The Minerals Energy Complex in South Africa: an Empirical Debunking.*

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Abstract

A hugely influential framework in South African political economy holds that the country has been dominated for the better part of a century by a Minerals Energy Complex (MEC) comprising powerful firms and state agencies involved in mining and a range of downstream industries. The MEC is said to act as a 'system of accumulation' determining patterns of accumulation across the economy. This paper argues that MEC theories rest on hollow empirical foundations. It shows, firstly, that the apparent size, stability and integration of MEC sectors in national accounting data are a statistical artifact of the overly expansive and ad hoc way in which the MEC has been defined. Secondly, it shows that the political-institutional conditions for an MEC system of accumulation no longer exist, if they ever did. Conglomerates related to MEC sectors once possessed the ability to shape economy-wide accumulation dynamics but it's unclear if their interests were ever geared towards the self-reproduction of core sectors at the expense of diversification. With liberalization those capacities were dismantled. MEC firms never regained their position at the top of the corporate hierarchy and in fact there is no clear evidence of them even acting as coherent fraction of capital. Far from favoring the MEC, the post-Apartheid state meekly pursued diversification but was stymied in this by it's own lack of capacity. This left commodity dependence intact – not as a result of the MEC, but of state enfeeblement induced first by neoliberalism and then by state capture. The paper closes by showing how assumptions of corporate hegemony – latently embedded in MEC theories – leave us unable to explain major trends in South African political economy like state capture.

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1 Introduction

For nearly three decades, the Minerals Energy Complex (MEC) has served as a one of the dominant categories of analysis in South African political economy. First articulated in Fine and Rustomjee's (henceforth *FR*) *The Political Economy of South Africa* (1996), the MEC framework contends that South Africa's economic trajectory since the early 20th century has been shaped by a powerful coalition of mining conglomerates, energy-intensive industries, and state-owned enterprises. This complex, they argue, functioned as a "system of accumulation," directing capital flows, stifling diversification, and reproducing a commodity-dependent industrial structure. The theory gained renewed prominence post-Apartheid, as Samantha Ashman, Ben Fine and Susan Newman (*AFN*) have argued that the MEC evolved through globalization and financialization – retaining its dominance over economic policy and accumulation patterns (Ashman, 2009; Ashman et al., 2011b, 2013). Today, the MEC remains a pervasive lens for analyzing South Africa's stalled industrialization, persistent inequality, and contested transition to democracy.

Yet despite its influence, the empirical foundations of the MEC thesis have gone largely unchallenged. This paper argues that the theory rests on flawed assumptions about both the structural and institutional dimensions of South Africa's political economy. The chief target of the paper is the continuity thesis - the claim that the minerals-energy system mapped by *FR* still directs accumulation in the democratic era. New value-added, export and ownership evidence shows that post-1994 South Africa no longer matches the structural or institutional profile that thesis requires; the idea of a cohesive, still-dominant complex is therefore untenable. In the course of mounting this critique, I also revisit the evidence for a pre-1994 MEC and finding it lacking in key respects, particularly with regards to the crucial matter of determining whether constellations of corporate power were aligned or opposed to diversification. What endures today is not an integrated minerals-energy system but commodity dependence rooted in a fragmented, capacity-starved state, a macro-financial regime shaped by global integration, and firm-specific rent seeking rather than coordinated corporate power.

The argument proceeds on two fronts. First, I interrogate the structural claims underpinning the MEC thesis. *FR* (1996) defined the MEC as a cluster of sectors—mining, energy, and seven broad manufacturing categories—that accounted for a disproportionate share of value added and exhibited strong input-output linkages. *AFN* (2013) updated this analysis, asserting that the MEC's economic weight remained stable post-1994. However, cross-national comparisons from 1995 using OECD input-output data reveal that South Africa's MEC sectors, as defined by these scholars, are neither unusually large nor uniquely integrated. The complex's apparent stability stems from its ad hoc construction: by grouping primary and heavy industries that form the backbone of any modern economy, MEC theorists conflate technical necessity with systemic bias. When mining is excluded, South Africa's MEC shrinks below the global average, undermining claims of structural exceptionalism.

Second, I tackle the institutional narrative of MEC continuity. The original theory emphasized the centrality of conglomerates like Anglo American, which controlled vast swaths of industry and finance through cross-holdings and directoral interlocks. These firms, aligned with state agencies, purportedly prioritized mineral-linked accumulation over diversification. Post-Apartheid, however, liberalization shattered this system. Conglomerates unbundled, foreign firms entered key sectors, and corporate governance shifted to a shareholder model. By 2022, MEC-related firms accounted for just 8 percent of assets among South Africa's top 40 corporations - a stark contrast to their 84 percent dominance in the 1990s. Meanwhile, the state's capacity to steer industrialization eroded. Early democratic governments pursued diversification halfheartedly, while the Zuma era saw institutions hollowed out by corruption. *AFN* attribute post-1994 neoliberalism to MEC interests, but this conflates sectoral power with broader capitalist preferences. Deregulation and financialization reflected pressures from a heterogeneous business elite, international investors, and ideological shifts - not the machinations of a coherent MEC bloc.

I link the problems with the MEC approach (MECA) to underlying theoretical defects. In seeking to construct an encompassing middle range theory of South African capitalism – pre- and post-Apartheid - MEC scholars have essentialized historically contingent power relations. The result is a latest instrumentalism that reduces state actions and market dynamics to the "imperatives" of an abstract complex and assumes a strong form of corporate hegemony over the state - a premise that collapses under empirical scrutiny. By over-aggregating disparate phenomena into a monolithic "MEC," proponents obscure the evolving political processes — such the fragmentation of corporate power, the erosion of state capacity, and the complex interplay of neoliberal reforms and state capture — that have reshaped the economic landscape. As the final section of this paper demonstrates, the persistence of MEC rhetoric rests on an uncritical assumption of structural continuity that belies the profound institutional and agential shifts observed over the past three decades.

Despite all this MECA proponents have produced research that is, in it's details, deeply insightful on a number of topics including globalization and the nature of the democratic transition in South Africa. But the problems in the broader framework they've sustained redound beyond the seminar room. The MECA encourages seriously flawed strategic priorities. It's analysis strongly implies that an alternative development path can only be opened up by interventions that disorganize and fragment the supposedly dominant bloc, like mining nationalization. In fact, capitalist power is too dispersed for such actions to be decisive. The more immediate hurdle is a fragmented, capacity-starved state whose economic agencies have been hollowed out by the patronage networks that deepened under the Zuma presidency (Von Holdt, 2019). Reviving industrial momentum will hinge less on dismantling an allegedly unified MEC than on rebuilding state capability and assembling coalitions broad enough to support a coherent development programme - tasks the MEC template, in its current form, does little to illuminate.

This paper is divided into six sections. Section 2 lays out the MECA's argument. Section 3 critically evaluates the evidence that South Africa displays a distinctive MEC-dependent industrial structure. Section 4 moves to the institutional-political level and examines whether MEC firms comprised the dominant power cluster in the economy and whether they continue to do so. Section 5 tests the evidence that the post-Apartheid state has prioritized MEC interests. Section 6 draws out deeper theoretical flaws in the MECA shows how the result in a "blunt instrumentalism" (Sachs, 2024). Section 7 summarizes and suggests a rethinking of research agenda.

2 The 'Minerals Energy Complex': a history of the concept

At the core of the MECA is the claim that there is a close articulation between the industrial structure of the economy and its system of governance. The methodological technique guiding *FR*'s original work was what they called the 'linkagency' approach. This took as its starting point the obvious fact that processes of capitalist development unfold, in part, according to opportunities inscribed by the existing structure of activities, through which is given matrices of supply and demand, endowments of technology and skill, habits of consumption etc. Yet, pace certain reductive approaches, 'linkages' in this broad sense are by themselves never sufficient to summon forth the resources and entrepreneurial capacities upon which growth hinges. For this we need to understand how social or individual agencies are configured such as to allow certain actors to capitalize on specific opportunities while others are passed over. *FR*'s account of agencies is broadly Marxist in that it emphasizes class agencies and particularly seeks to draw some analytical distance from 'developmental state' theories, which in their view unduly segregate market and state. In its essence the MECA is an interpretation of the historical evolution of South African capitalism centered on the congruence between a certain set of sectorally defined interests and opportunities and a certain structure of corporate and public power, which have together defined the pathways along which development has progressed.

The original work on the subject was indeed deeply historical. *FR* traced the origins of the MEC to the inter-war period, during which the state, while seeking to nurture the development of Afrikaner capital, inadvertently helped to incubate the complex by targeting its economic interventions at basic and heavy industries. The subsequent period witnessed the full maturation of the MEC as cross-ownership and directoral interlocks "eroded the disjuncture" between Afrikaner and English fractions of capital, thereby aligning class and state agencies around a program of support for core industries. The closing chapters of the book focused on demonstrating the state's bias towards the MEC, chiefly manifesting in preferential tariffs and heavy investment in the SOEs that provisioned critical services and infrastructures for the wider complex. In a set of opening empirical chapters *FR* surveyed the institutional and structural foundations of the matured MEC, demonstrating the heavy weight of it's core sectors in national output, their tight integration with each other, their relatively weak linkages with other sectors and the historical consistency of these facts. They devoted particular attention to ownership and corporate structures which disclosed the vast scope of influence of the big conglomerates, their rootedness in mining, their control over finance and their close links with SOEs.

Collectively these structures constituted what *FR* term a 'system of accumulation'. This more elaborate terminology is intended to call attention to the ways that the MEC was able to shape accumulation beyond it's own borders. Not simply a set of prominent sectors and firms, the MEC is conceived here as kind of dynamic nexus at the heart of the economy, influencing it's general pattern of growth. Three things account for it's ability to perform this role. First are the extensive cross-holding and pyramidal ownership structures which allow MEC firms to directly project influence across an array of sectors. Second is the control the MEC wields over finance which provides it a means to shape economy-wide patterns of capital allocation. And thirdly is it's close relationship and in fact interpenetration with state agencies and SOEs. The MEC is thereby endowed with broad capacities for shaping development yet these have mostly manifested in an undermining of the non-MEC economy. MEC dominance inscribes a growth path defined by stunted diversification, in which non-MEC sectors flounder while accumulation concentrates in and around the mining-linked core of the economy.

Democratization initially seemed to herald a sharp break from the old accumulation system, as liberalization, the restructuring of corporate ownership and the growth of services appeared to undercut the bedrocks of the Apartheid economy. But MEC theorists aver, contending that the same system of accumulation remains in place though in a somewhat evolved form. Central to their arguments is that globalization and financialization – the dominant vectors of post-Apartheid restructuring – were not entirely exogenous forces bearing on the South African economy but were in fact rooted in the shifting strategic imperatives of MEC firms themselves (Ashman & Fine, 2013, p.171). A desire to modernize and internationalize operations was long-standing among the corporate elite but had been obviated by the Apartheid's growing isolation. Barriers to externalization were gradually lifted towards the end of the Apartheid era and then torn down with the ANC's neoliberal turn. The "broad thrust of economic developments and economic policy [post-Apartheid]" thus came to revolve around "manag[ing] the globalization and financialization of South Africa's domestic conglomerates, whilst sustaining their profitability on core activities within the domestic economy itself," (Ashman et al., 2011a, p.186).

AFN demonstrate upticks in outward investment, capital flight and the acquisition of financial assets across the early democratic period, implying MEC firms led these developments (Ashman et al., 2011a; Ashman, 2009; Newman, 2019). For all that had changed, however, the same underlying pattern of accumulation was reproduced. The centerpiece of *AFN*'s empirical case is an updating of input and output data in which they show that, as a collective of industries, the MEC's weight in the economy held steady as did the same core-periphery pattern of value chain linkages. With policy still tending to mirror the (shifting) preferences of MEC giants and with their associated industries still forming the gravitational center of the economy, it made sense to understand the 1990s ruptures in terms of an evolution within the prevailing system of accumulation rather than the transition out of it (Ashman et al., 2013, p.261).

