



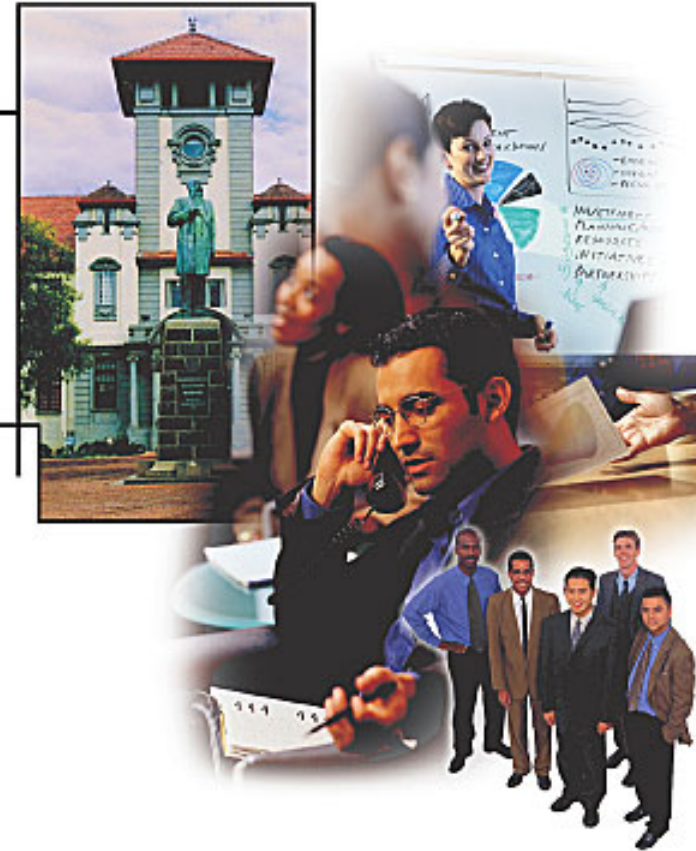
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Capital flows and the African growth experience: The role of FDI

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Structure



- Literature overview
- Some stylized facts on capital flows
- Determinants of growth in Africa:
 - Cross-country regression results
 - Panel data results
- Conclusion



Historical growth determinants: Literature overview



- Easterly and Levine: 1960-1989
 - Ethic fragmentation and poor quality institutions
- Sachs and Warner: 1965-1990
 - Close trade policies and geographic location
- Rodrik: 1965-1990
 - 1965 per capita income, life expectancy, public savings, export taxes, EAP
 - 1965 per capita income, life expectancy, average terms of trade
- Collier and Gunning: 1960-1989
 - Openness and Investment/GDP ratio
- Devarajan, Easterly and Pack: 1970-1997
 - Private I, good policies
- Dollar and Easterly, 1965-1995
 - Aid-investment-growth relationship



