

South African Reserve Bank

Occassional Bulletin of Economic Notes

OBEN/22/01



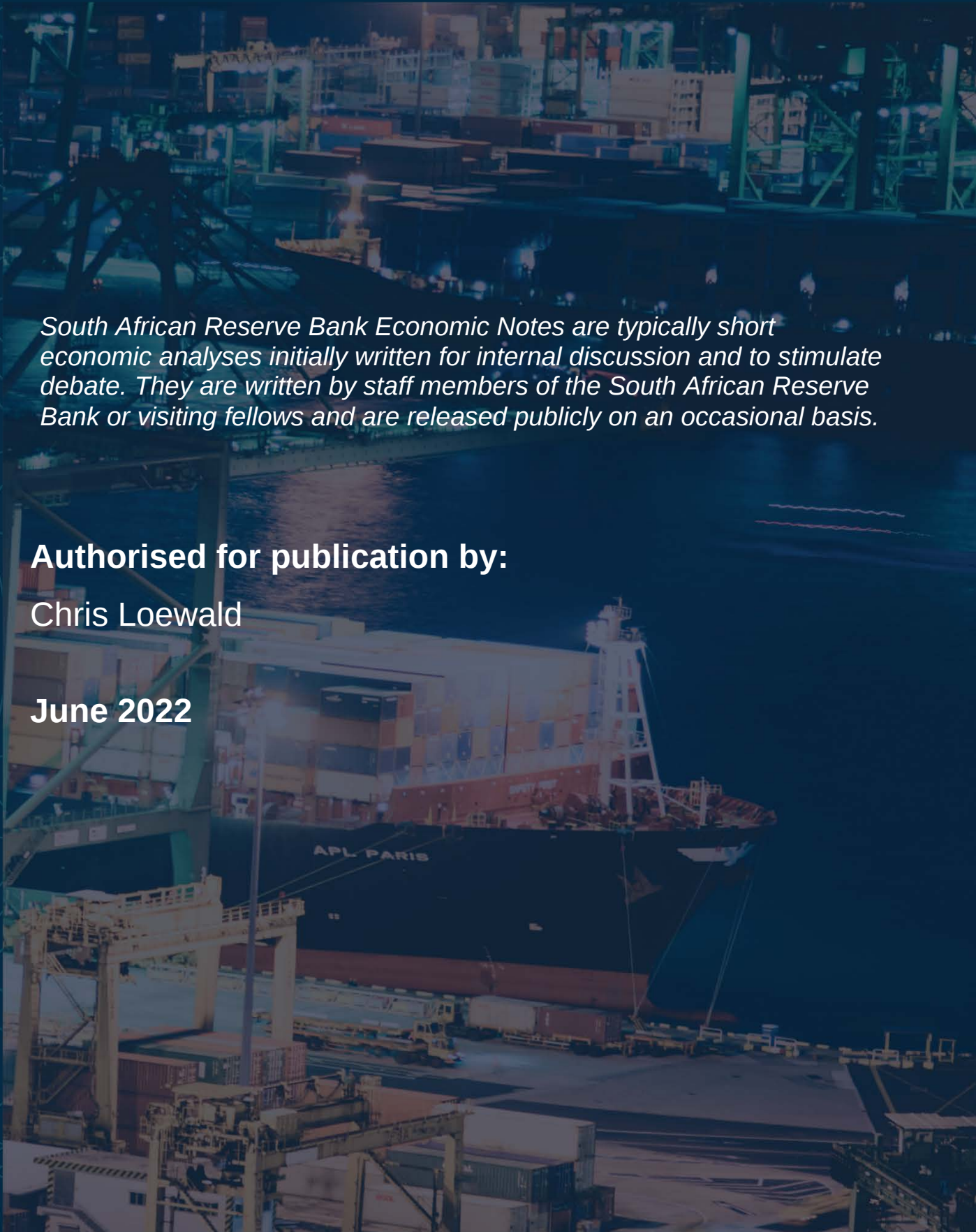
SOUTH AFRICAN RESERVE BANK

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Authorised for publication by:

