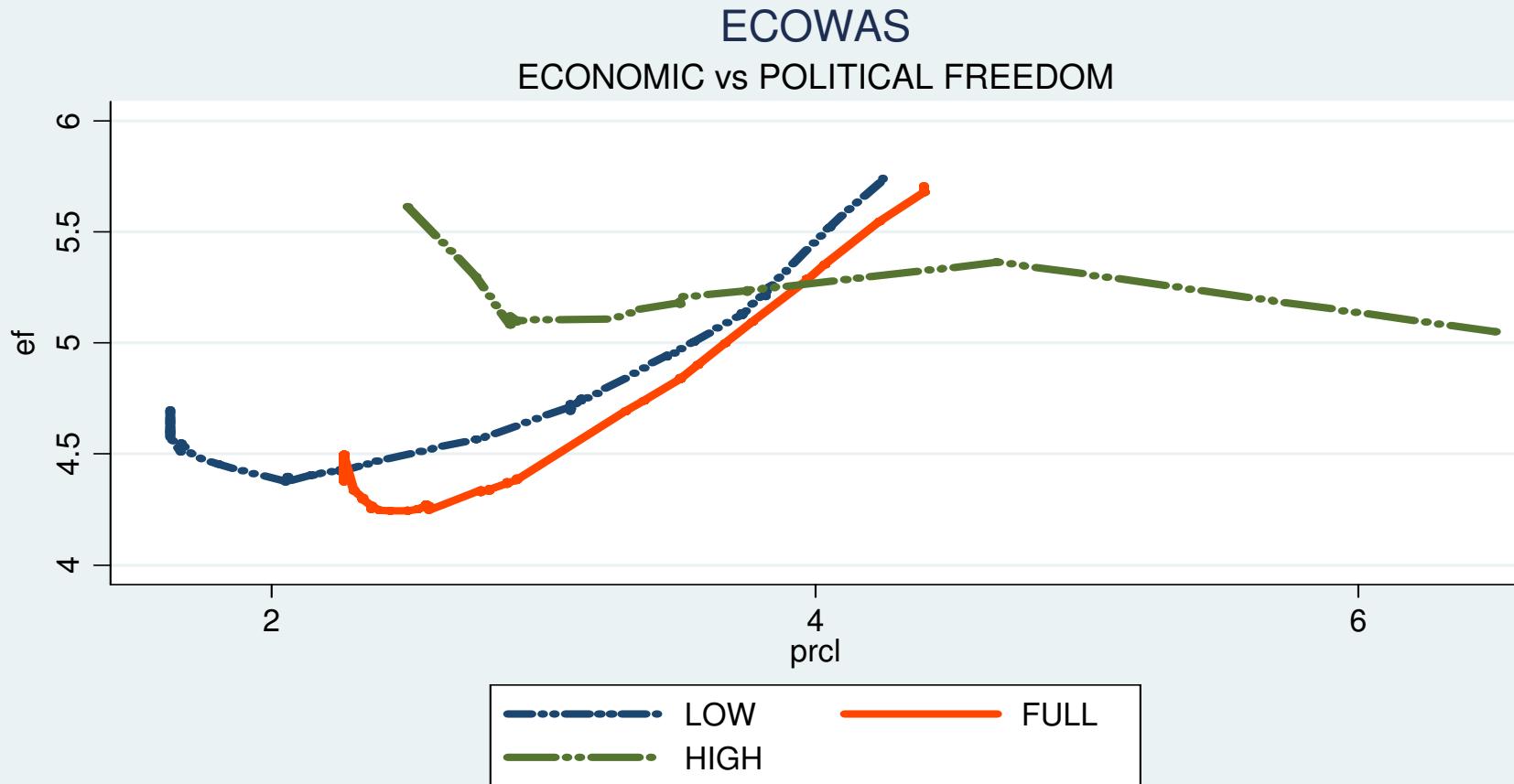

ECOWAS
INCOME GAP vs INFLATION - COUNTRY MEANS

LOW   FULL
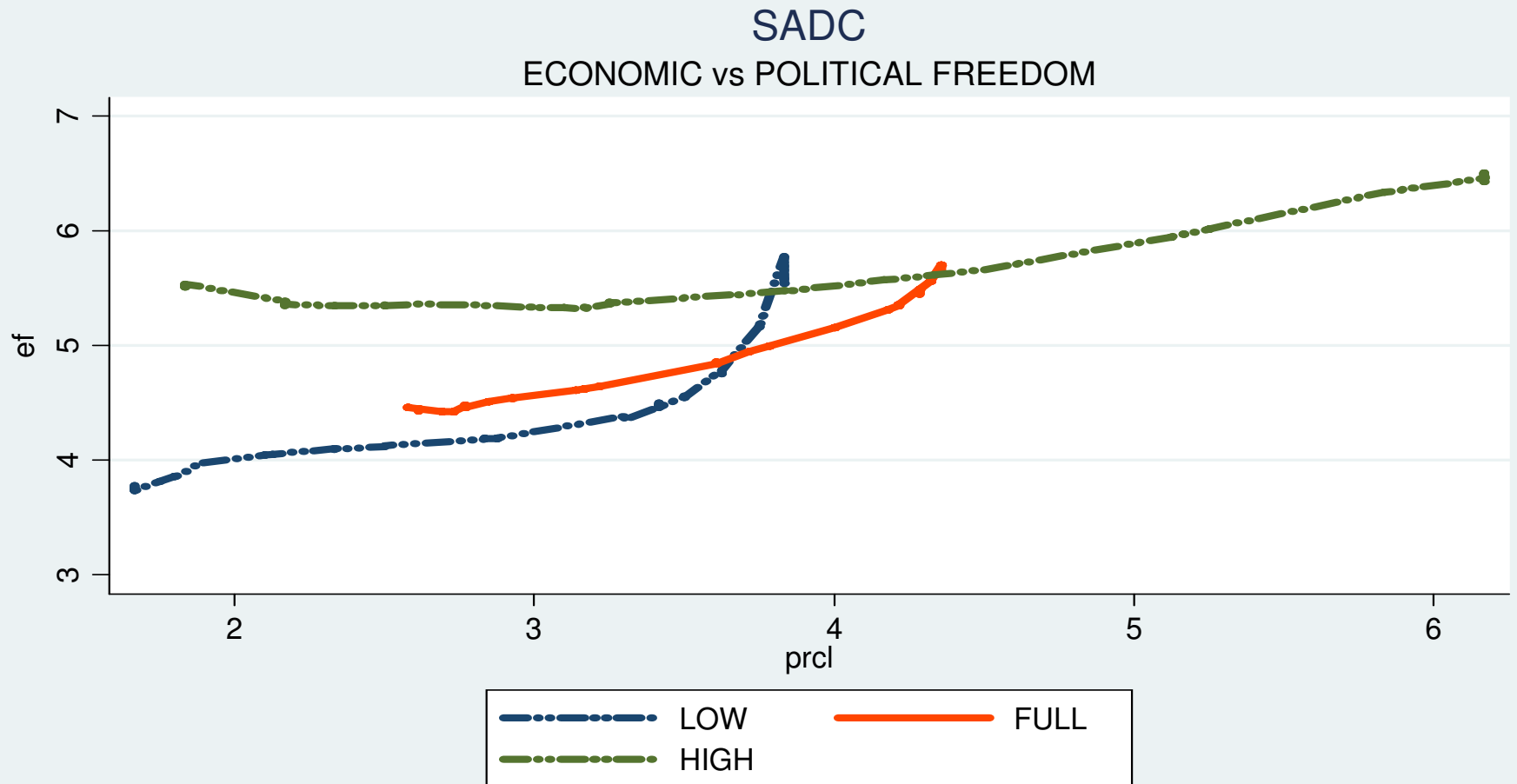