Stylized facts on capital flows to Africa

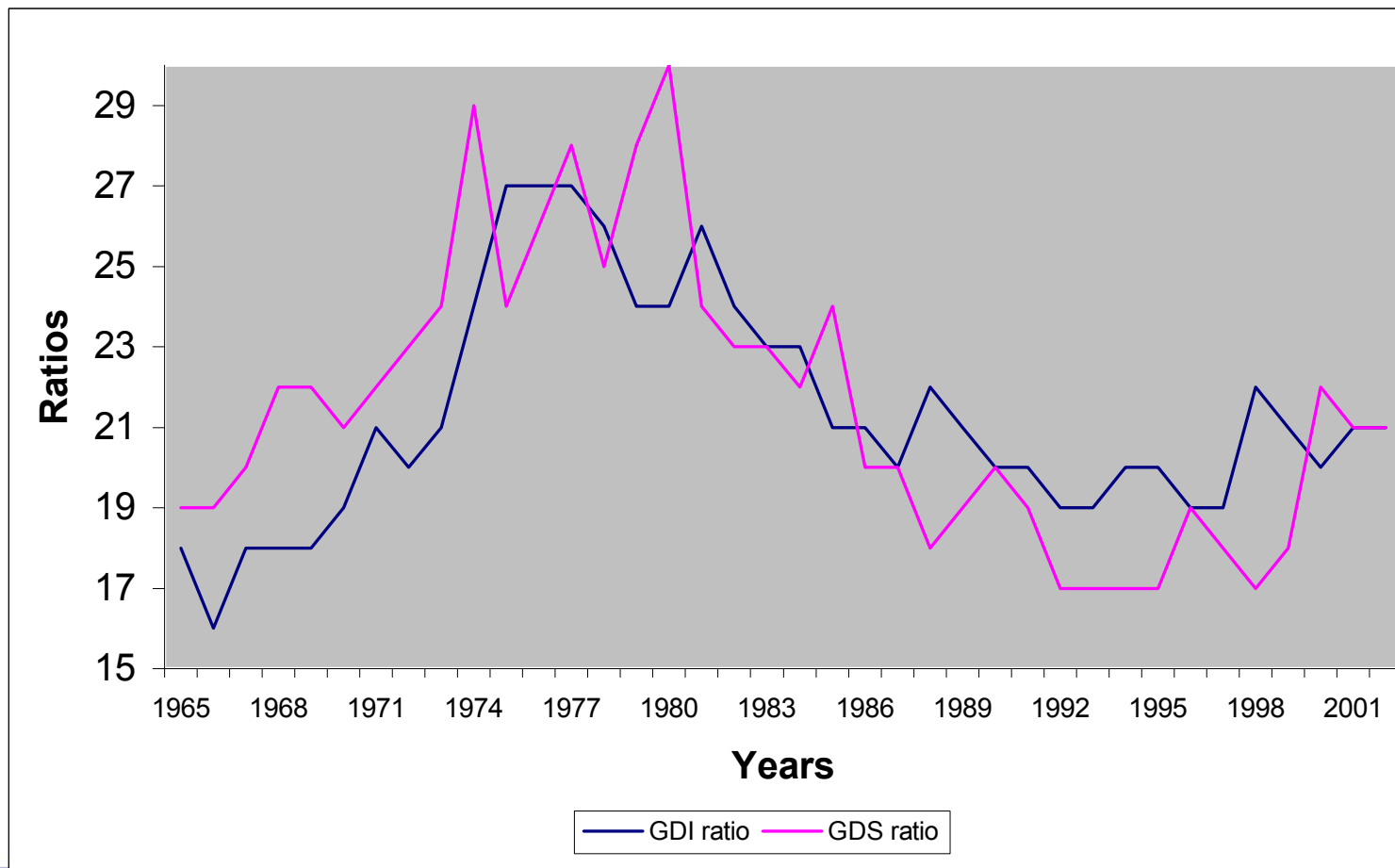


- Saving and investment levels are improving, but still a key constraint
- Debt overhang remains large despite decline in nominal levels of debt
- Reversal in ODA flows, but still far short to reach MDG
- Nominal FDI flows are increasing, but are unevenly spread
- Volatility in certain flows are still high