Chris Loewald

June 2022



SARB Occasional Bulletin of Economic Notes

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Table of Contents

Contents

1. Surging commodity prices explain a lot
Theo Janse van Rensburg and Erik Visser
2. Should we worry about the high producer prices? Yes, but ...
Susan Knox, Palesa Mnguni, Pieter Pienaar and Witness Simbanegavi
3. Policy lessons from global retail CBDC projects
Nic Spearman
4. Revisiting EM economic development and convergence
Jean-François Mercier

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Revisiting EM economic development and convergence

Jean-François Mercier

Abstract

Long-term convergence of emerging countries towards advanced economies' income/capita levels has never been generalized nor consistent, even though the share of countries that converged has risen since 2000. Broader adoption of stability-oriented macro policies and trade/capital account opening probably facilitated a greater degree of convergence, but it seemed to be neither a sufficient (nor in some cases necessary) condition. Failure by many countries to successfully reallocate resources towards sectors with higher productivity gains may explain why they failed to match the performance of dynamic Asian economies, or even converge at all. The need to expand high value-added manufacturing and services sector appears strong in South Africa, which remains a commodity-dependent economy with a limited skills base and insufficient productivity growth.

1. Introduction

Emerging economies (EM) typically strive to converge, over time, towards income levels of advanced economies (AE). National governments publish development plans; international organizations offer funding and advice to achieve the goal. Conventional wisdom would indeed suggest that in an open world, an emerging country should be able to import technologies from AEs, build its capital stock – if necessary, through external financing – and hence reduce its productivity gap with AEs.¹ But the experience of the past 50 years shows that convergence is neither constant over time, nor universal. Many countries only experience short bursts of convergence; some, like South Africa, have diverged over time.

Referring to academic literature that analyse the different models of development and their shortcomings, this note looks at the incidence of convergence in medium- to large EMs over the past few decades, and at empirical evidence of correlation with potential drivers of development. It then looks at potential policy responses for countries like South Africa, in an environment where the further integration of EMs in the global economy may be more challenging than in the recent past.

¹ Classical economic theory also suggests that as EMs have relatively low capital/labour ratios, returns on capital should be high enough to entice investment.

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2. Changing views on convergence over time

For decades, economists tended to argue that unconditional convergence² was an unlikely scenario. The Prebisch-Singer hypothesis, developed in the 1940s, argue that the relative price of primary products – which EMs disproportionately produce and export – falls over time, because primary products have a lower income elasticity of demand. Hence, commodity producers will face declining terms of trade. This hypothesis provided support for import-substitution industrialization policies followed by several EMs (for example, India) in the 1950s and 1960s, but later found to deliver insufficient development.³ Later, Romer (1986) favoured a model with increasing returns-to-scale technology, which enables rich countries to maintain or increase their lead; while Baumol (1994) argued that only countries with adequate initial levels of human capital endowment could converge, with the poorest countries being left out.

The late 1980s and 1990s saw a shift in the paradigm and, with the emergence of the “Washington consensus”, a greater focus was placed on adopting the right set of policies (macro stability, trade and financial opening, deregulation) to drive convergence. In 1995, Sachs and Warner argued that previous analyses were too pessimistic as to the ability of poor countries to converge; and missed the crucial role of efficient institutions. Using two metrics for appropriate policies (respect of property rights and integration in global trade), the authors found that countries that met both criteria generally experienced strong convergence in the 1970s-1980s. Barro (1996) echoed this argument, pointing out the benefits for growth from the rule of law, free markets, education, and small government consumption.

3. Empirical evidence: uneven convergence

Historical data do suggest that economic convergence has rarely been the norm and has not always been sustained. To assess the existence of convergence, we analyse trends in GDP per capita (in 2015 US\$, from the World Bank database) for a sample of 44 medium to large EMs since 1960 and compare it to the average GDP per capita of high-income countries. In each of the last four decades of the 20th century, only about half of our sample countries converged; and the percentage of those converging “fast” or “very fast” was even lower.⁴ Progress was much improved in the 2000s – a period characterized by strong global growth, high demand from China and a commodity “super-cycle” – but again partly reversed in the past decade (Figure 1).

² Unconditional convergence implies that a developing country will converge irrespective of policies put in place to achieve that goal.

³ Adhia (2015) points out that between 1966 and 1980 India's per capita income grew on average by less than 1% a year, despite a heavy focus on industrial development following independence in 1947.