HIGH
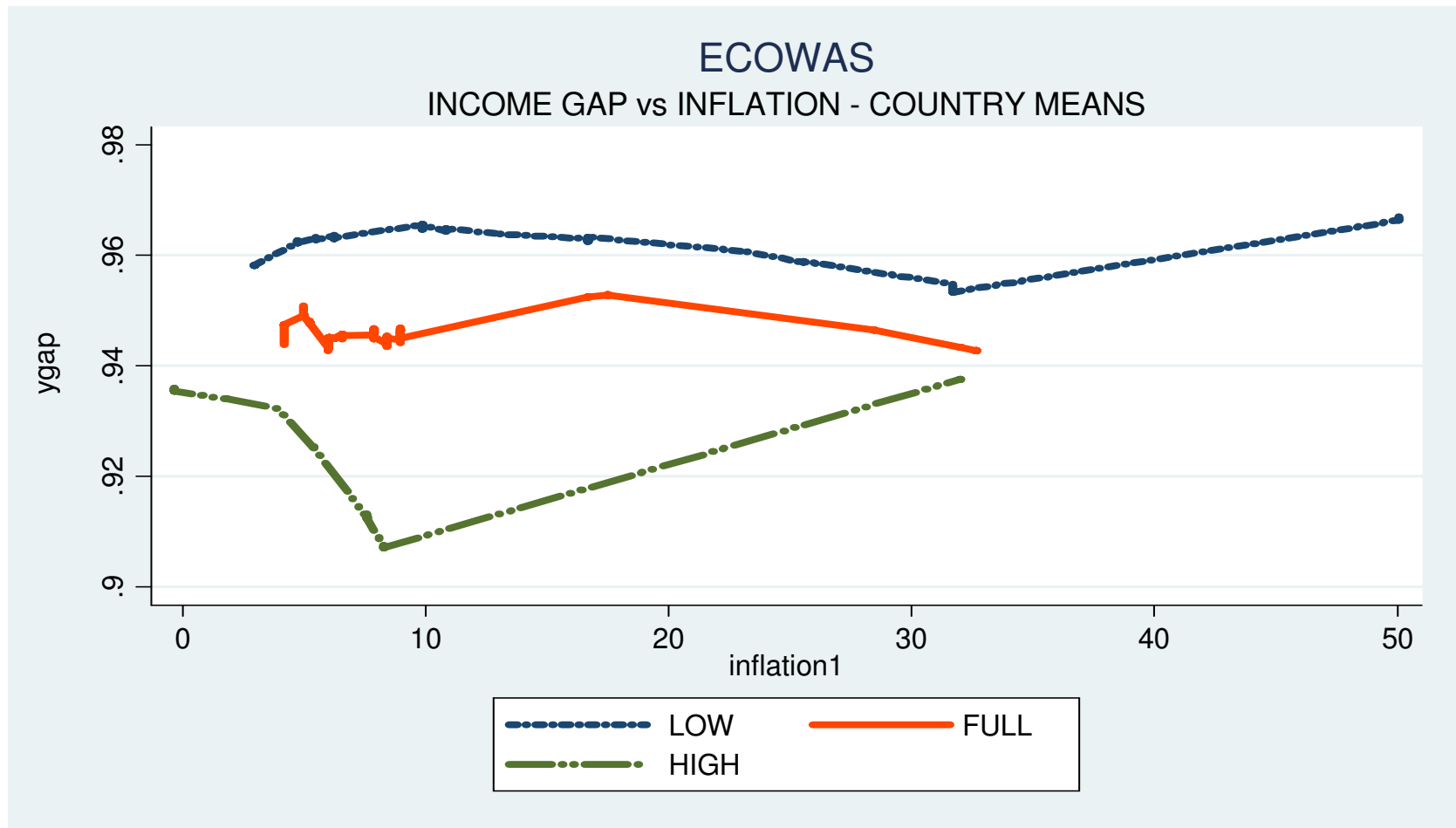
ECOWAS: Income Gap & Openness – Regimes, Country Means