This argument has proved enormously influential. Its now an article faith among many heterodox leaning scholars that the South African social formation is best understood in terms of the persisting dominance of the MEC (although this argument has far less traction amongst mainstream economists). A plethora of books and papers have drawn on the concept to explain topics ranging from neoliberalism (Ashman & Fine, 2013; Ansari, 2016; Marais, 2010), to financialization (Isaacs, 2017; Mohamed, 2009; Ashman et al., 2011b), industrial policy (Roberts & Rustomjee, 2010; Zalk, 2017; Lumkile Mondi, 2005), capital flight (Mohamed & Finnoff, 2005; Ashman et al., 2011a), labor conditions (Reddy, 2015; Kenny, 2023), trade policy (Claar, 2018), energy systems (McDonald, 2011; Froestad et al., 2018), energy transitions (Baker & Burton, 2024; Satgar & Cock, 2021), social crises (Hart, 2014) and much else (Mohamed et al., 2023; Sharife & Bond, 2012). This success did not arrive overnight. A decade after the *Political Economy of South Africa* was published, Fine (2010) was lamenting the term's limited uptake. But that changed quickly in the following years. The stress on continuity in MEC theories likely proved appealing to those grappling with the ongoing failure of the South African economy to foster a diversified economic base. Likewise it resonated with the increasingly common sense notion that the interests of the incumbent corporate elite had prevailed over other actors in the democratic transition. Outwardly, mining seemed to remain a central pillar of the economy and the Marikana massacre in 2012 and its aftermath shed a stark light on the ways that sector had become re-enmeshed in webs of political power following the the demise of Apartheid.

As its popularity has increased, the boundaries of the concept have become blurred. In some writing "MEC" now serves as little more than shorthand for the clout of large mining- and energy-sector firms. The scholarship surveyed above, however, treats the term much more precisely: it denotes a distinctive industrial configuration – tight input-output linkages, conglomerate ownership and a supportive state apparatus – that together amount to a "system of accumulation." It is this stricter, analytic version that the paper interrogates. I do not dispute the plain facts that minerals remain vital to South Africa's economy or that mining houses wield considerable power; rather, I question whether those facts, on their own, demonstrate the continued existence of a coherent MEC. Quantitatively, the empirical the case for MEC dominance rests almost entirely on output and linkage data. The serious problems with this data are examined in the next section.

3 Is there an MEC industrial structure?

FR (1996) provided two main pieces of evidence to demonstrate the structural bias towards minerals and energy in South African industrialization. First they show the large weight of MEC sectors in economic activity - measured in terms of employment, exports and, chiefly, value added - using national accounting statistics (pg. 83). Secondly, they used input output tables to reveal the core-periphery pattern of industrial linkages. MEC sectors were shown to each draw large shares of their inputs and dispatch large shares of their outputs to and from other MEC sectors while non-MEC sectors operated with relatively independent value chains (pg. 77). *AFN* (2013) reproduce and update the same figures to demonstrate the continuity of the MEC post-Apartheid. We now observe a slight decline in the MEC shares of exports and employment (to only around 10 percent of the latter). But as a share of GDP the MEC continued to hold its ground, hovering at just over 20 percent until 2010. Table 1 below replicates *AFN*'s (2013, p.255) Table 10.1 showing input-output linkages for 2010.

These figures have been questioned by other critics. Bell & Farrell (1997) noted that *FR*'s crucial Figure 4.5 showing the MEC's weighting in GDP used current rather than constant prices which means that it cannot be used to assess the inter-sectoral allocation of real resources over time. Adjusted to constant prices, which nets out commodity price fluctuations, the same figure shows a notable decline in the MEC share occurring from the mid 60s till the mid 70s, contradicting the thesis that diversification had been stunted. Surprisingly, *AFN* once again don't tell us whether the GDP shares they report or are in current or constant prices and whether and to what extent the results are robust to this distinction.

A far more serious problem is the lack of benchmarks in *FR* and *AFN*'s data, which seriously limits what we can safely conclude from it. The problem can be gauged just by glancing at Table 1 which enumerates the sectors comprising the MEC, defined at the 2-digit level. The list is long, encompassing a full 7 of the 16 manufacturing sectors in standard SIC (/ISIC) classifications as well as mining and energy. Neither *FR* or *AFN* describe the selection criterion through which it was constructed. It seems likely that it was simply back-filled inductively from IO tables. In other words *FR* simply looked at

MEC subsector	Share of inputs from MEC sectors (% of total)	Share of output to MEC sectors (% of total)
Coal mining	26	90
Gold and uranium ore mining	55	5
Other mining	23	77
Coke and refined petroleum products	88	18
Basic chemicals	77	60
Other chemicals and man-made fibres	67	37
Plastic products	68	30
Non-metallic minerals	73	8
Basic iron and steel	82	59
Basic non-ferrous metals	91	59
Metal products, excluding machinery	70	41
Machinery and equipment	63	53
Electricity, gas, and steam	53	47
Non-MEC manufacturing	23	6

Table 1: MEC Input-Output linkages. Reproduced from Ashman & Fine (2013). The category other mining includes extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction (excluding surveying); mining of iron ore; mining of non-ferrous metal ores, except gold and uranium; stone quarrying, clay and sandpits; mining of diamonds (including alluvial diamonds); mining of chemical and fertiliser minerals; extraction and evaporation of salt; mining of precious and semi-precious stones (except diamonds), asbestos, and other minerals and materials; service activities incidental to mining of minerals.

which sectors were mostly closely connected and then lumped these together in the MEC. The result is that the MEC includes not simply minerals and energy but almost all of the most basic sectors in manufacturing - chemicals, plastics, steel, other minerals products - as well as machinery which is a more intermediate but likely highly network in IO terms. The boundaries of the MEC, in other words, have been drawn such as to surround the whole primary segment of the industrial value chain. The skeptic will invariably worry that the apparent size and stability of the MEC core as well as it's internal cohesion are simply an artifact of the expansive and ad hoc way in which it's been defined. Would we not expect these sectors collectively to be large, stable and well connected in every economy simply by virtue of the technical realities of modern industrial production? Would we not expect the remaining sectors to be less connected, especially in output terms, since they are closer to finished stages of output?

The obvious way to alleviate these concerns is to provide international benchmarks against which the distinctiveness of the South African productive structure can be gauged. This is easily done using the OECD's Inter Country Input Output database which provides global IO tables for 76 countries between 1995 and 2020 (see Appendix A1 for the full list of countries). Using this data I first calculate MEC value added shares for all country-years and highlight South Africa alongside the global mean (ex South Africa) – Figure 1. The figure shows that South Africa's value-added share of MEC is only marginally higher than the global average with the disparity narrowing over time (and then diverging again in the last two years of the sample). Appendix Figure A2 disaggregates this by sector, revealing that only non-energy mining and coke and refined petroleum products consistently comprise larger shares of value added than the global average (chemicals and fabricated metals are also larger for the first period of the sample up to around 2010). Excluding mining, the MEC as an aggregate closely tracks the global mean (Figure 1, RHS panel)[1]. When mining is counted, it hovers consistently below the level of other mining intensive

[1]Mining is obviously central to the sector, so the logic of this exclusion should be made clear. It functions to test the higher order claim that the MEC has had a "determining role throughout the rest of the economy" (Fine & Rustomjee, 1996, p. 5) manifesting in the over-development of core sectors at the expense of other manufacturing. If true, the MEC's footprint should remain visible once the mining node itself is removed; otherwise the concept reduces to the truism that mining is large. The subtraction therefore serves as a stress-test of the *linkage* architecture, not a denial of mining's economic weight. Without this test, a large MEC share may simply reflect the arithmetic fact that mining is large

middle-income and rich countries (see Figure 1's caption for the definition and list). Exactly the same pattern emerges with exports (Figure A3). Thus to the extent that the South African MEC exceeds the norm this is really just an artifact of the size of mining (and refined petroleum, itself related to the country's large coal deposits).

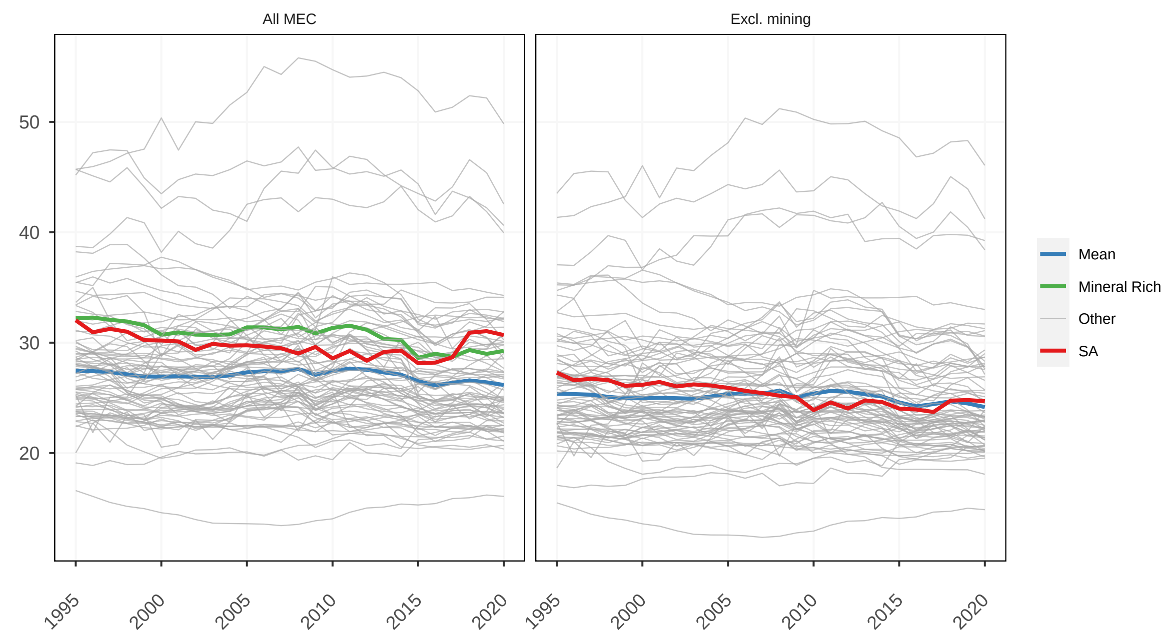

Figure 1: MEC value added shares, South Africa vs 76 countries. Calculated by summing value added of MEC sectors over the total value added of all sectors in the database. See Table 1 for a full list of MEC sectors. RHS panel excludes non-energy mining from the calculation. Data derived from the OECD's Inter-Country Input Output Tables. Mineral Rich countries are defined as all middle and upper-middle income countries in the top decile of mineral rents as a percent of GDP for 2021, as calculated by the World Bank and which are included in the ICIO database. These are Australian, Brazil, Chile, Kazakhstan, Peru and Ukraine. The figures show that the size of the South African MEC, in value added terms, is relatively normal, particularly if mining is excluded. In 2010, for example, the year from which the data from Table 1 was taken, SA's MEC was smaller than Italy, German, Jordan and Egypt (see Appendix A1).

The second thing to note about Figure 1 in the constancy of MEC shares. Recall that this is the main evidence of stalled diversification furnished by *FR* and *AFN*. But going by Figure 1, an inability to diversify out of the MEC is in fact the normal condition of global capitalism. The cross-country mean standard deviation of MEC value added shares for the whole period is 1.24, while SA's is 1.01. The average first to last period change in MEC shares is -1.31 and -1.33 for SA (if we exclude mining, the decline in SA's MEC sectors was twice the global average). The general stability of MEC shares is partly a function of the fact that the latter comprises mostly primary sectors which are only likely to be diminished by very significant shifts in technology and output. But it also reflects, once again, the broad gauge way in which the MEC has been defined. As Figure A2 suggests, if we look inside the MEC we do in fact see a degree of diversification occurring, with various sectors rising and falling over long periods. However, most of the action in sectoral reallocation is likely to be masked even here because each of these 2-digit industry aggregations are themselves extremely broad. 'Metal products ex machinery', for example, contains 7 distinct subsectors ranging from steam generators to cutlery. Other than with respect to the very widest scale of structural change – industry to services for example – diversification simply cannot be studied properly at this level of clustering.

Next I calculate the IO statistics in Table 1 for all country-years. In Figure 2 I aggregate these by calculating the total share of MEC inputs from MEC sectors and MEC outputs going to MEC sectors. In Figure 3 and Appendix Figure A4 these are disaggregated by sector, as in the table. There is a very clear result here: there is nothing at all unusual about the integration patterns that Table 1 describes. In input terms, the South African MEC evinces more or less the same level of cohesion as the global average, becoming slightly more integrated in recent years. In output terms it's below average for most years, again rising above the average in recent years. The seemingly weak integration of the MEC with non-MEC sectors also appears entirely normal from the comparative angle. In fact SA's non-MEC economy is more integrated with MEC sectors than the average in both input and output terms (Figures 3 and A4. The really striking figure from the sectoral breakdown is mining. It might be expected that, given export quantities, relatively little output from mining would end up back in the MEC. But the fact that so few inputs from mining (and mining services) are sourced from the rest of the MEC appears to directly controvert the predictions of that framework.