⁴ A country is described as converging “fast” or “very fast” when its GDP per capita (expressed as a share of the high-income average) increases by more than 25% or 50%, respectively, within the 10-year period.

Figure 1: Share of EMs converging towards high-income GDP/capita

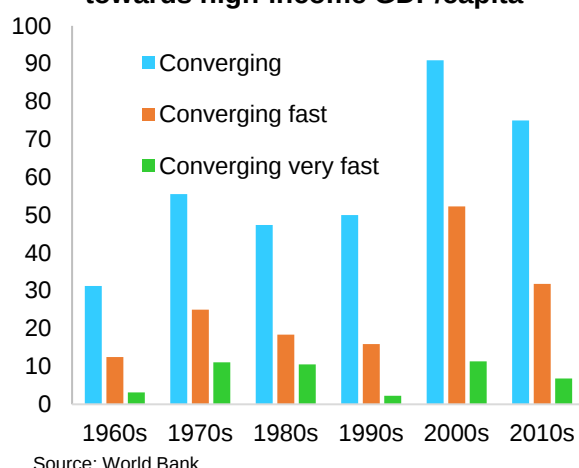
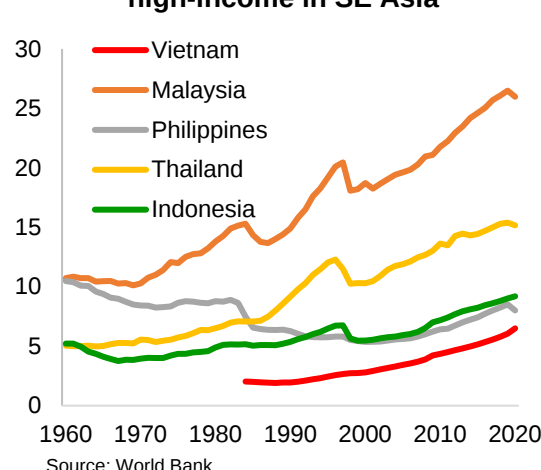


Figure 2: GDP/capita share of high-income in SE Asia



Regional performances are also quite disparate. Most countries in South-East Asia have experienced a steady convergence – barring a temporary setback around the 1997-98 Asian crisis – as have most eastern European economies since 2000 (Figure 2). By contrast, the performance of Latin American countries is disappointing, except for Chile between the mid-1980s and the early 2010s. Within Sub-Saharan Africa, while countries like Ethiopia and Rwanda were “fast convergers” in the 2000s and 2010s, South Africa and Nigeria have tended to diverge over time. From about 30% of the high-income average in 1960, SA’s GDP per capita had fallen to 13% by 2010 and has broadly stagnated since, despite some moderate convergence in the 2000s (Figure 3).

Of course, the starting point should influence the speed of convergence: Hence, under the right conditions, it should not be a surprise to see a low-income country like Ethiopia converge faster than an upper-middle income one like Chile. But even after controlling for the starting point, the pace of convergence is highly uneven. Figure 4 shows how even “good” performers over time, like Malaysia, Thailand or Botswana, did not experience anything close to the fast catch-up of China, Korea or Taiwan once their GDP per capita had reached 10% of the high-income average. The spectacular growth of China since 2000, just like that of the Dynamic Asian Economies⁵ in the 1970s/80s, remains an exception.