ECOWAS
INCOME GAP vs OPENNESS - COUNTRY MEANS

ECOWAS Economic vs Political Freedom across Regimes
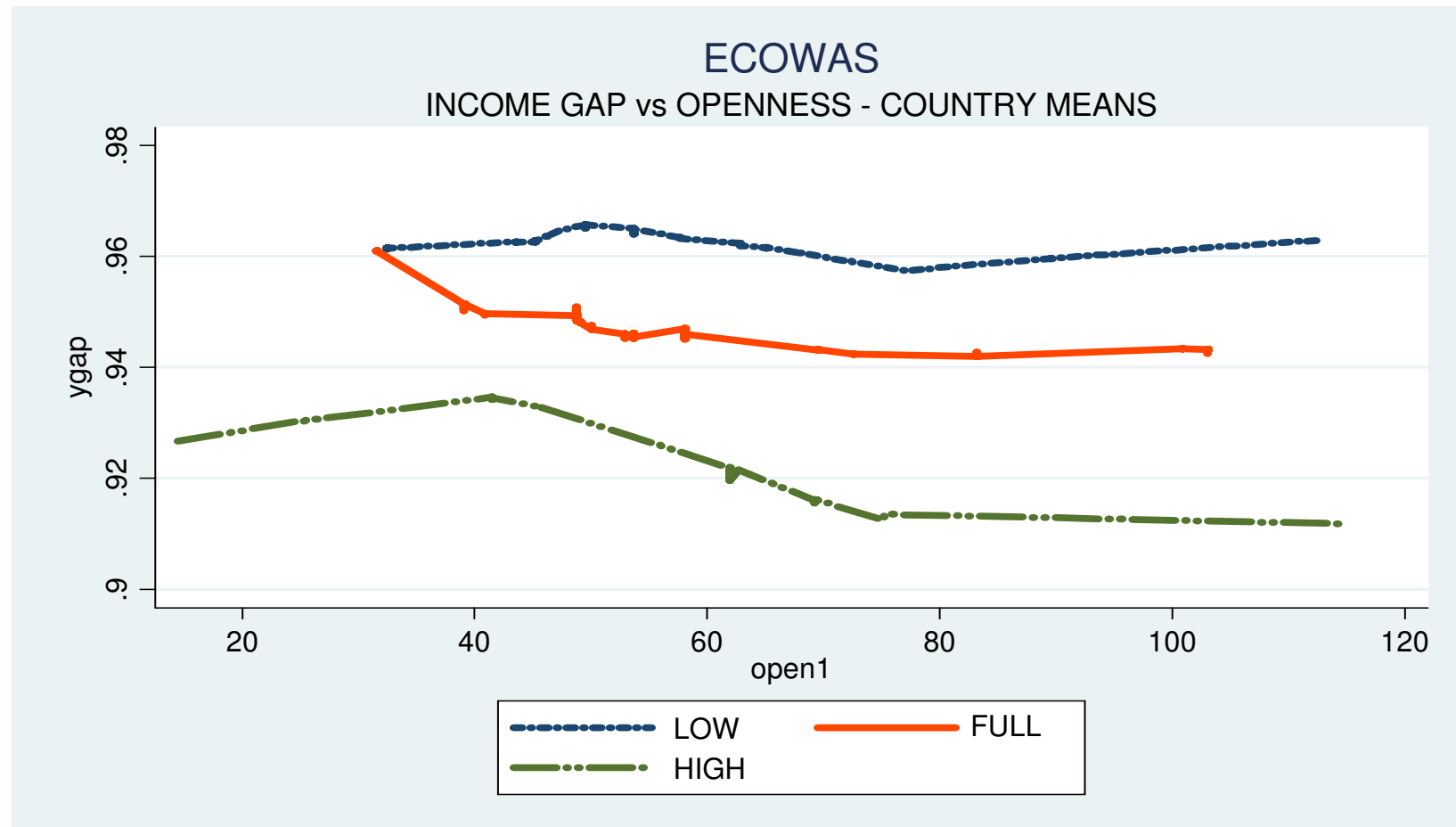
ECOWAS
ECONOMIC vs POLITICAL FREEDOM