GDI and GDS ratios



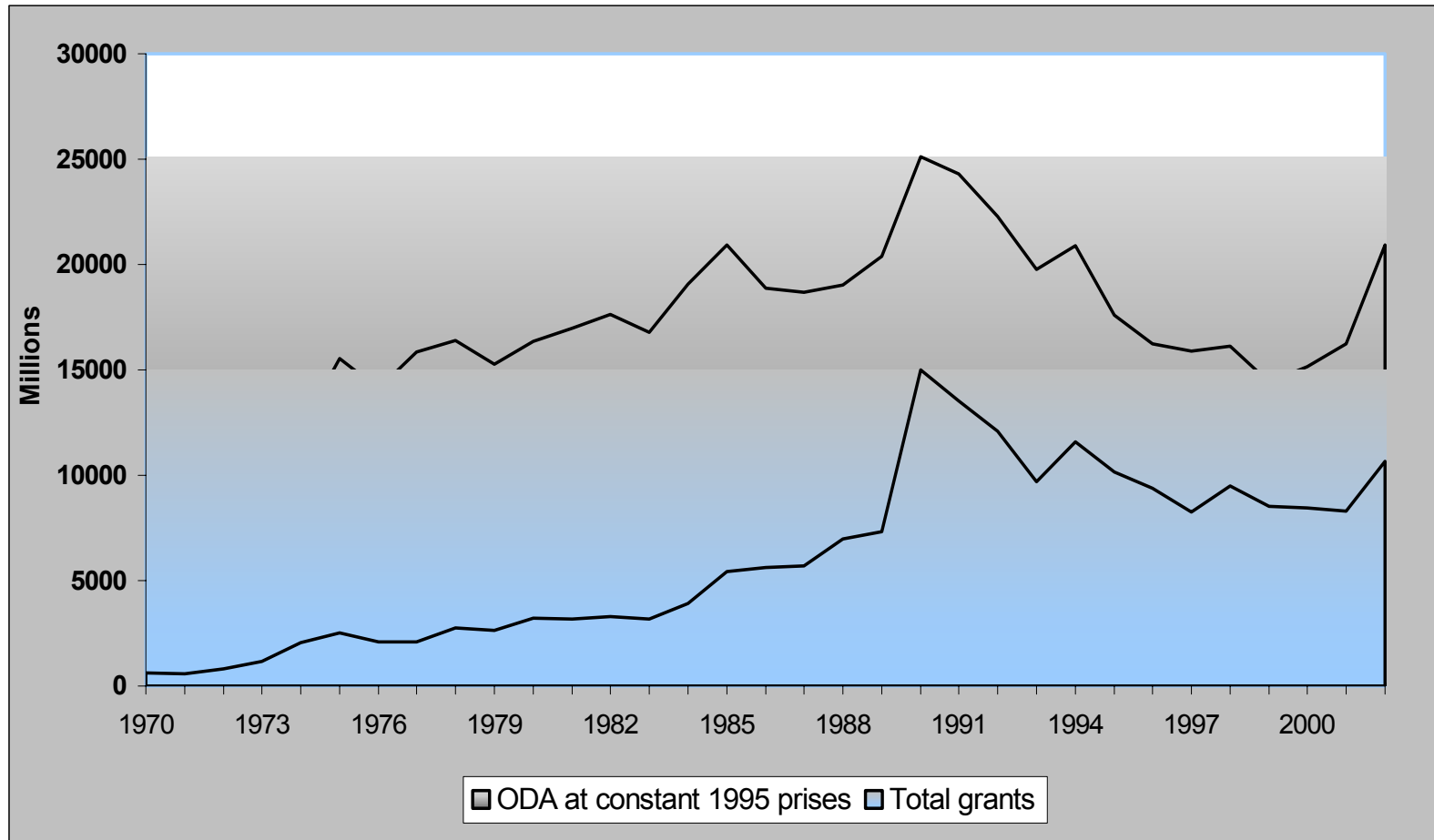


External debt trends

Period	External debt per capita (US \$)	Debt to GDP ratio (%)	Debt to export ratio (%)
1970-1974	51	15.4	85.4
1975-1979	158	25.8	123.9
1980-1984	303	37.8	184.8
1985-1989	425	58.0	322.7
1990-1994	455	62.6	288.5
1995-1999	441	61.4	213.3
2000-2002	363	52.7	160.9