⁵ Korea, Taiwan, Singapore, and Hong Kong

Figure 3: GDP/capita share of high-income in Africa

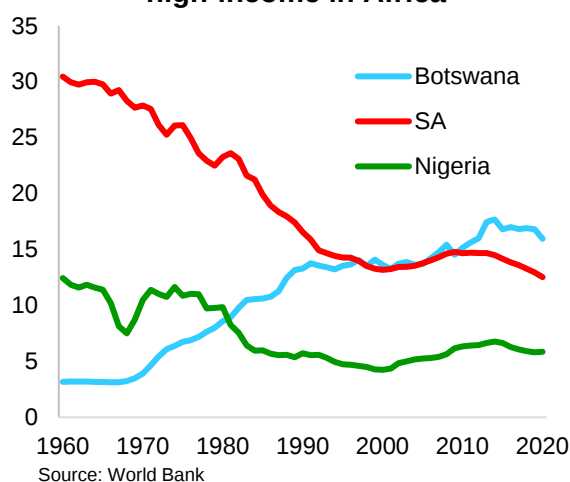
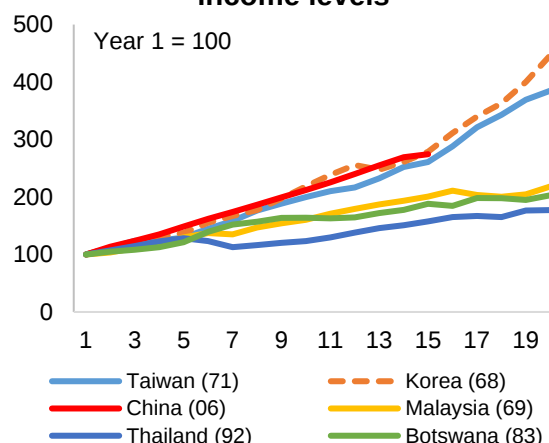


Figure 4: Compared rise in real GDP/capita beyond 10% of AE income levels



4. The debatable role of policies and institutions

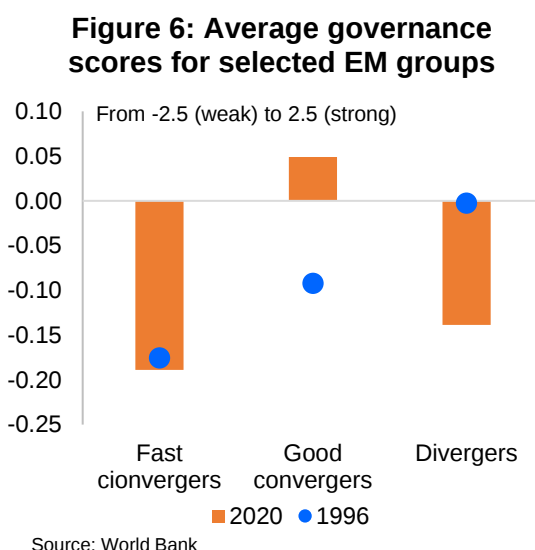
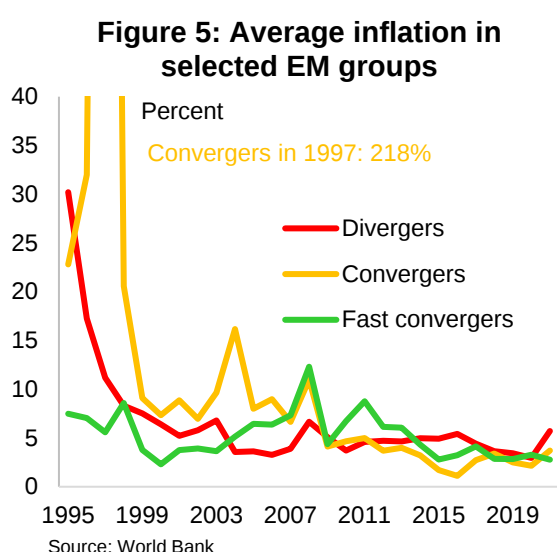
What explains this uneven performance? The significant increase in the percentage of “convergers” after 2000 would appear to support the arguments of Sachs and Warner (op. cit.) about the role of policies and institutions. Countries seemed to reap the benefits of earlier reforms that (among others) increased the independence of central banks, set inflation targets, lowered tariffs, and liberalized capital accounts. Both inflation and inflation volatility subsequently declined from earlier decades, as did the volatility of real effective exchange rates and the frequency of EM financial crises (including defaults).⁶

However, such an explanation may have its limitations. First, the percentage of converging countries declined after the GFC, potentially indicating that the 2000s performance partly resulted from exceptional circumstances (China’s outsized demand growth, the commodity super-cycle, expansion of global value chains). Second, improved inflation performance occurred both in countries that converged and diverged, including Brazil or Peru, which put the hyperinflation episodes of the 1980s behind them and also liberalized their trade and capital accounts. In fact, comparing average inflation across “convergers” and “divergers” does not show meaningfully different patterns of late (Figure 5).⁷ This echoes the argument of Easterly (2004) that while “extremely bad” policies will result in clear growth under-performance, the impact of policy changes becomes negligible when both the starting and end points fall within a moderate range.