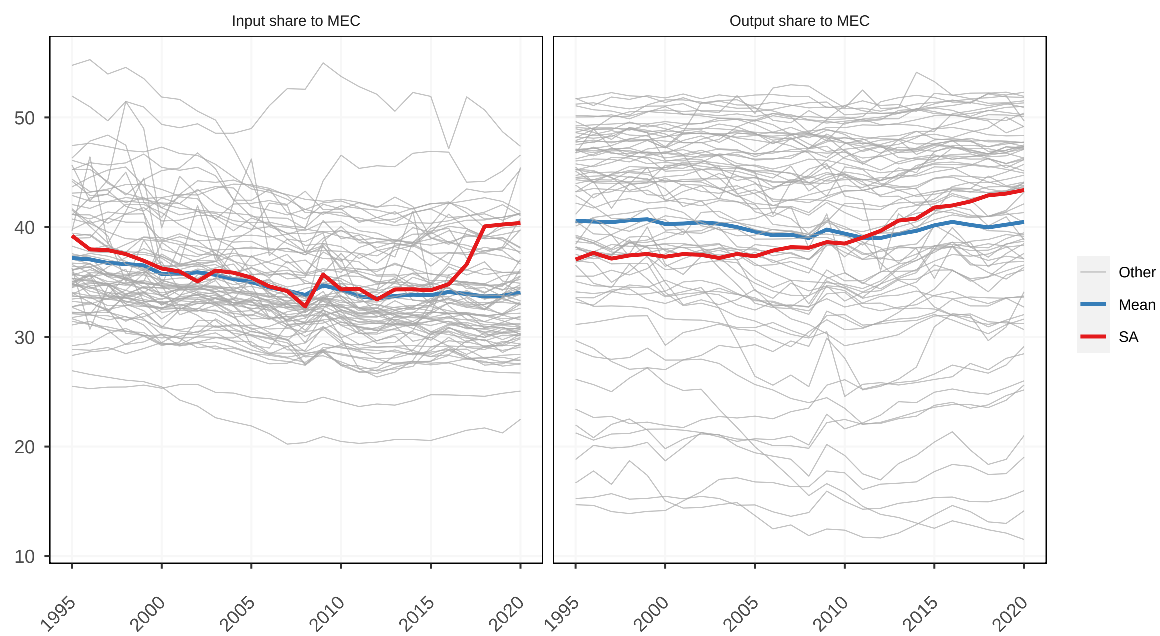

Figure 2: MEC input-output integration, South Africa vs 76 countries. LHS panel calculates the share of total inputs of (domestic) MEC sectors coming from (domestic) MEC sectors. RHS panel does the same for outputs. See Table 1 for a full list of MEC sectors. Data derived from the OECD' Inter-Country Input Output Tables. The figures show that in IO terms the linkage pattern of the South African MEC is entirely normal. Given that the MEC is defined to include mostly primary sectors it is expected that large shares of inputs and outputs will remain in these sectors.

It therefore seems clear that the large and stable value-added shares and high levels of integration in the MEC are just an artifact of the over-capacious way in which borders have been drawn. This in effect means that there is no evidence that South Africa has the distorted industrial structure which is supposed to be the primary means through we would observe the operation of the MEC system of accumulation. We have no reason to believe, moreover, that South African development has been characterized by opposition between MEC and non-MEC economies. Note that the problems here are not just about trends but levels – they call in question the very existence of the MEC and not simply its persistence.

Of course, nothing here rules out that something like the industrial structure which the MECA describes may yet exist. Notwithstanding the weak linkages just described, the basic impetus for the MECA seems broadly valid – mining was the wellspring of capitalist development in SA, the linkages to which it gave rise very clearly shaped patterns of early industrialization and and those influences might have lingered for some time. Mining dependence certainly shows up continuously in other ways, like export composition. Moreover, from at least the mid-1980s, as the political crisis ratcheted up, SA experienced industrial stagnation and we have good evidence from other sources that the effect of this was to lock in place a relatively backward productive structure (Hausmann & Klinger, 2008). This is not to say that an *MEC* structure was preserved as there is no solid of such a structure ever having existed. But the possibility remains.

However, uncovering better evidence of such a structure would only be the first step in righting the MECA ship. Recall the purpose of the MECA is to *explain* the accumulation trajectory of the country, not simply to give it a catchy label. What we need then is not simply to observe the accumulation patterns characteristic of the minerals-energy 'bias' but to have evidence that it is the mechanisms associated with the MEC system of accumulation that produce this effect. For that, we need to ascend from the industrial to the corporate structure, from the domain of linkages to that of agencies.

4 Does the MEC rule?

4.1 The Apartheid MEC: power but to what end?

Central to the MECA's appeal is to offer a complete account of development by joining structure with politics and institutions. Having described South Africa's industrial ecosystem, *FR's* (1996) original work moved on to a detailed survey of ownership, governance and financial institutions before elaborating a history of industrial development that emphasizes consistent state support for the MEC core. In this they traced out what they called the six "axes" of capital each combining MEC with financial interests. This data they marshaled demonstrated beyond much doubt the 'structural prominence' of the firms associated with the MEC (Young, 2015). If this collective were indeed to function as a complex there is little doubt it would act as the main locus of power in the economy – although 'locus' is maybe inappropriate given the sheer expanse of these interests, which by the early 90s comprised around 84 percent of the JSE. Cross-holding patterns, directorial interlocks and sheer extent of concentration and personalized control created a strong organizational basis for cohesion across the six axes of capital (Reddy, 2023). Moreover, the control that conglomerates exercised over finance, although this was a relatively late development, certainly left them with a powerful instrument through which they might in principle shape accumulation across the wider economy. In short, these figures serve to establish the enormous power of the cluster of conglomerates held to constitute the MEC.

What this data – alone or in combination with prior statistics on industrial structure – cannot do, is to give us some sense of how that power was likely to be deployed. It cannot, in other words, establish how precisely *interests* were configured within the so-called MEC, particularly with respect to the crucial

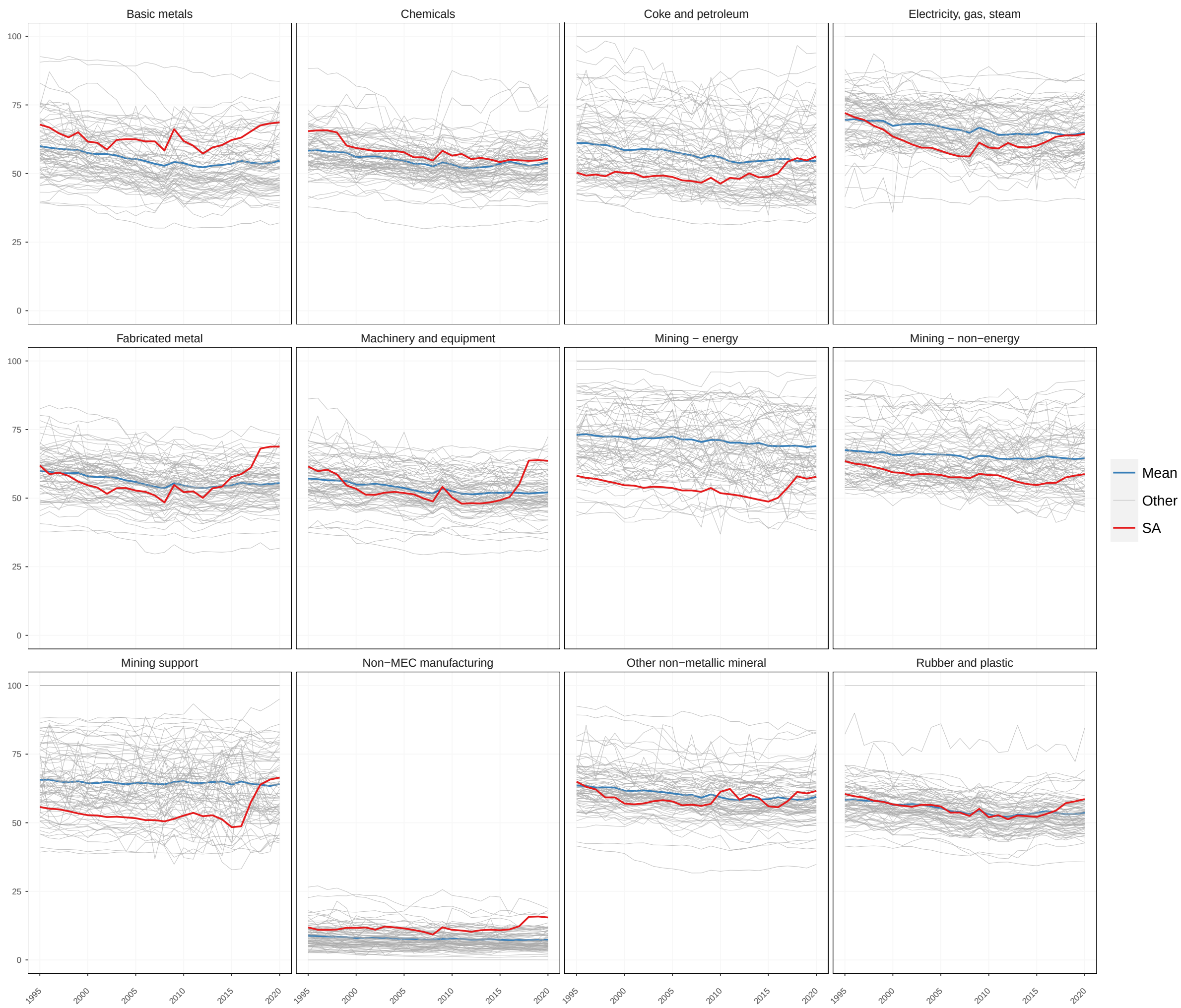

Figure 3: MEC input shares, South Africa vs 76 countries. Share of inputs of each MEC sector sourced from (domestic) MEC sectors. See Table 1 for a full list of MEC sectors. Data derived from the OECD Inter-Country Input Output Tables. See Appendix A4 for output shares by sector. The figure shows that most MEC sectors in SA, with the exception of basic metals and chemicals are generally less integrated in input terms than the global norm. Crucially, it shows that both energy and non-energy mining as well as minig support draw relatively few inputs from other MEC sectors. It also shows that weak linkages between MEC and non-MEC manufacturing sectors is a normal pattern – in fact in SA these linkages were relatively strong.

question of diversification. It is firstly unclear what the precise weighting of MEC activities was within the business model of each respective axis of capital. We may be assured that such activities were dominant in certain conglomerates – Anglo Vaal and the crucial case of Anglo American. But we don't know this to be true of others. Liberty Life seems to have been mostly a financial group with no direct stake in mining activities. Rembrandt obtained a minority stake in Gold Fields of South Africa in the early 80s but began reducing that stake fairly quickly on it's way to focusing on core activities like luxury goods and tobacco. Even if it were clearly the case that all conglomerates derived a majority of their revenues from MEC activities, this still wouldn't settle the issue. There is no basis for leaping from this to the proposition that MEC groups were concerned primarily with the reproduction of the MEC core to the exclusion of other sectors. These were, after all, diversified conglomerates whose entire history of development was characterized by expansion into new sectors, not all of them connected to minerals and its cognates. Indeed it's possible to read the data *FR* present in a very different way: as suggesting that South Africa possessed institutional arrangements that were highly *propitious* for diversification. Cross-sector conglomerates, densely interconnected with banks and with public agencies – these have been heralded in certain key accounts as crucial ingredients in the East Asian miracle economies, as *FR* well know (1996, Chapter 2). It is the dismantling of vertical integration and the creation of counterposing interests across the beneficiation value chain that many see as the key political barrier to diversification today (Roberts, 2008; Zalk, 2021; Mondliwa & Roberts, 2019).

To the extent that *FR* offer evidence of the MEC's hostility to diversification this has to be inferred from the historical record of stunted industrial transformation. But again this is a dangerous inference. Many things could have obviated diversification independent of the preferences of MEC firms. More seriously: the evidence of failed diversification, at least during earlier periods of the MEC, is itself weak. *FR* don't support it with anything beyond the problematic statistics just discussed. For both the inter-War period and the post-War period up to the 80s, Bell & Farrell (1997) demonstrate that a wide variety of industrial sectors experienced extremely strong growth. They were at times outpaced by MEC sectors, particularly in later years, but the strong co-movement of these different sectors raises serious doubts about whether development in the MEC core was ever oppositional to growth in the industrial peripheries. As we've already noted, from the 80s diversification does grind to a halt. But there are obviously some major confounders that would have to be cleared away before we could seriously attribute this to the MEC. It seems pretty clear that the primary causes of industrial stagnation from that point were the political and economic crises in which the South African economy became embroiled.