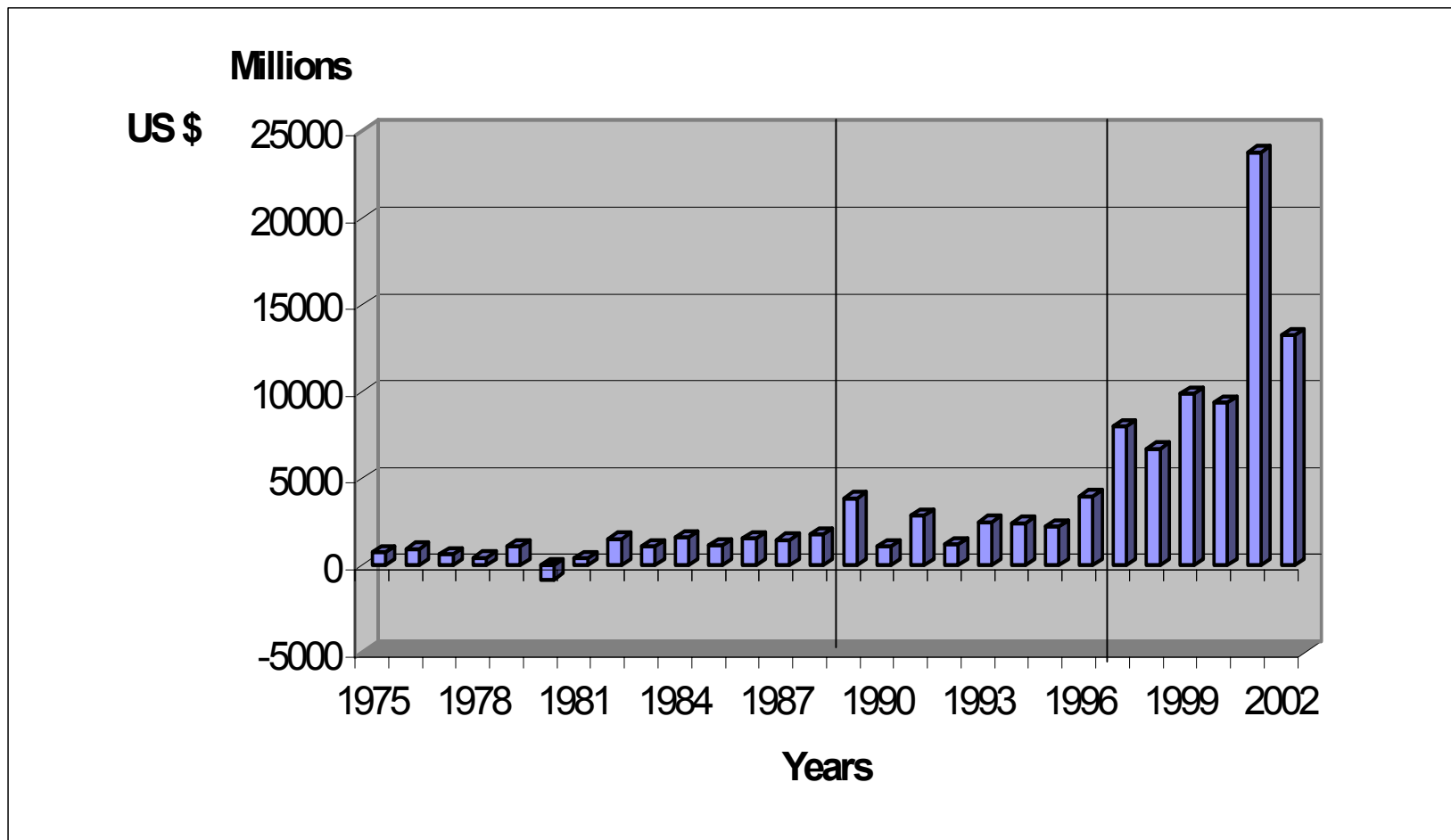


Official development assistance flows





Net FDI inflows to Africa





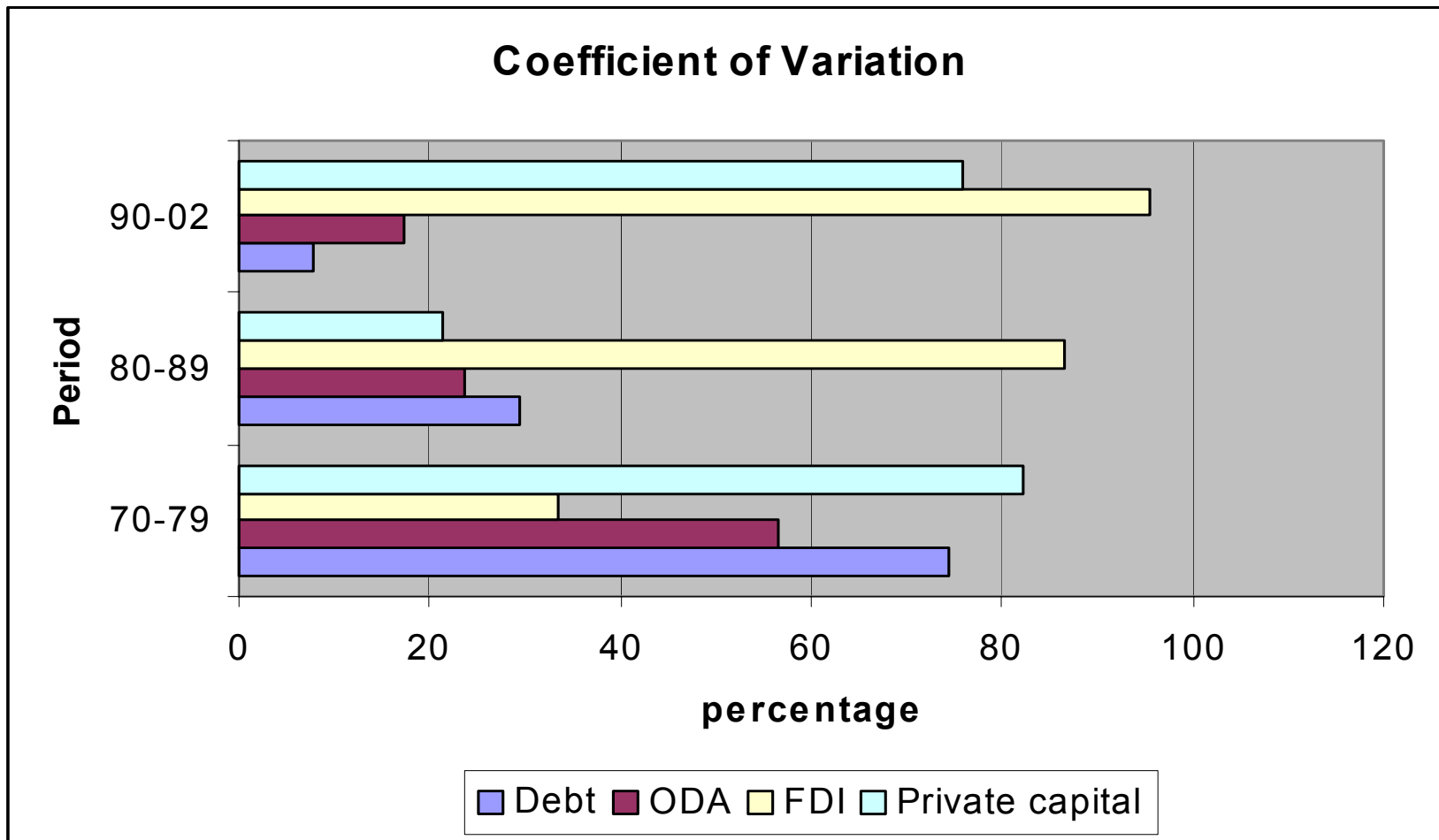
FDI/GDP ratio: Top recipients

Rank	Country	FDI as % of GDP	Average real growth rate
1	Equatorial Guinea	38.2	24.5
2	Angola	14.5	7.6
3	Lesotho	11.5	3.3
4	Chad	11.3	4.0
5	Congo	8.3	3.1
6	Sao Tome & Principe	5.9	2.6
7	Cape Verde	5.4	6.1
8	Seychelles	5.4	3.7
9	Eritrea	5.1	2.6
10	Namibia	4.9	3.3
11	Mozambique	4.6	8.1
12	Swaziland	4.4	3.2
13	Zambia	4.3	2.4
14	Nigeria	3.6	2.3
15	Tanzania	3.2	4.6





Volatility of capital flows





Determinants of growth

- Trade
- Oil exporter 0/1
- FDI % GDP
- ODA %GNI (Aid)
- Debt % GNI
- GDI % GDP
- CPI and Deficit
- Rule of law
- Geographic location 0/1
- Pop & Literacy
- Average for 1995-2000
- Dependent variable: GDP per capita growth
- All Africa: n = 46
- Strong performers: n = 24
- Strong performers excl extreme values: n = 21





Regression: All Africa

- Best fit model includes: FDI, DEBT, AID, OILEX
- $R^2 = 0.61$
- Trade variable enters with negative sign and not statistically significant
- Macroeconomic stability, rule of law and socio-economic variables insignificant



Regression: Moderately strong performers



- Statistically significant variables are FDI, DEBT, AID, OILEX
- $R^2 = 0.66$
- Coefficients for variables are same as full example, except for oilex



Regression: Moderate strong excluding extreme values



- Excluded: Equatorial Guinea, Congo and Lesotho
- Different set of significant variables: Debt, aid, literacy, population growth, geography
- $R^2 = 0.47$
- Favourable impact of FDI and oil exports depends on performance of extreme countries





Conclusion

- Heterogeneous nature of countries
- Capital flows are most significant determinant of growth
- High dependence on aid
- Debt restructuring
- Trade disappointing
- Geography matters in better performers
- Macroeconomic stability is important but not sufficient for growth





Panel data results

- Random effects model, GLS regression, STATA
- Periods: 1990-2002
1990-1996
1997-2002
- Trade variable replaced by exports as % of GDP
- 1990-2002 model:
- Countries with higher FDI and exports are better growth performers
- Overall model provides a good fit
- However, change in variables over time does not explain the changes in GDP per capita fully
- Model is successful in explaining cross-sectional variance
- Period 1990-1996 only FDI is statistically significant
- Period 1997-2002 FDI and exports are statistically significant



Conclusion



- Longer term growth tend to be predictable based on a small number of variables
- Shorter term growth determinants varies more