⁶ Reinhart (2019) identifies “missing defaults” in EM in the wake of the Global Financial Crisis, in contrast to earlier periods of joint declines in capital flows and commodity prices.

⁷ We select three samples of EMs based on their relative growth performance: “Fast convergers” (India, Malaysia, Thailand, Sri Lanka, Vietnam, and Bangladesh); “other convergers” (Philippines, Indonesia, Dominican Republic, Costa Rica and Bulgaria); and “divergers” (Argentina, Brazil, Peru, Mexico and South Africa).

To assess more specifically the impact of institutional quality, we compare countries' average score on the World Bank's governance indicators.⁸ Again, the evidence is mixed. Unlike other sub-groups, the “divergers” see on balance a deterioration in their average score from 1996 to 2020; but that score is still, on balance, better than that of the “fast convergers” (Figure 6). Looking at each indicator, there appears to be some correlation between relative growth performance and rule of law or government effectiveness, in contrast to other metrics. But individual performance varies even within sub-groups. For example, South Africa does better on most metrics than Indonesia, the Philippines and Thailand; yet it diverges while they converge. Furthermore, comparing development performance to institutional quality raises an endogeneity issue: While the latter helps growth, it also tends to improve as an economy develops and incomes rise.⁹



5. Challenges in overcoming the “resource curse”

Relying on commodity exports tends to undermine convergence. Figure 7 and Appendix 1 illustrate the paucity of commodity-dependent countries (CDCs) among “fast convergers”, even in the 1970s and 2000s when commodity prices rose strongly.¹⁰ Commodity-dependency affects more than 50% of EMs according to UNCTAD and is hard to move away from, with about three-quarters trapped in that situation for decades.

Most economists acknowledge the existence of a “resource curse” but disagree over how commodity-dependency undermines growth. Hansen (2013) highlights the dominance of the commodity sector by foreign firms with few incentives to create linkages with other domestic sectors. Isham et al. (2005) argue that some commodities (that are typically extracted from a narrow geographical or economic base) are more prone to rent-seeking behaviour, which in turn is damaging to institutional development.

⁸ These indicators include voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption.

⁹ Authors such as Rodrik, Easterly, Goldin acknowledge this endogeneity.

¹⁰ We use the UNCTAD definition, which classifies a country as commodity export dependent when more than 60 per cent of its total merchandise exports are composed of commodities.

Others point to diminishing returns in the primary sector that result in a decline – and greater volatility – in relative prices of commodity exports, though Frankel (2010) disagrees. Historical experience does suggest that relative prices of farm and (to some extent) metal commodities fall over time (Figure 8). Sachs and Warner (1995, op. cit.) acknowledge the existence of a “resource curse” but argue that subsequent weak growth may result from the wrong policy response, such as protectionism.

Figure 7: Percentage of CDCs among “fast convergers”

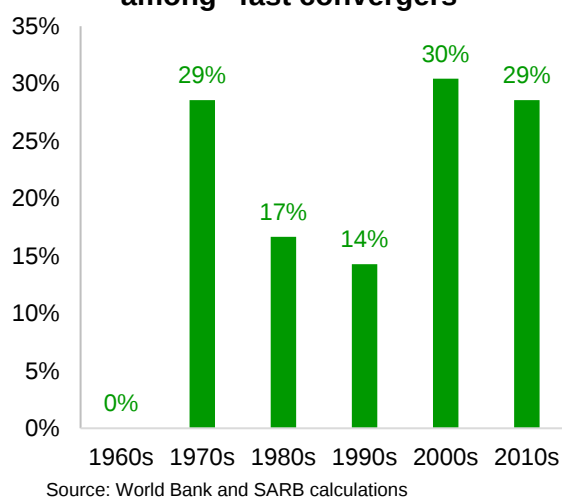
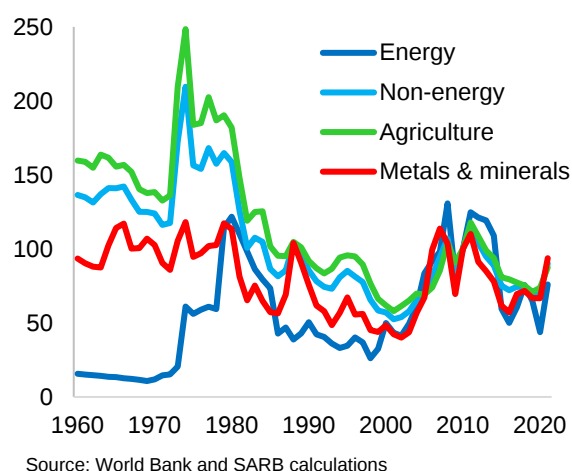