The other evidence that the MEC interests were geared towards self-reproduction comes from the historical pattern of state intervention, which *FR* argue was concentrated on MEC sectors. To the extent that the state was operating at the behest of the MEC magnates this could show a revealed preference towards bolstering the core at the expense of the non-core. Yet *FR* do not offer anything to dissuade us from the counterfactual that in the absence of an MEC, the state would have acted in identical ways. As Bell & Farrell (1997) argue – states, at least those with similar capacities, almost always did. State owned or sponsored initiatives in basic industries like steel are an extremely ubiquitous feature of the history of late industrialization, including in those regions that were ultimately most successful at diversification (like East Asia). The IO data above offer one clue as to why this was the case – basic industries supply the critical inputs upon which the more advanced segments of value chain rest, which means they need to be adequately developed as precondition for industrial upgrading. In a sense, then, this is the same problem of over-aggregation coming back to bite the MECA. Because it's identified with a near majority of primary industries, MEC theorists face a greater burden of proof in showing that it was the particularistic agencies of the MEC rather than the more general imperatives of industrial development that shaped patterns of state intervention. We are left doubting, not only whether the class agencies of the MEC were dominant in deciding patterns of accumulation, but whether either the MEC conglomerates or the public agencies with which they were involved ever acted with any particular hostility towards diversification.

In short the problems for the MECA in the in its analysis of the pre-democracy period pertain to interests rather than power. The collective of firms that *FR* identified as constituting the MEC clearly represented the dominant power cluster in the economy. There was an institutional basis for cohesion within this cluster and for the projection of influence across other domains. But was it oriented primarily by interests specific to minerals, energy and related sectors? And did those interests imply a preference for industrial monocropping at the expense of diversification? The answers to these last two questions are unclear.

4.2 The post-Apartheid MEC: out of power

What then of the post-Apartheid period? Is there better evidence here of a clearer alignment of power and interests around the MEC? The obvious challenge in extending the MECA into the democratic era is that many of the institutional arrangements held by *FR* to be a defining feature of the MEC have been dismantled. With democracy, corporate institutions in South Africa underwent a dramatic transformation propelled by the converging interests of business actors seeking modernization, political actors seeking reform and international investors seeking more stable returns (Reddy, 2023; Andreasson, 2011; Padayachee, 2013). A hyper-concentrated, "Old Boy" system of corporate power gave way rapidly to one closely modeled on Anglo-Saxon shareholder value orientation. Control shifted from individuals to institutional investors. Beefed up and increasingly independent boards curtailed the power of CEOs. Conglomerates were unbundled and winnowed down to their 'core competencies'. Bigger firms rapidly internationalized while smaller ones were acquired by foreign MNCs or went out of business. A new cohort of black capitalists were integrated through subsidized equity deals and through directorial and managerial diversification. Board interlocks migrated from control to communicative functions and the corporate network gradually eroded.

Perplexingly, given that ownership and control systems were so central to the original thesis, *AFN* (2013; 2011b) simply gloss over all of these changes. They don't spare even a sentence to unpacking the implications of these shifts on MEC continuity. And in fact they don't engage at all in any of the institutional mapping that was a core part of *The Political Economy of South Africa*. The reason for this, it seems, is that they regard it as sufficient evidence of the MEC's continuing dominance that the early post-Apartheid state primarily served the financializing and internationalizing imperatives of MEC firms. Further below I deal with the serious conceptual and empirical problems with this argument, which misleadingly conflates neoliberalism with the MEC. But even if that conflation were fair, indications of a policy orientation to neoliberalism would not be enough to demonstrate the persistence of the MEC because any number of things could produce that orientation. If we are to be convinced that an MEC continues to dominate the economy of South Africa then we need direct evidence of its power and its capacity, more specifically, to govern flows of accumulation across the economy – as *FR* clearly appreciated in their original work. Does such evidence exist?

Not on the surface. In none of the obvious ways of representing the corporate power structure does there appear any clear sign of continued MEC dominance. The most straightforward hierarchy we can construct is of firm size. In Table 2, column 1 I look at the composition of the largest 40 South African domiciled firms by asset size using data from Who Owns Whom for 2022. Only eight of these firms are from MEC sectors, representing less than 8 percent of total assets and around a quarter of total market capitalization and turnover (see Appendix A1 for details). This result is largely robust to including foreign firms in the sample (column 2) and to looking only at non-financial corporations (NFCs) (column 3). It is strengthened when we broaden the sample to the largest 100 SA firms - only 16 of which are from MEC sectors, collectively accounting for just over 8 percent of total assets. This isn't a recent development. The bottom panel of Table 2 repeats the exercise for 2005 and again finds a relatively diminutive MEC component. Note, furthermore, that what we're attributing to the MEC here is really only a story about mining. Take mining houses out of the picture and the MEC vanishes almost entirely from the upper firmament of corporate power - the only non-mining MEC firm in the top 40 for 2022 was Sasol (Appendix A1). We might be tempted to conclude from this that the close articulation between productive and corporate structures, which was supposedly a hallmark of the Apartheid economy, has been disrupted. But actually we might simply be observing is the corporate domain shifting to match the transformations that have taken effect in the productive structure. The map of corporate power that Appendix A1 describes corresponds well to an economy transformed by tertiarization and the rise of services - a dynamic the MECA tends to downplay [2].

Metric	Top40, SA	Top40, All	Top40, NFCs	Top100, SA	Top100, All
2022					
N	8	10.0	12.0	16	20.0
Share MCap	26.3	39.6	40.8	25.2	38.0
Share assets	7.4	19.1	28.7	8.1	18.8
Share turnover	26.2	62.5	34.1	23.5	53.9
2005					
N		11.0	13.0		24.0
Share MCap		45.4	55.8		41.9

Table 2: MEC share of the largest firms 2022 and 2005. Firms are ranked according to asset size (2022) and market capitalization (2005). South African firms are those head quartered in the country. Data from Who Owns Whom. See Appendix A1 for a list of the 50 largest firms in 2022. The table suggest that MEC firms are far from dominant in the corporate power structure.

Size is a crude metric of corporate power. It doesn't capture many potential dimensions of economic power – such as systemic importance in forex flows, which we know to be an attribute of the MEC. Neither does

[2] MEC firms might themselves oftentimes have been directly or indirectly central to processes of tertiarization, as in the expansion of service sector work through outsourcing (Tregenna, 2010). What matters for the argument here, however, is not whether historically rooted firms branch into new activities—they often do—but whether those investments still lock together around a minerals-energy nexus in the manner hypothesised by MEC theory

it map neatly to the political domain. It's entirely possible that, amidst declining structural prominence, MEC firms have continued to punch above their weight politically. But, again there is currently no good evidence of this. The few data points we have – corporate politics is an under serviced field – don't support such a conclusion. There is no evidence of MEC prominence in the corporate network (Reddy, 2023) [3]. The few studies that have looked in detail at business associations don't register any outsized role for MEC firms (Taylor, 2007; Handley, 2008). It has often been assumed that because BEE has been the most advanced in mining, this has accorded the sector special privileges. But in fact the opposite might be true – mining was fixed on by elites because of it's high visibility, historic significance and dependence on state licensing, which made it an appealing target for both rent-seeking and for redistributionist policies (Bowman, 2019).

Quite frankly it would be something of a miracle if MEC theorists were able to show that mining and related firms today possessed anything remotely like the systemic importance that was held by the historically dominant conglomerate groups. The far more atomized constellation of power in the corporate system, combined with the diminished importance of MEC sectors, makes such an outcome more or less impossible. This is grounds enough, I would argue, for putting to bed the notion that the MEC constitutes a continually dominant system of accumulation, although it does not rule out that the MEC operates as one influential fraction of capital among many. But even in this more limited, 'descriptive' sense, the term is poorly substantiated. Perhaps building on the faulty IO data above, researchers tend to impute a common set of interests and outlooks to the firms in mining and related sectors. But there is no basis for this - even if the data weren't faulty, linkages don't equate to interests, in fact they often inscribe opposing interests (Roberts, 2008). Neither do sectors themselves necessarily delimit natural political communities. The broad trend in business politics globally has been towards a weakening of intra-sectoral cohesion and a strengthening of ties based on firm type, as heterogeneity in firm level characteristics has magnified (Kim & Osgood, 2019). If we're to be convinced that the MEC operates as a well-cohered bloc we need hard evidence showing organizational linkages and coordinated action.

Our estimations of the MEC's power would be somewhat different if it were defined so as to encompass finance. Some recent accounts argue that we should actually be talking about the "Mineral-Energy Finance Complex" (Ashman, 2019; Isaacs, 2017). But this is a largely ad hoc appendation. The only basis for it appears to be the erroneous claim (see below) that the MEC has financialized. Even if this were so, financialization - a turn towards financial revenues and metrics - doesn't magically foster links with the financial sector itself. Such links previously existed - as a result of conglomerate control over major banks in the wake of divestment. But precisely one of the most significant aspects post-Apartheid institutional transformation has been the severing of these ties. There is no longer any special relationship between MEC firms and financial firms at the level of ownership or directorship. If such a relationship exists elsewhere, say in the lending behavior of big banks, evidence of such has yet to be presented.

[3] This conclusion is clear if we define the MEC sectorally, as we strictly should. Reddy (2023) finds some persistence of MEC influence in the corporate network up to around 2005 when categorizing MEC as firms as those with links to historic conglomerates.

5 Is there an MEC state?

What of the public side of the MEC post-Apartheid? So far we've looked only at its corporate face but the original theory of the MEC was clear that state agencies, particularly SOEs, were integral to the complex. If the MEC continues to benefit disproportionately from state favors this could offset its diminished economic influence. Indeed we might be inclined to interpret such favors as indicating systemic importance of a kind not captured by the rough measures discussed above. The problem once again is that MEC theorists offer scant evidence of policy bias. Indeed it's not clear that they have pursued such evidence because their emphasis is placed exclusively on the ways that the MEC has prioritized internationalization and financialization post-Apartheid (Ashman et al., 2013, 2011b). As I argue below, such priorities are not native to the MEC and to the extent that MEC firms adopted them this was unrelated to their MEC-ness. Logically it is quite clear that if the argument about continuity is to be sustained, then what we should expect to find is state interventions of a similar kind as witnessed historically – ones that worked to expand and reproduce the MEC core at the expense of the industrial periphery. This means that we should train our lens first and foremost on industrial policies - broadly understood as those which act to alter the structure of activities in the economy.

Yet for the first decade of democracy, Zalk (2014) argues, "industrial policy" is a poor description of the state's activities, what we had instead were "industrial interventions" – discrete packages of support for specific industries and actors but ones that were disconnected from any wider development plan. Across these various interventions MEC sectors, particularly those furthest upstream, featured quite strongly. Key firms in those sectors benefited from heavily subsidized electricity in a continuation of Apartheid era policies at the state-owned electricity utility, Eskom. Consistent with a policy of export promotion, resource related sectors received various tax allowances and benefited from cheap credit supplied by the Industrial Development Corporation (IDC) (Zalk, 2014; Black, 2021). Various writers accuse the IDC of maintaining a historic bias towards MEC sectors across the post-Apartheid period but the numbers they present are far from clear cut and appear to have shifted against the MEC in more recent years (Lumkile Mondi, 2005; Goga et al., 2019). They are also presented without the aid of benchmarks, which makes it hard to gauge their meaning in terms of state priorities - some degree of support for resource based sectors is inevitable given their competitive advantages and centrality in the country's trade account. On the other hand, the one concerted effort at industrial intervention in the first democratic period was in the auto sector, under the Motor Industry Development Program and subsequent iterations (Black, 2021). It helped to engineer a minor anti-MEC shift in output and exports by bolstering value chains related to automotive production, but fell short of bigger objectives, partly due to the influence of powerful incumbents who ensured that rents were privatized rather than flowing into wider industrial upgrading (Masondo, 2018). A raft of smaller more poorly endowed programs targeted small business and tech intensive sectors. On balance, the most we can say is that in the first decade of democracy industrial policy evinced a faint bias towards MEC firms (if not sectors as such), mostly by way of path dependency in piecemeal subsidies rather than any active or integrated programme of support.

From 2007 just ahead of a broader political transformation in the ruling coalition, industrial policy began pivoting towards "structural based reforms" (Zalk, 2014, p.327). The signal event here was the introduction of the National Industrial Policy Framework (2007) and associated Industrial Policy Action Plans.