Lowess smoothing, bandwidth = 0.8

SADC Economic vs Political Freedom across regimes

Freedoms: 2SLS Results

	ECOWAS		SADC	
	ygap	*neq5*	*ygap*	*neq5*
Between Effects			**EF PRCL**	EF
Fixed Effects	EF	EF PRCL	EF	**EF**

Cape Verde, Mozambique Results

	ygap	*neq5*
Cape Verde	-0.299*** (-3.267)	0.438** (2.346)
Senegal	-0.370*** (-6.040)	0.504** (4.982)
Mauritius	-0.833*** (-5.429)	
Mozambique	-0.728*** (-4.403)	-1.313*** (-4.507)

Full sample: t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1
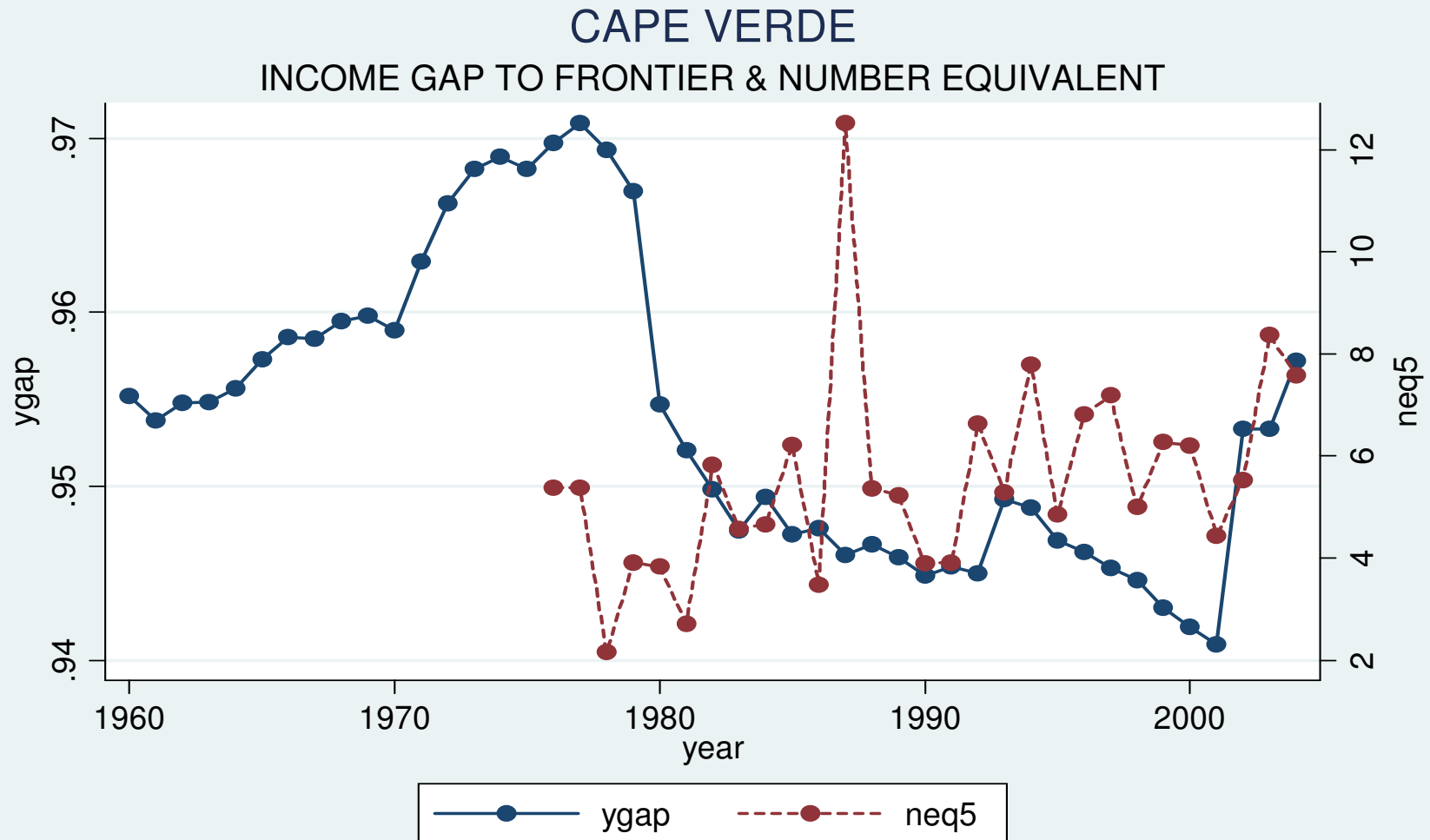
Cape Verde vs ECOWAS: Income Gap