Figure 8: Commodity price indices deflated by the US CPI



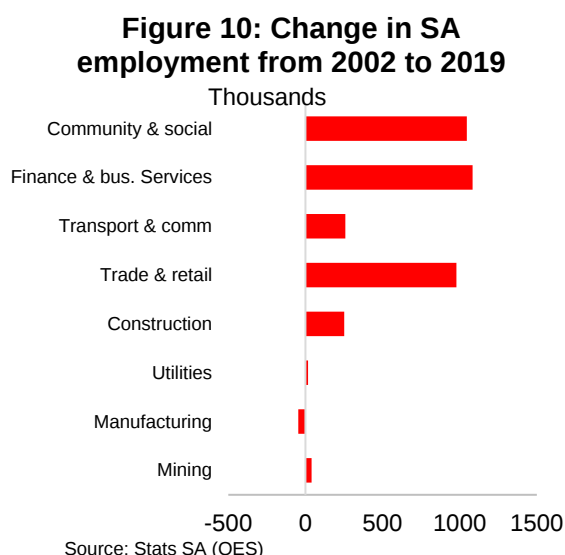
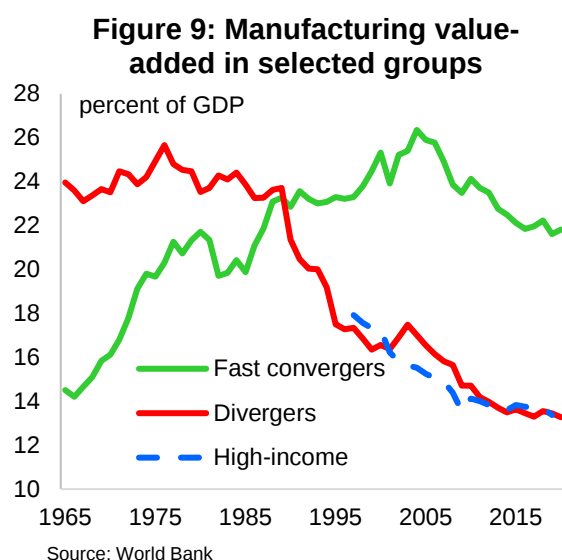
6. Sectoral productivity and allocation

Beyond moving out of commodity dependency, the ability to both generate productivity gains and shift resources to sectors with high-productivity potential may hold a key to convergence. Rodrik (2011) observed evidence of unconditional convergence across EMs in specific economic sectors, irrespective of factors like policies and institutions. But it is not uniform across industries; and sectors like machinery/equipment and high value-added services offer greater potential than others.

The challenge for EMs is thus to re-allocate resources to these sectors; but insufficient workforce education and skills typically stifles such efforts. Economic liberalization may result in productivity growth in some sectors (e.g. manufacturing) but if this happens through rationalization and job-shedding, labour then often shifts to lower-productivity sectors, with limited growth benefits for the economy as a whole. Diao, McMillan and Rodrik (2017) witnessed such patterns in Latin America, in contrast to Sub-Saharan Africa – where resource reallocation, especially from agriculture to the secondary and tertiary sectors, helped growth but within-sector productivity gains were weak. Except India, no country was able to combine benefits from both within-sector productivity gains and resource reallocation, as the “Asian Tigers” had achieved earlier.