The NIPF's ostensible purpose is to chart a break from the MEC. It calls for mitigating the economy's reliance on commodity-linked sectors and expanding into labor-absorbing and knowledge intensive parts of the value chain while supporting smaller enterprises. It also espouses various transformation goals, as manifested in a scheme to support black owned manufacturing business, launched in 2015. Other than basic chemicals, none of the sectors that were to become priorities of the Department of Trade and Industry (DTI) were in the MEC core (Hausmann & Klinger, 2008). But paper commitments seldom governed day-to-day decision making. The DTI's project teams were thin, and the post-2009 proliferation of economic agencies diluted already scarce administrative talent, leaving little capacity to turn the National Industrial Policy Framework into enforceable programmes. A wider neoliberal macro stance further dulled the incentive to invest in new tradable capacity: tight fiscal ceilings, high real interest rates and a persistently strong rand made incremental expansion of existing commodity lines more attractive than venturing into unfamiliar industries. While there were pockets of success (eg. agro-processing and metals and machinery (Zalk, 2021, p.43)), most manufacturing sectors stagnated in the wake of the Great Financial Crisis of 2008 (Hausmann & Klinger, 2008).

Left elements in the ANC had hoped that the rhetorical turn toward a 'developmental state' would be given real force after Jacob Zuma's ascension to the presidency. But as I detail further below, it was in fact a patronage-seeking elite that was to become the dominant element of his coalition. Labor aligned ministers in the new government quickly found themselves isolated. State capacity across the board declined rapidly as Zuma green lighted an unchecked spree of predatory extraction (Chipkin et al., 2018). One strong pocket of bureaucratic efficiency remained relatively untouched by this – the National Treasury – but its authority was used to anchor neoliberal monetary and fiscal policies which only served to further undercut efforts at industrial restructuring (Zalk, 2021). Thus already by the start of the Zuma administration the state had become deeply "fragmented" with it's various agencies increasingly unmoored from any central authority and subject to the influence of competing political factions (Bell et al., 2018). Let alone a coherent program of industrial support, the state was increasingly unable to provision the basic services on which accumulation was dependent, particularly in the MEC core. Fine (2010, p.10) registers the problems this poses for the MECA, when he wonders whether under-capacity at the power utility Eskom, which led to rolling blackouts from 2008 onwards, "represent[ed] erosion of the MEC's interests and/or failure to meet them?". All this transpired as steady advances in mechanization were pushing the technological frontier further away from laggard countries and raising the barriers to industrial upgrading. Rather than a result of deliberate bias towards specific sectoral interests, stunted diversification post-2007 was most proximately the product of an increasingly segmented and ineffectual state unable to meet the intensifying challenges of modernization.

Well-organized incumbents in upstream commodities linked sectors did play some role in spiking the diversification agenda. Ironically former SOEs and core MEC nodes Sasol and MittalSteel (formerly Iscor) were some of the worst offenders here. Both adopted import parity pricing and rebuffed all efforts to negotiate lower rates for local industrial consumers, despite continuing to receive various forms of direct support from the fiscus (Roberts & Rustomjee, 2010; Zalk, 2017; Masondo, 2018). Since it's not clear whether such efforts ever carried real force, we should be careful in what derive from this about corporate power. Roberts (2008, p.21) perceives the influence here of a persisting MEC, as commodity linked interests appear to shape accumulation outcomes. But this is a misreading. It suffices just to describe how enormously different are the alignments of agencies and capacities between today and the era of the MEC-proper, even if the outcomes they produced are superficially similar (which is in fact unclear). *FR* portray the apartheid-era MEC as a tightly knit coalition: mining-energy conglomerates acted in concert with powerful state agencies to bring about strong growth across a fairly broad industrial ecosystem (while undermining accumulation outside that system). Today we see the opposite configuration - atomised firms pursuing narrow rent-seeking deals with a fragmented, capacity-starved state in a way that fulfills short-term particularistic objectives but entrenches a pattern of stagnation across manufacturing as a whole (Zalk, 2021). Particular interests within mining and related sectors might have remained powerful throughout, and stunted diversification might have been a common outcome. But these are insufficient conditions for the existence of an "MEC". If that term is to be reduced to a loose tag for any large firm that preserves rents, the concept will lose the analytic specificity that once made it attractive.

It's not actually clear how much *AFN* would actually disagree with the substance of the account constructed here. At various points they seem to imply that the stasis in manufacturing has not been a product of selective supports for vested interests, as under the old MEC, but a default outcome of the inability of a neoliberalized state to mobilize for diversification (Ashman & Fine, 2013; Newman, 2019). This is in turn tied back to the MEC because neoliberalism itself is said to reflect MEC 'imperatives' of internationalization and financialization post-Apartheid. This claim – that globalization and financialization are driven by the evolving business strategies of the MEC – is central to their argument and worth addressing in detail.

The first problem with it is that it is not clear why and how MEC firms would have chosen to pursue "finanicalization strategies of their own" (Ashman & Fine, 2013, p.171) – understood here as an attempt to swap productive lines of business for financial ones (Ashman et al., 2011b, p. 175). The general view is that, outside of instances in which there are organic synergies with financial services (eg. auto companies offering consumer credit), financialization strategies are a response to intensified pressure from shareholders for more stable and quicker yielding returns (Rabinovich & Reddy, 2025). They are imposed on firms, not elected by them. Far more worrying for the MECA is the fact that there is no actual evidence of such strategies ever having been adopted in any generalized way either in South Africa or anywhere else. The 'financial turn in accumulation' turns out to have largely been a myth founded on a misconstrual of the evidence which, among other things, mistook overseas investments and intangible assets (goodwill) as a sign that NFCs were amassing financial instruments (Reddy, 2025; Rabinovich, 2019; Soener, 2020).

In the South African case the only evidence of financial accumulation that we have been provided is what appears to be a very slight increase in net financial acquisitions by the corporate sector, showing up in SARB flow of funds accounts (Ashman et al., 2011b; Isaacs, 2017; Newman, 2019). But if we look at the data across the full span of time, we in fact do not see any consistent increase - indeed financial accumulation appears to peak in the mid 1980s and to trend downwards for most of the 1990s, precisely when the MEC was supposed to be undergoing its financialization (Figure 4, see also (Karwowski et al., 2022)). Securities, moreover, contribute to only a vanishingly small part of this trend – it is primarily driven by trade credit and a residual category, which suggests it might be more of a 'real' sector phenomenon. Firm level data, far more accurate for these purposes, similarly fails to bear out any

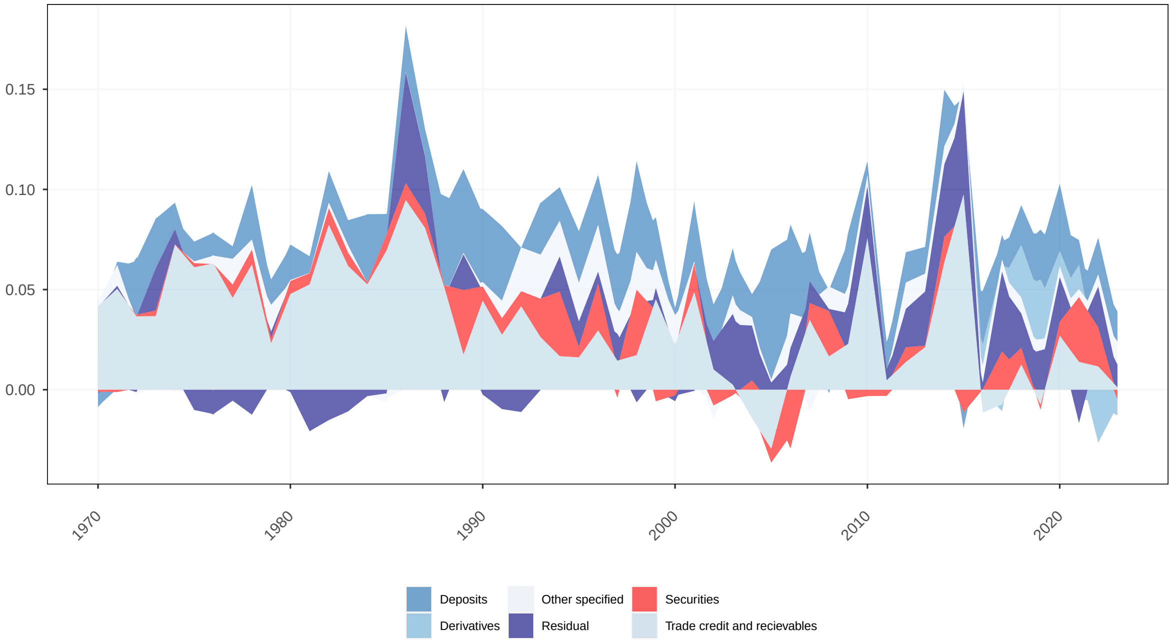

Figure 4: Net acquisitions of financial assets (%GDP) by SA NFCs, 1970 - 2022. Data from the South African Reserve Bank. Deposits calculated as: 'Cash and demand monetary deposits' + 'Short/Medium-term monetary deposits' + 'Long-term monetary deposits' + 'Funds Placed with other financial institutions' + 'Funds placed with other institutions'. Securities calculated as: 'Treasury bills' + 'Other bills' + 'Short-term government bonds' + 'Long-term government bonds' + 'Non-marketable government bonds' + 'Securities of local governments' + 'Securities of public enterprises' + 'Other loan stock and preference' + 'Ordinary shares'. Trade credit and recievables calculated as: 'Trade credit and short-term loans' + 'Amounts receivable/payable'. Other specified calculated as: 'Bank loans and advances' + 'Foreign branch/head office balances' + 'Long-term loans' + 'Mortgage loans' + 'Interest in retirement and life funds'. Residual category as found in the data. The data shows that there is no long running trends towards greater financial accumulation by SA NFCs and that trends in asset acquisition are not driven by securities as financial accumulation theories would imply.

trend towards expanding financial portfolios among NFCs (Figure 5). Karwowski et al. (2022) find "no clear evidence that profitable companies are holding cash and financial assets instead of investing".

The non-financial corporate sector might not have financialized but the wider economy certainly did – witnessed in the phenomenal growth of the financial sector itself. This resulted from a conducive institutional environment activated by the sudden globalization of the economy. Once again it would be strange to argue that MEC leaders actively pursued this outcome in any conscious way. But the policies which ignited financialization – deregulation and the stripping of exchange controls – were very much on their agenda. Were these policies, and the wider suite of neoliberal reforms of which they were a part, a creation of the MEC? In a certain sense, yes: large-scale domestic capitalists played a principal role in the campaign for neoliberalism. Simply because of how its been defined – to encompass virtually the entire universe of big corporations – this also means that *MEC* firms were central to that campaign. But in playing this role, they were not acting *qua* MEC firms. There is no reason whatsoever to suspect that the sectoral identity of these companies or their embeddedness in a so-called MEC had any major bearing on their preferences for liberalization. Such preferences were in no way endemic to the MEC core, indeed many key players pursed liberalizing policies in the course of *detaching* themselves from MEC group structures and transforming their sectoral affiliations. They were joined by a range of other actors: firms of different scales and sectors, institutional investors and foreign MNCs, Western

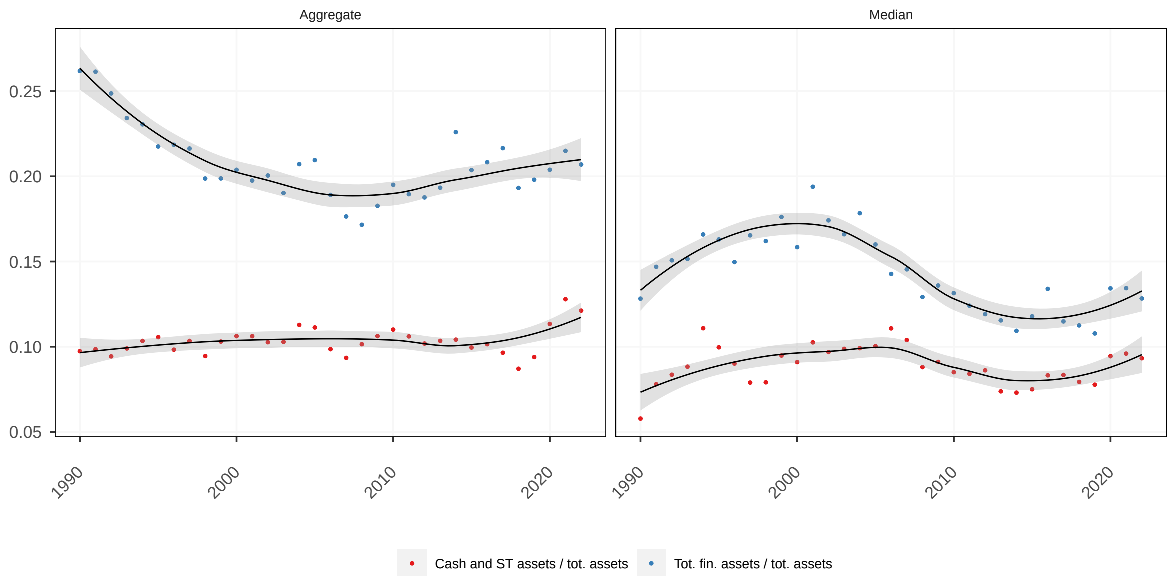

Figure 5: Financial balance sheets of SA NFCs, 1970 - 2022. Data from Compustat Global. Total financial assets are calculated as: Total Assets - Physical Asssets - Intangibles - Assets Other - Inventories - Current Assets Other. Cash and short-term investments as found in the data (Compustat item CHE). Normalized by total assets as found in the data (item AT). The data shows that there is no long running trend towards the amassing of financial portfolios by SA NFCs.

governments etc. To make either neoliberalism or globalization into a creature of the MEC is a complete fallacy. In South Africa as in most places, these were a collective project of a wide coalition of actors in which big businesses, particularly those positioned to gain the most from internationalization, were particularly prominent (Kim & Osgood, 2019). Their effect was not to preserve the MEC but to hasten it's demise by accelerating processes of structural change (eg. deindustrialization) and governance reform.