CAPE VERDE vs. ECOWAS
INCOME GAP TO FRONTIER
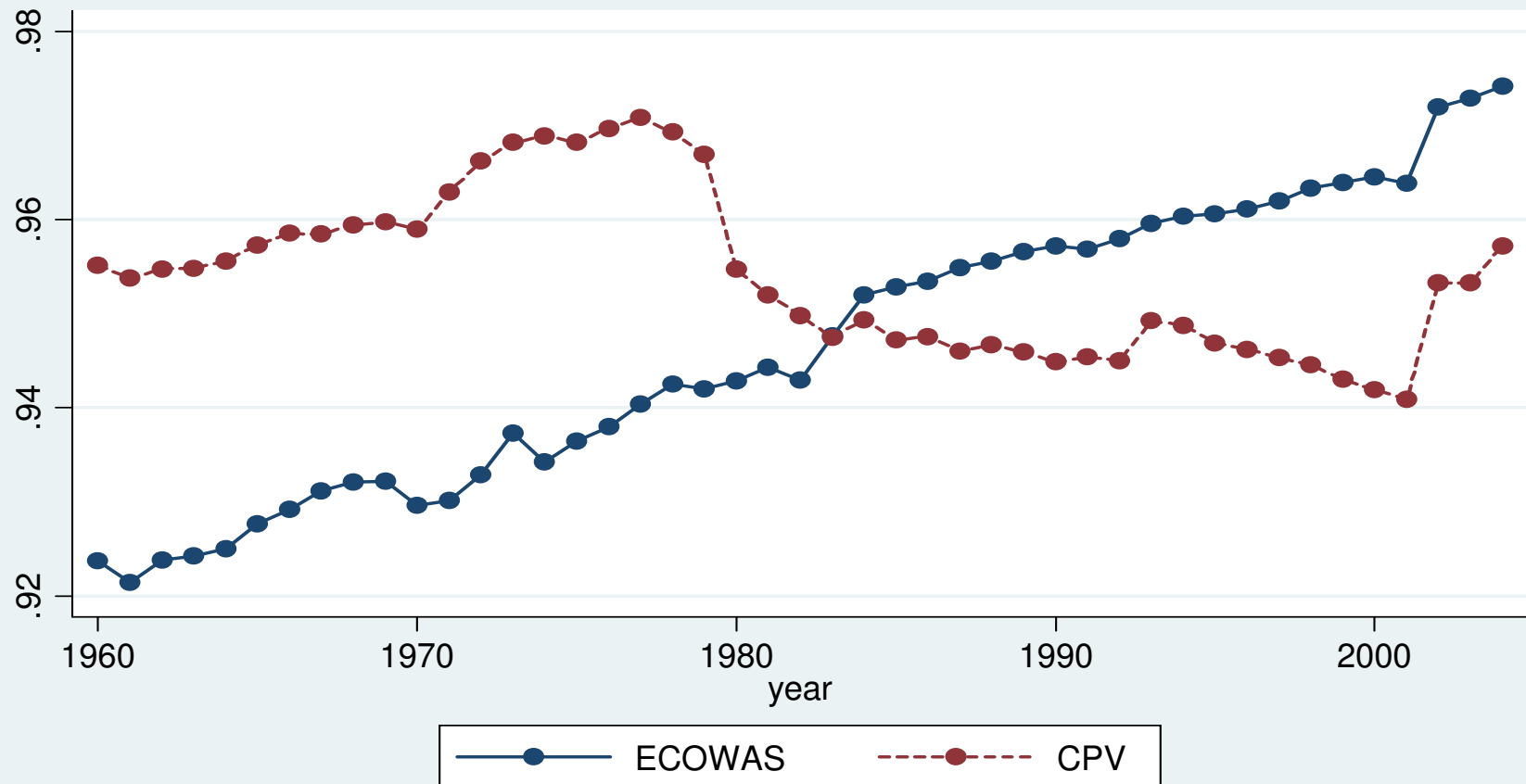
Cape Verde vs ECOWAS: NEQ