A related debate is whether a developing economy (especially a commodity-dependent one) needs a sizable and growing manufacturing sector to converge. UNCTAD identifies many CDCs that shifted resources from primary to tertiary sectors in the last 25 years; however,

resources often moved to low-productivity services, limiting convergence opportunities. A longer historical comparison shows that in five “fast converging” economies, manufacturing initially rose as a share of GDP before stabilizing at high levels; by contrast it fell on average in five diverging ones, including South Africa (Figure 9). In effect, the latter “de-industrialized” in similar fashion to high-income countries without having achieved convergence.¹¹



7. Policy implications for South Africa

South Africa’s failure to reverse earlier divergence appears at odds with policies followed since democratization and their outcomes (lower and more stable inflation, increased trade and financial openness). Possibly, these policies, by themselves, “were not enough.” This is not to argue that stability-oriented policies should be abandoned: On the contrary, as Easterly or Rodrik (op. cit.) argue, a shift away from “moderate” policies can have very damaging effects on growth. In SA’s case, improving public finances appears crucial to reduce premiums on borrowing costs and “crowding-out” of private-sector investment. Equally, reversing the deterioration seen in some governance indicators over the past 20 years or so may help restore what was (post-1994) one of South Africa’s comparative advantages (versus many other EMs) to attract investment.

But while such steps would probably help potential growth, they might not be enough to lift it by the required amount – maybe at least 2-3 percentage points – to achieve sustained convergence. In recent decades, SA suffered from both declining productivity growth and a reallocation of labour resources towards low-productivity sectors (such as public and social services, retail or informal employment – Figure 10). This occurred even as SA was able to attract, up to recently, a similar share (relative to GDP) of external capital as EM peers. But such flows appeared to fund public deficits and financial investments rather than real-economy, productivity-enhancing investments.

¹¹ For this comparison, the fast convergers are Korea, Singapore, Malaysia, Thailand, and Sri Lanka; the divergers are Argentina, Brazil, Mexico, Peru, and SA.

Shifting a greater share of resources to higher value-added manufacturing or services may be needed, including to boost know-how, “learning by doing” and innovation (and thus help remedy poor educational outcomes, which would take years to fix). Even a diversification of the primary sector into more diverse exports (including in agriculture) might assist with labour absorption and rural development.¹² Yet, export-oriented strategies may become challenging if global trade flows grow by less than in recent decades, and “latching on” global supply chains become harder as the latter are shortened. In addition, Asian economies have by now established a dominant position in many product markets which may be hard to challenge.

Rodrik (op. cit.) suggests “opportunistic” approaches like special economic zones, subsidised credit, tax incentives can be “shortcuts” to help achieve successful resource reallocation. However, SA policymakers may first need to address structural constraints, such as rail or power infrastructure or regulatory uncertainty, to maximise the impact of any such steps and reduce the risk of wasting public money.

8. Conclusion

Economic convergence of EMs towards rich countries’ income levels has improved in recent decades; yet it is far from being the norm and may prove more challenging in coming years in an environment of slow global potential growth and rising protectionist pressures. The fast convergence of China in the last few decades appears an exception that will be hard to match. Better macro policies and improved governance may not be sufficient to shift a country like South Africa onto a significantly higher growth path. In the longer run, stronger growth – that reverses the widening income gap between SA and high-income economies (or successful EMs) – may require a reallocation of resources to higher-productivity sectors.

¹² UNCTAD and the World Bank cite the example of Costa Rica, which achieved both income convergence and reduced commodity dependency, by reducing its initial reliance on coffee and banana exports and focusing on export diversification (including through a broader range of agricultural exports).

Appendix: List of non-OPEC emerging countries that experienced fast convergence over respective decades

Fast convergence is defined as having GDP per head – expressed as a share of the high-income average – that expands by more than 25% within ten years. Commodity-dependent countries are highlighted in blue.

1960s	1970s	1980s	1990s	2000s	2010s
Korea	Botswana	Botswana	Chile	Angola	Bangladesh
Singapore	Brazil	China	China	Bangladesh	China
Taiwan	Hong Kong	Hong Kong	Korea	Bulgaria	Cote d'Ivoire
	Korea	Korea	Malaysia	China	Ethiopia
	Malaysia	Taiwan	Sri Lanka	Dom Rep	Ghana
	Singapore	Thailand	Taiwan	Ethiopia	India
	Taiwan		Vietnam	Hong Kong	Indonesia
				India	Philippines
				Indonesia	Poland
				Korea	Romania
				Nigeria	Rwanda
				Panama	Sri Lanka
				Peru	Turkey
				Poland	Vietnam
				Romania	
				Russia	
				Rwanda	
				Singapore	
				Sri Lanka	
				Taiwan	
				Tanzania	
				Thailand	
				Vietnam	

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