The point that has just been made illustrates the acute conceptual challenges that plague this debate. MECA proponents never clearly define the terms on which they are assessing the continuity of the MEC, all the while slipping tacitly between multiple different definitions of the latter, seen varyingly as an industrial structure, as set of historically dominant firms, as a cluster of resource-related firms, as a bigger complex comprising state institutions and as a system of accumulation. They proclaim a certain preference for the last of these – the MEC as system, but their own arguments are inconsistent with this. To evaluate the continuity of a system we need to look at essential features of its systemness - the rules, processes and mechanisms through which it operates, independent of specific actors, such as to produce the outcomes with which it is associated. In largely ignoring the concrete dimensions of corporate and state power and their coordination - the plumbing of the system - *AFN* abdicate this task. Lengthier, if quite abstract, discussions of corporate strategy in recent MECA writing are a partial exception. However this analysis almost exclusively stresses points of *distinction* with the old MEC - the way that globalization and financialization are now the dominant 'imperatives' of MEC companies, rather than industrialization (Ashman et al., 2011b). We are compelled to ask: if the new system of accumulation operates so differently from the old system of accumulation then in what way is it the same system? *AFN*'s implicit answer belies their unconscious slippage back to a more agential notion of continuity: the complex endures because the sectors and firms historically linked to it retain their centrality.

In fact, the main conclusion of this paper so far is that there is no good case to be made for continuity, no matter how the MEC is defined. There almost certainly has been continuity in the composition of manufacturing activities but it's unclear of what form, due to the problems elaborated in section 3. Historically dominant conglomerates extended their influence into the democratic period up to some point but not till the present. Resource linked firms continue to hold power but there is little evidence so far of them cohering into a complex. Neither are state institutions wedded to that complex. Most emphatically, the 'system' governing accumulation in modern South Africa in numerous hugely significant ways from the variety of capitalism that reigned under Apartheid. Similar agents might be present in both but they act according to very different logics defined by very different institutional and political environments. Formal control and strategic coordination between firms has given way to arm's length relationships, strategies of diversification to ones of globalfocussing, domesticated finance to markets of corporate control, family ownership to shareholderism, state cohesion to fragmentation, institutionalized racism to BEE, *dirigism* to neoliberalism, distorted industrialization to premature deindustrialization and enforced autarky to hyperglobalization.

6 The MEC and the assertion of hegemony

This issues this paper has identified – most notably a persisting unwillingness to take empirical verification seriously – are partly a reflection of deeper underlying problems in the MECA. Specifically, they stem from a strong proclivity towards over-theorization in that tradition. MECA writers have had a tendency embellish their claims, interpreting historically contingent constellations of power and interests as manifestations of an underlying structural unity. This tendency was more muted in *FR*'s original work, which was more historically attuned. But it's become pronounced recently, as MECA writers have set about trying to build a grander theoretical narrative capable of bridging across entirely distinct historical epochs, while overcoming the binary of state and market by integrating those entities into a structural account of capitalist development (Ashman et al., 2013). The problem with this is that the objects of their analysis are simply not appropriate materials for the construction of a theory of that scope.

At the core of the MEC, for example, is a particular pattern of state capital relations, defined by the hegemony of a certain set of sectoral interests. The theory of the MEC seeks to identify structural sources of this hegemony in the systemic importance of minerals-related value chains. But however relevant those structures, they are not enough to preserve the MEC from the vagaries of history. The limits, particularities and the very fact of the MEC's hegemony will still be determined by political processes. Yet because the very idea of the MEC is entirely conditional on this hegemony, *AFN* are compelled to eschew any concrete analysis of such processes, instead treating MEC dominance as a structural fact of the social formation. In effect, their approach comes to rest, as Sachs (2024, p.1) argues, on the "blunt assumption state is acting solely on behalf of the MEC and its related fractions of finance capital," by which sleight of hand that state is conceived simply as a "neoliberal continuation of its Apartheid predecessor" [my emphasis].

This "blunt assumption" might have seemed passable during the first five years or so of democracy, during which corporate power was at its apex. In truth it was it was deeply misleading even then. Large-scale capital (though not the MEC per se) might have won the battle to define the structural contours of the new regime – neoliberalism rather than radical reform. But its scope to define the content of that regime was far from limitless – it was checked by the presence of other powerful social forces and by its limited influence within the ANC, hence the uneven form that neoliberalization took. Even under Mbeki, self proclaimed "Thatcherite", there are indications of corporate hegemony having started to wane (Taylor, 2007). Several flashpoints – BEE, the HIV/Aids crisis and the expropriationist turn in Zimbabwe – created fractures in the dominant bloc. These were widened by mounting opposition from Left and nationalist elements within the ANC, and by factors internal to the business community which undermined cohesion. The outward orientation of major conglomerates took their attention and resources away from domestic politics (Spicer, 2016). Processes of black elite formation, which were critical to reforging ties between state and economic elites, proceeded slowly in the first decade of democracy, contributing to wider tensions around racial transformation and undermining the effectiveness of business associations (Taylor, 2007).

Over time the gulf between the MECA's "blunt assumption" of corporate supremacy and the reality of South African politics has consistently widened. Already prior to Zuma's tenure that assumption had become completely untenable. The case of Eskom is useful in illustrating this. Recall that mismanagment of the power utility, which led to frequent blackouts beginning in 2008, present a troubling anomaly for the MECA, suggesting that state capacities had become seriously misaligned from the supposedly dominant system of accumulation. Fine's (2010) attempt to account for this perfectly illustrates instrumentalist frame of reasoning into which the MECA is invariably pulled. He starts by pointing out, quite correctly, that delays in capacity expansion were firstly a product of the "institutional impasse" in which Eskom had become mired in the early 2000s, as the conflict over privatization dragged on. That conflict itself should have been the first clue that explanations of the Eskom crisis cannot be simply MEC-centered but will need to bring other classes and social actors 'back in'. Indeed it was those other actors that ultimately won the fight, ensuring that the power utility remained in the state's portfolio. But bound by the "blunt assumption" that all things happen at the behest of the MEC, Fine is drawn back to the challenge of explaining why MEC interests did not "press for expansion of capacity on a timelier basis" (the possibility that they did and were rebuffed is discounted *a priori* on the basis of the same assumption) (p.36)? His suggestion is that Eskom's under-capacitation was a casualty of the state devoting itself to a different set of MEC priorities – around internationalization. This in turn required spending constraints to avoid "crowding out" the capital that conglomerates needed for overseas export. He doesn't explain how such crowding out will have occurred but the gist of his point seems clear: under-capacitation was simply a downstream effect of the austerity which was the MEC's main priority. It reflects, not the limits of the MEC's power, but its very pervasiveness.

And yet, almost as soon as the institutional impasse was crossed, Eskom announced a massive new investment plan to the rapturous applause of MEC firms – which suggests that defunding Eskom had been neither the preference of the MEC nor the intention of the state (McDonald, 2008). Fine would have been better served sticking to his first argument – the protracted wrangling over privatization was indeed the first cause of Eskom's future capacity problems. But some additional context is useful here. Capacity upgrades had become extremely urgent by the time that Eskom's investment plans were announced but just a decade prior they hadn't appeared so at all. Eskom entered the democratic period with large reserves of excess capacity – a legacy of the high modernist zeal of the Apartheid state. Those reserves were rapidly depleted however, and the main cause of this was a campaign of mass electrification which the first ANC government launched early into its tenure, resulting in the connection of an estimated 2.5 million households to the grid in just six years (McDonald, 2008, p.16). Thus even in the earliest days of democracy, during the high water mark of corporate influence, the power utility has ceased to be simply a creature of the MEC and its 'neoliberal imperatives'.

By the time ground was broken on the coal-based megaprojects – Medupi and Kusile – which were the mainstays of Eskom's expansion plan, other pressures were being heavily exerted onto the power utility. Left with few levers for directly mobilizing resources within the neoliberalized state, SOE investment and procurement budgets had come to be affixed on as the most promising means through which the accumulation of a 'patriotic bourgeoisie' could be supported (or more cynically, through which rents could be extracted). To "increase influence over local supplier development" Eskom eschewed a single 'turn-key' contract for the construction of the new plants, instead opting to coordinate the project itself through multiple discrete contracts (Bowman, 2020, p.413). This proved to be a task far beyond its increasingly stretched managerial capacities. Kusile and Medupi experienced delays and cost-overruns on a gargantuan scale, setting the scene for the rolling blackouts that began to hit the economy from 2008 onwards. Fine (2010) is at pains to deny that there were ever serious capacity constraints at either Eskom or other related agencies because of what this would imply for MEC continuity. Unfortunately his argument, made in 2010, has simply been overtaken by events. From today's vantage its simply impossible to deny capacity constraints had become a biting reality across the public sector already by the late 00s and would dramatically magnify in the coming years as the state fell victim to the rampant predation of the Zuma government.

It goes without saying that once the state capture agenda had shifted into gear, any possibility of recreating effective coordinating institutions of the kind that characterized the original MEC had been completely dissipated. In reality that possibility had been foreclosed long before, at least since the late Mbeki period. But the analytical costs of cleaving to the corporate hegemony assumption become heaviest during the era of state capture, during which large sections of the increasingly fragmented state fell under the sway of a rivalrous faction of the elite, whose interests were increasingly opposed to those of big business (Von Holdt, 2019). The corporate sector was far from spent of course. It retained a major foothold in the state through the National Treasury – which remained deeply responsive to corporate interests and ideologically devoted to neoliberalism. Corporate actors, in particular large banks, successfully defended the Treasury against Zuma's first takeover attempt in 2015. And yet clearly, while the Zuma faction reigned, corporate power was broadly attenuated and increasingly confined to what Kalaitzake (2022) calls "limit determination": the ability to define the boundaries of the existing order, in this case by debarring policies which challenged the institutional foundations of neoliberalism. Capital's ability to define the political agenda within that order was severely diminished, however, and this had serious consequences. MEC interests appear to have been among those most adversely affected by state capture, particularly through the devastating effects it had on energy and logistical infrastructures and through the intensification of rent seeking in the mining sector (Hausmann et al., 2023). These nuances, so critical to understanding political dynamics in the last decade, are entirely elided by the one dimensional account of power that seems to be an embedded feature of the MECA.

7 Conclusion

The MECA has become a dominant paradigm in post-Apartheid political economy. But this article shows that it sits on a foundation of sand. At every level the theory is woefully under substantiated. For starters, the data used to demonstrate the MEC's size and centrality is over-aggregated and effectively unusable. We hence do not have a clear picture of which precise (3 or 4-digit) sectors constitute the MEC, what their relative importance is and how they are interconnected with the rest of the economy. We know that a powerful cluster of firms rooted in mining once existed but it remains unclear how and to what ends these firms shaped accumulation and whether and to what extent the state aided in this. We know, furthermore, that this cluster was dismantled in the wake of democratization. We have no good evidence that it was recomposed in any form or that firms in MEC sectors ever reprised their place at the top of the corporate hierarchy. We have no evidence to suggest that they rekindled any special relationship with banks or other financial institutions. Indeed we have no evidence to suggest that they were even able to combine with each other into anything like a cohesive fraction of capital. We have, moreover, no evidence to suggest that the state paid them special favors. In fact, we have good evidence to suggest that state policy grew steadily more hostile to the MEC economy, first by way of a (feeble) effort to diversify and then by way of its increasing subservience to a different, predatory section of the elite. Only by breaking with the assumptions of the MECA can we begin to understand these and other critical processes in post-Apartheid political economy.