CAPE VERDE vs. ECOWAS
NUMBER EQUIVALENT

Cape Verde - Income Gap & NEQ

CAPE VERDE
INCOME GAP TO FRONTIER & NUMBER EQUIVALENT

Mozambique vs SADC: Income Gap
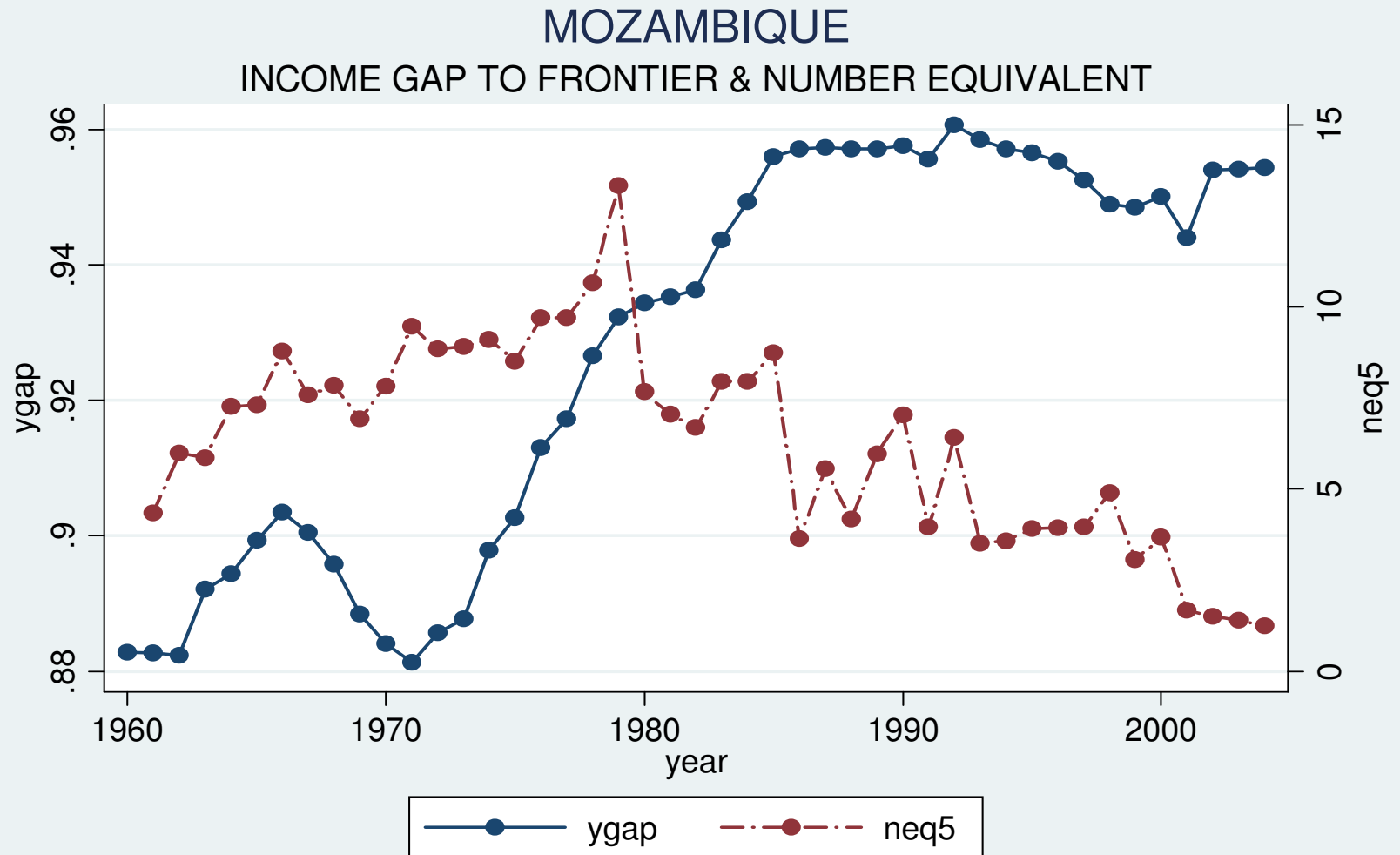

MOZAMBIQUE vs. SADC
INCOME GAP
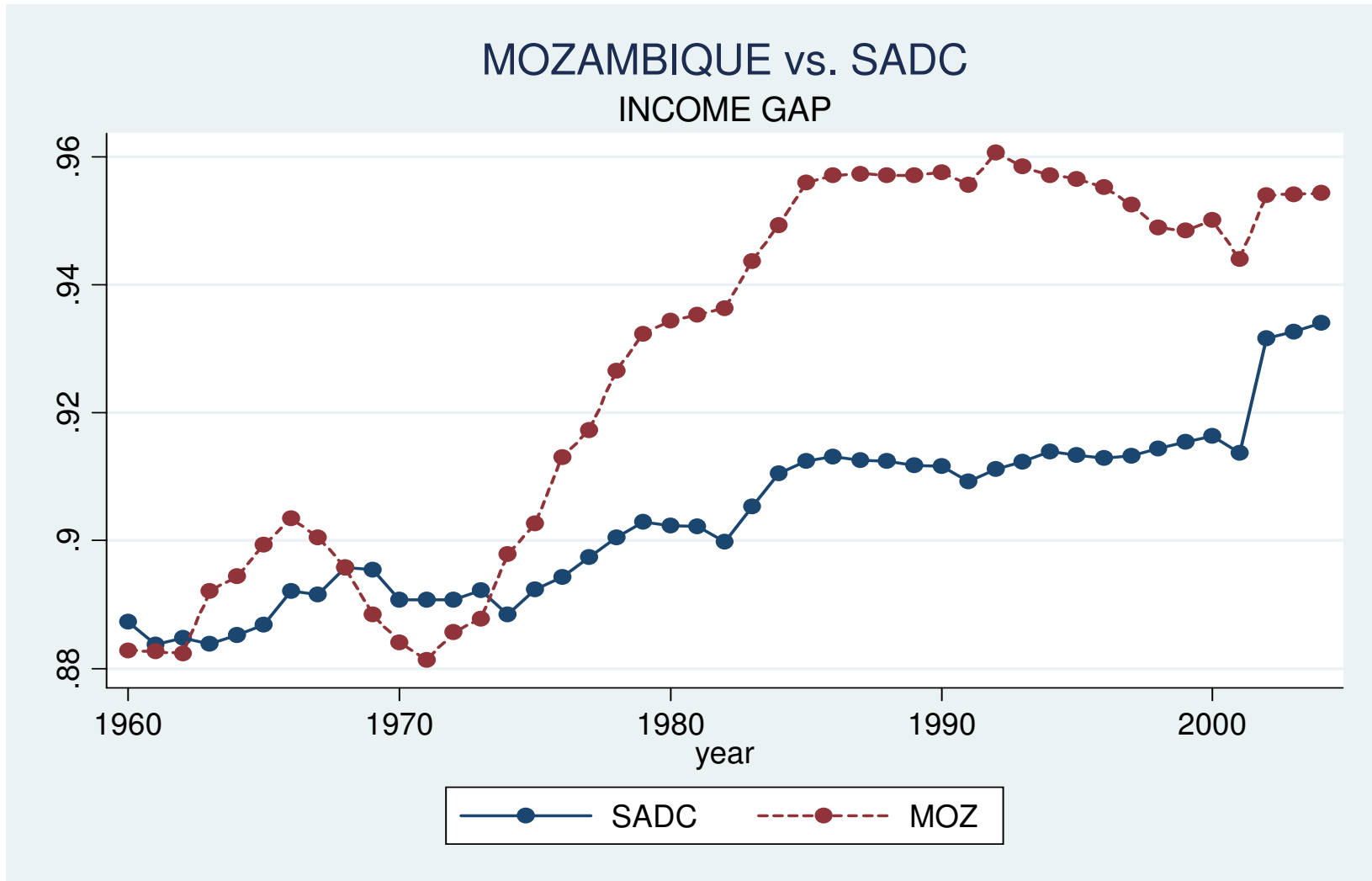
Mozambique vs SADC: NEQ

MOZAMBIQUE vs. SADC
NUMBER EQUIVALENT
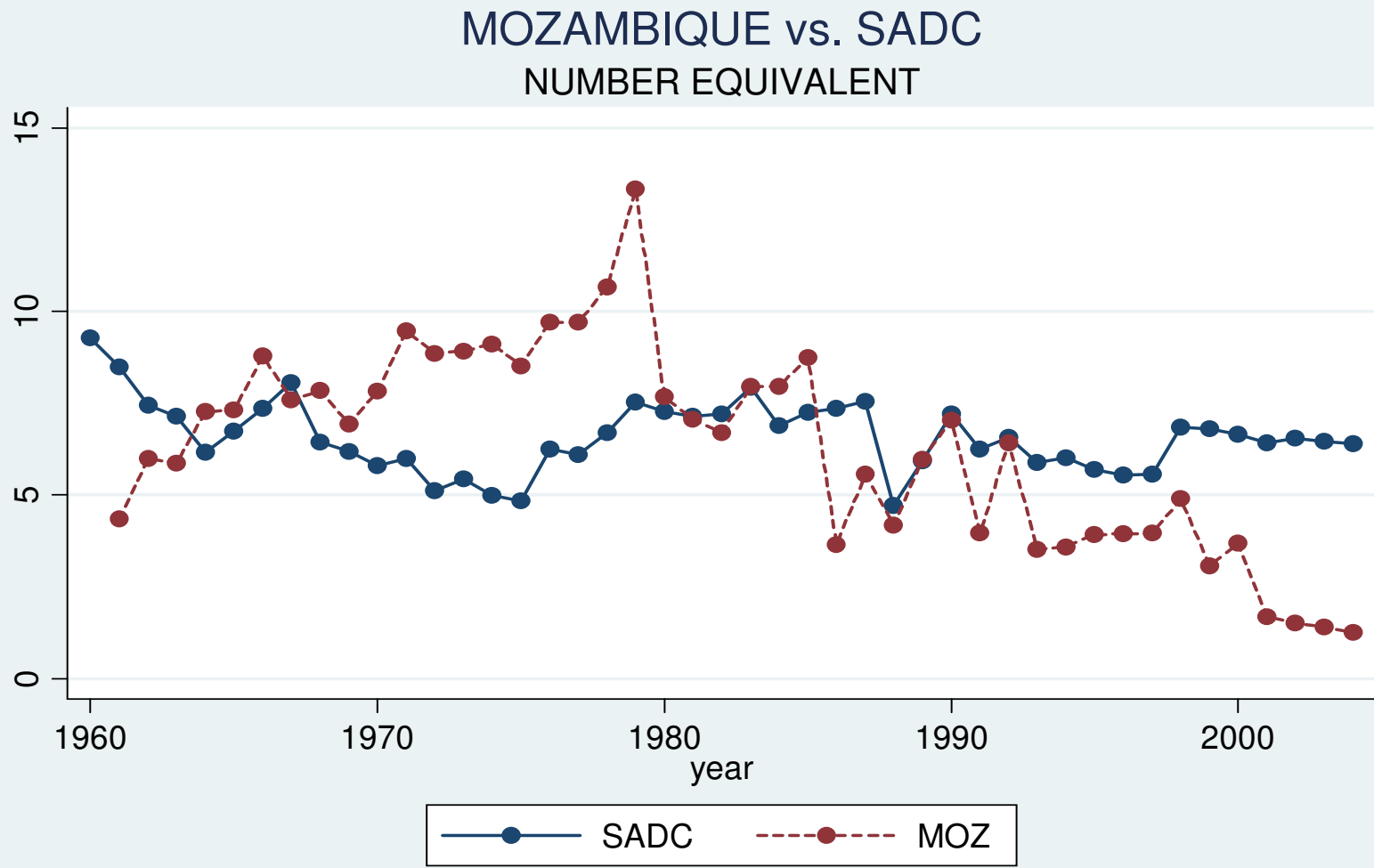
Mozambique: Income Gap & NEQ

4 - Conclusions

- 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 ECOWAS, especially in the range of 45-75% of GDP, but not for SADC.

- In SADC HIGH-regime countries, economic and political freedom drive convergence, suggesting effective institutional arrangements.

- The commonalities present in the HIGH-regimes are:
  - 1) the expected 2-way relationship;
  - 2) convergence entails macroeconomic stability (inflation < 9%, budget deficits < 7% of GDP);
  - 3) political and economic freedoms are greater;
  - 4) freedoms affect diversification policy as do government deficits, albeit in different directions across both sub regions.

Conclusions

- Increasing deficits counteract prevailing diversification stance in both sub regions, a sign of regime credibility.

- The comparison across sub regions 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.

- The estimated impact that Cape Verde and Mozambique have on the coefficients for ECOWAS and SADC reinforces the perception from the comparative indicators.

- These two case studies of positive G&G interaction reflect on the potential for cooperative governance and peer-review mechanisms outside of its usual domain among OECD and EU member countries, especially in PALOP and SSA .

Thank you for your attention.