What future, then, for the MECA in the wake of these criticisms? Here I would draw a distinction between that tradition's theorization of Apartheid capitalism and what came after. The evidence presented above shows that the former to be under-substantiated. But it does provide dispositive reasons for actively discount the MEC pre-democracy. The basic intuition of that account is clearly valid: the industrialization path was heavily shaped by mining and the patterns of ownership and concentration which this produced created an institutional power structure that in principle could have influenced accumulation well beyond core sectors. But if the MECA is to be convincing, its proponents will have to much more clearly delimit the boundaries of the MEC, prove anew its centrality in the economy and carefully show its articulation with the business system. More importantly, they will have to show how corporate and state interests were aligned around key issues of industrial development. This will require, in turn, respecting the analytical and ontological separation of state and market. *FR* proclaimed one of their core innovations to be a surmounting of what they perceived to be an unhelpful dichotomization of those entities in other theories of development. But their alternative approach this led simply to a conflation of the two and from there into the logjam of instrumentalism. It is in fact the central task of any historical account of capitalist development to understand how state-capital conflicts and coalitions were patterned over time, and which structural factors produced this patterning. That task is abdicated if the two are simply elided.

As a theory of post-Apartheid capitalism, on the other hand, I do not believe that the MEC has or should have any future. South Africa remains heavily exposed to global commodity cycles; minerals- and energy-based products still dominate merchandise exports, and the country's largest firms continue to earn outsized profits from resource rents. Yet commodity dependence by itself is not proof that the minerals-energy complex – understood as a tightly integrated system of accumulation centred on capital-intensive extraction and cheap energy – still governs the economy. The conglomerate pyramids, quasi-monopoly boards and state-enterprise mandates that once bound mining, heavy industry and finance into a unified bloc have been dismantled or repurposed, while a service expansion geared to low-wage employment has become the main absorber of labour. What persists is a path-dependent bias toward primary products, but the institutional wiring that originally sustained the MEC has been so thoroughly reconfigured that continuity cannot be presumed. A satisfactory explanation of South Africa's stalled diversification must therefore look beyond the MEC template to the politics of late-late-industrialisation, the macro-financial regime, and the fragmentation of state capacity traced in the preceding pages.

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8 Appendix

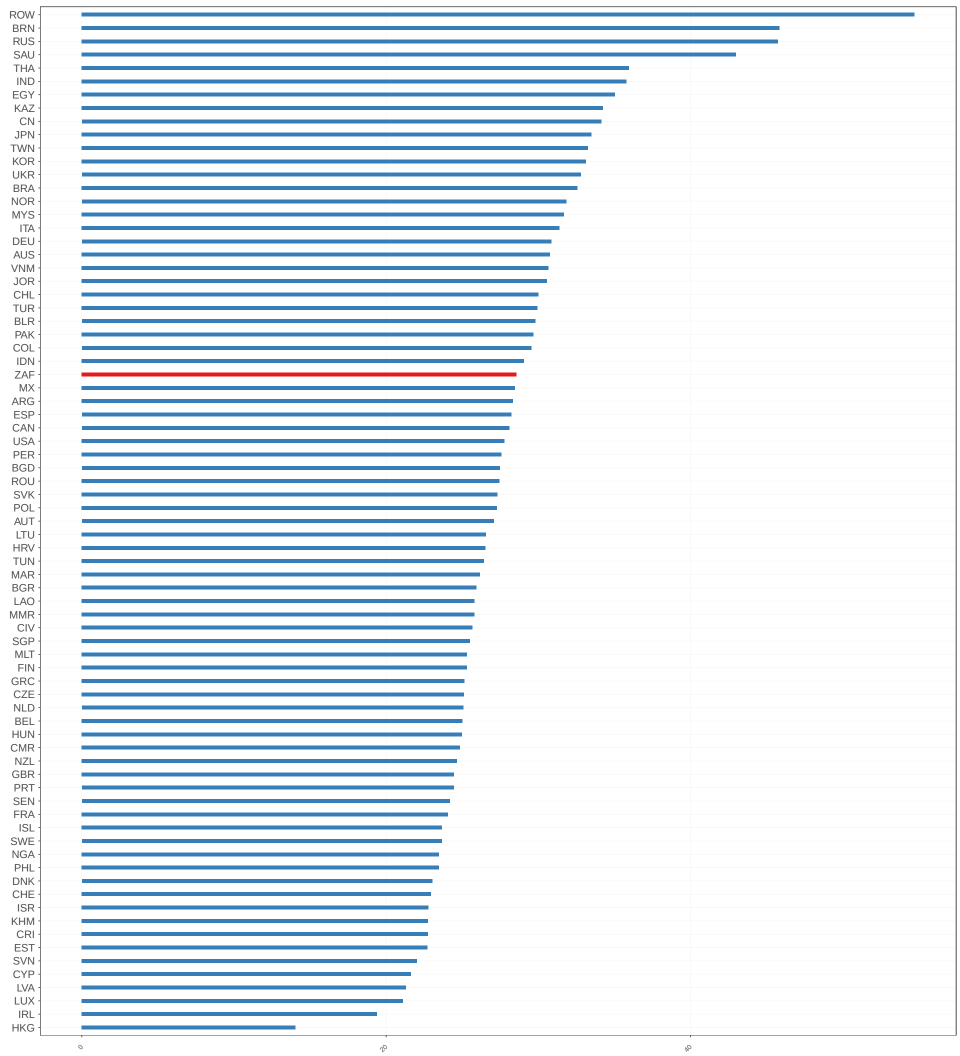

Figure A1: MEC value added shares 2010, South Africa vs 76 countries. Calculated by summing value added of each sectors over the total value added of all sectors in the database. See Table 1 for a full list of MEC sectors. Data derived from the OECD's Inter-Country Input Output Tables. The figure shows SA's MEC sector was not unduly large in value added terms in 2010.

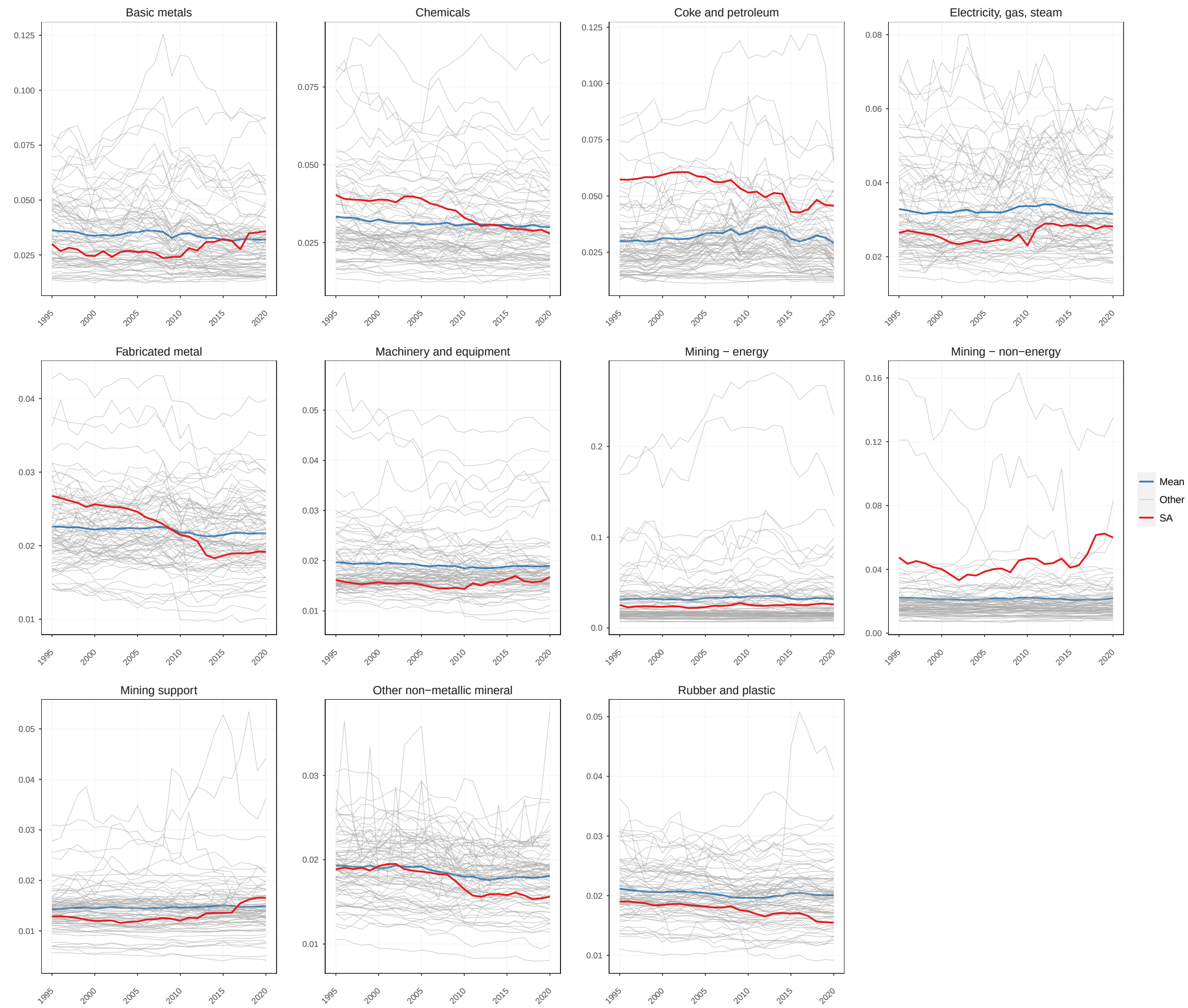

Figure A2: MEC value added shares, South Africa vs 76 countries. Calculated by summing value added of each sectors over the total value added of all sectors in the database. See Table 1 for a full list of MEC sectors. Data derived from the OECD's Inter-Country Input Output Tables. The figures show that the size of the South African MEC sectors, in value added terms, is relatively normal, with the exception of mining and coke and petroleum (related to coal mining). It also points to clear patterns of intra-MEC diversification.

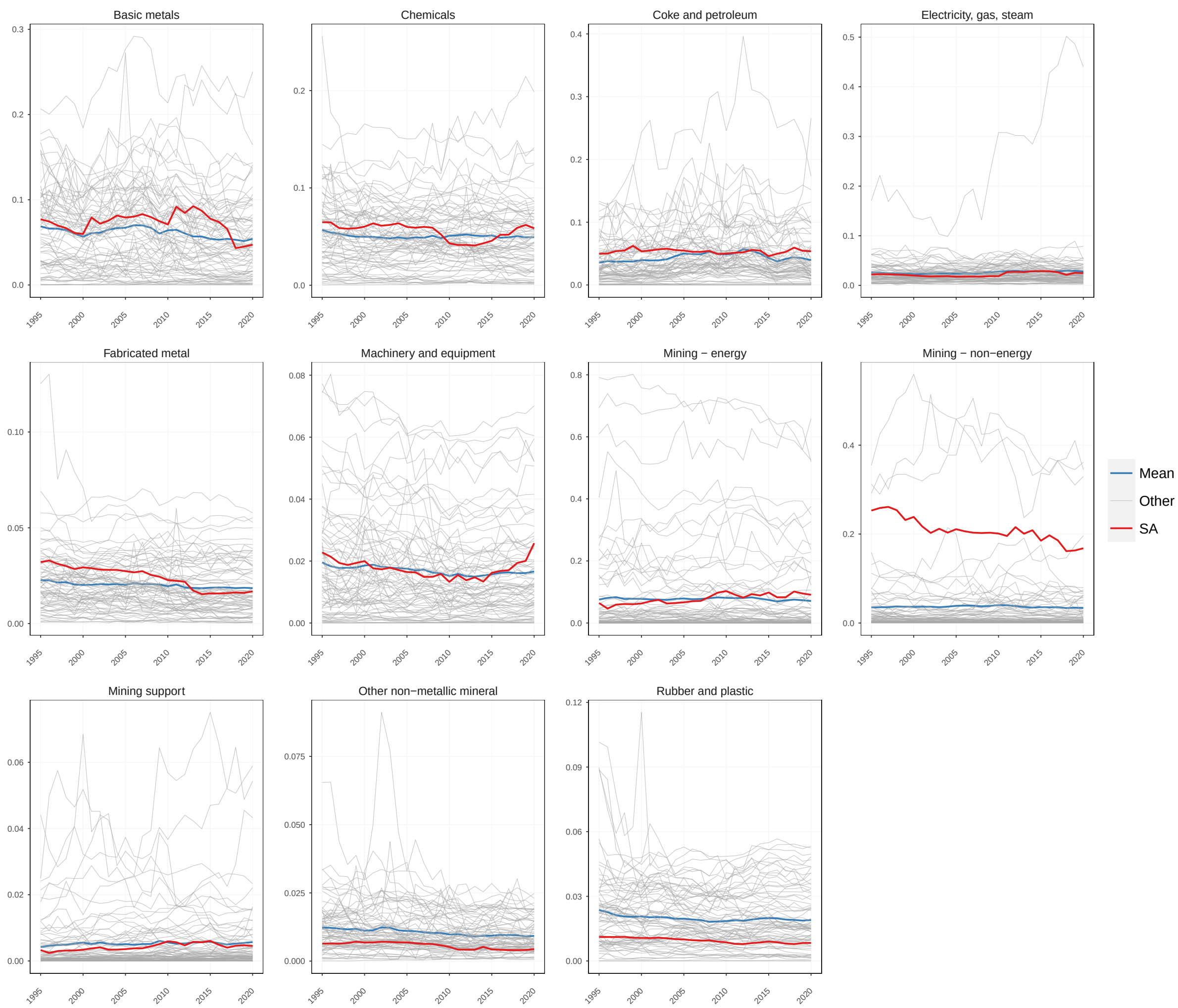

Figure A3: MEC exports shares, South Africa vs 76 countries. Calculated by summing the export value added of each sector over the total exports added of all sectors in the database. See Table 1 for a full list of MEC sectors. Data derived from the OECD's Inter-Country Input Output Tables. The figures show that the size of the South African MEC sectors, in export terms, is relatively normal, with the exception of mining and coke and petroleum (related to coal mining). It also points to clear patterns of intra-MEC diversification.

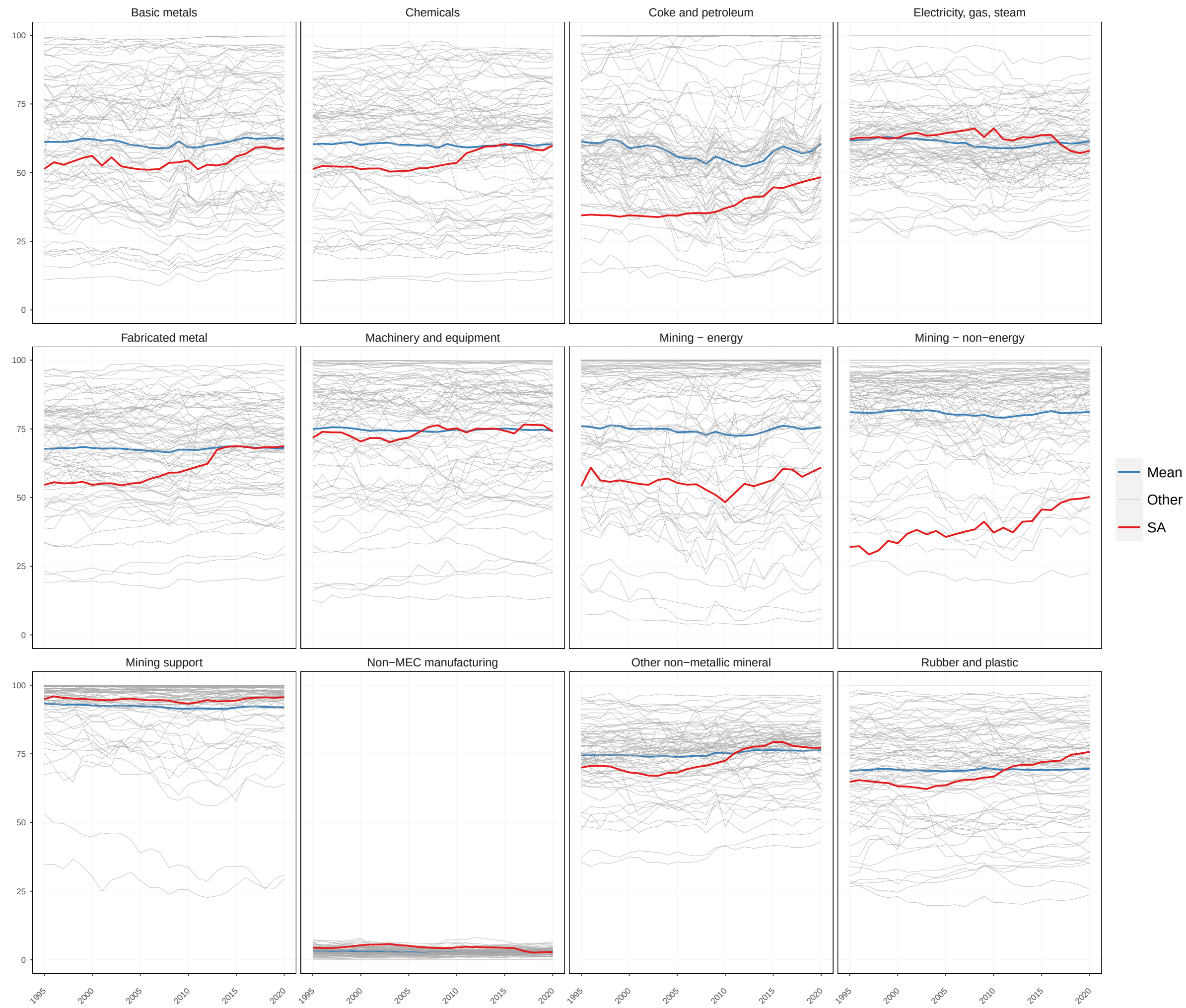

Figure A4: MEC output shares, South Africa vs 76 countries. Share of output of each MEC sector sourced from (domestic) MEC sectors. See Table 1 for a full list of MEC sectors. Data derived from the OECD Inter-Country Input Output Tables. See Appendix 3 for output shares by sector. The figure shows that most MEC sectors in SA, with the exception of basic metals and chemicals are generally less integrated in input terms than the global norm. It also shows that weak linkages between MEC and non-MEC manufacturing sectors is a normal pattern – in fact in SA these linkages were relatively strong. MEC output shares by sector, South Africa vs 76 countries. Total output from each sector going to other (domestic) MEC sectors. See Table 1 for a full list of MEC sectors. Author's calculations based on OECD Inter-Country Input Output tables.

Company Name	Country	Assets	Market Cap	Turnover	SIC	SIC Name	MEC
Anheuser-Busch InBev SA/NV	Belgium	3326418	1.745935e+12	902685	11031	Manufacture of malt liquors such as beer, ale, porter and stout	No
British American Tobacco PLC	United Kingdom	3098256	1.391322e+12	558023	12000	Manufacture of tobacco products	No
Standard Bank Group Ltd	South Africa	2883841	3.101231e+11	175036	64190	Other monetary intermediation	No
FirstRand Ltd	South Africa	2297610	3.362888e+11	197923	64190	Other monetary intermediation	No
Glencore PLC	Jersey	2071101	1.362584e+12	3998768	07100	Mining of iron ores	Yes
BHP Group Ltd	Australia	1866000	2.635238e+12	991377	07100	Mining of iron ores	Yes
Absa Group Ltd	South Africa	1793201	1.510603e+11	139691	64190	Other monetary intermediation	No
Investec Ltd	South Africa	1306440	3.033396e+10	96443	64990	Other financial service activities, except insurance and pension funding activities n.e.c.	No
Investec PLC	United Kingdom	1306440	7.228122e+10	96443	64990	Other financial service activities, except insurance and pension funding activities n.e.c.	No
Nedbank Group Ltd	South Africa	1252971	9.723066e+10	107889	64190	Other monetary intermediation	No
Naspers Ltd	South Africa	1206556	5.370586e+11	154812	62020	Computer consultancy and computer facilities management activities	No
Prosus N.V.	Netherlands	1198819	1.390042e+12	136152	62020	Computer consultancy and computer facilities management activities	No
Old Mutual Ltd	South Africa	1066956	5.629315e+10	85668	65110	Life insurance	No
Anglo American PLC	United Kingdom	1052976	6.365801e+11	548584	07295	Mining of platinum group metals	Yes
Sanlam Ltd	South Africa	1006586	1.442469e+11	0	65110	Life insurance	No
Quilter PLC	United Kingdom	936604	2.499308e+10	11723	65110	Life insurance	No
Compagnie Financiere Richemont S.A.	Switzerland	812771	1.163481e+12	396635	32111	Manufacture of jewellery and related articles composed of precious metals, precious and semi-precious stone and pearls	No
Momentum Metropolitan Holdings Ltd	South Africa	636799	2.903075e+10	66391	65110	Life insurance	No
Sasol Ltd	South Africa	433839	1.612301e+11	289696	19200	Manufacture of refined petroleum products	Yes
MTN Group Ltd	South Africa	391881	1.976599e+11	207003	61200	Wireless telecommunications activities	No
Alexander Forbes Group Holdings Ltd	South Africa	386265	8.098251e+09	4635	64200	Activities of holding companies	No
Discovery Ltd	South Africa	301927	8.826296e+10	59671	65121	Health insurance	No
South32 Ltd	Australia	268287	1.821862e+11	136852	05100	Mining of hard coal	Yes
Ninety One Ltd	South Africa	246546	1.051057e+10	16999	66190	Other activities auxiliary to financial service activities	No
Ninety One PLC	United Kingdom	246546	2.275693e+10	16999	66190	Other activities auxiliary to financial service activities	No
Vodacom Group Ltd	South Africa	228315	2.134566e+11	119170	61200	Wireless telecommunications activities	No
Capitec Bank Holdings Ltd	South Africa	191801	1.934223e+11	37761	64190	Other monetary intermediation	No
Mondi PLC	United Kingdom	186632	1.424226e+11	153167	17010	Manufacture of pulp, paper and paperboard	No
Anglo American Platinum Ltd	South Africa	176914	1.786133e+11	164104	07295	Mining of platinum group metals	Yes
Growthpoint Properties Ltd	South Africa	171976	3.269540e+10	13740	68100	Real estate activities with own or leased property	No
Impala Platinum Holdings Ltd	South Africa	169386	7.586778e+10	106594	07295	Mining of platinum group metals	Yes
Sibanye Stillwater Ltd	South Africa	166631	7.430239e+10	138288	07291	Mining of gold	Yes
Remgro Ltd	South Africa	150965	7.677351e+10	80843	64200	Activities of holding companies	No
Aspen Pharmacare Holdings Ltd	South Africa	134284	7.318984e+10	40709	21000	Manufacture of pharmaceuticals, medicinal chemical and botanical products	No
Sygnia Ltd	South Africa	127618	2.792529e+09	809	65300	Pension funding	No
AngloGold Ashanti Ltd	South Africa	126094	1.786133e+11	70311	07291	Mining of gold	Yes
NEPI Rockcastle N.V.	Netherlands	123026	6.600991e+10	10700	68100	Real estate activities with own or leased property	No
Textainer Group Holdings Ltd	Bermuda	118928	3.842077e+10	12653	77301	Renting of land transport equipment	No
Gold Fields Ltd	South Africa	114630	2.435792e+11	66963	07291	Mining of gold	Yes
Reinet Investments S.C.A.	Luxembourg	113725	7.412655e+10	11614	66120	Security and commodity contracts brokerage	No
Pepkor Holdings Ltd	South Africa	113567	5.893555e+10	81396	47610	Retail sale of clothing, footwear and leather articles in specialized stores	No
Bidvest Group Ltd (The)	South Africa	107509	8.875035e+10	114912	46301	Wholesale trade in foodstuffs	No
Bid Corporation Ltd	South Africa	106640	1.365464e+11	196341	82990	Other business support service activities n.e.c.	No
Shoprite Holdings Ltd	South Africa	102356	1.380302e+11	215050	47110	Retail sale in non-specialized stores with food, beverages or tobacco predominating	No
Sappi Ltd	South Africa	97304	2.382173e+10	113972	02100	Silviculture and other forestry activities	No
Redefine Properties Ltd	South Africa	92406	2.411928e+10	8239	68100	Real estate activities with own or leased property	No
Hammerson PLC	Ireland	91536	2.636194e+10	2651	68100	Real estate activities with own or leased property	No
PSG Financial Services Ltd	South Africa	88257	1.795982e+10	1919	65129	Other non-life insurance	No
Exxaro Resources Ltd	South Africa	85145	6.555758e+10	46369	05100	Mining of hard coal	Yes
Kumba Iron Ore Ltd	South Africa	82659	1.536801e+11	74032	07100	Mining of iron ores	Yes

Table A1: Largest 50 JSE firms ranked by assets, 2022. Data from Who Owns Whom. The top of the list is dominated by multinationals. MEC firms are clearly not a dominant component. Almost MEC firms with the exception of Sasol are in mining.