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INNOVATIVE ENTREPRENEURSHIP (INNOVAPRENEURSHIP) IN THE SME SECTOR: A CONCEPTUAL FRAMEWORK

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Abstract

This paper attempts a conceptual framework for innovative entrepreneurship (*'innovapreneurship'*). Nowadays, the term entrepreneurship is used very broadly, so much so that its essence may become lost. Even people who get business from the state have jokingly been referred to as 'tenderpreneurs'. However the original construct of an entrepreneur from the Schumpeterian perspective was that of a very serious player in the development of any economy. The entrepreneur was the 'undertaker' who 'under-took' new ventures or sought new and better ways of doing things. Driven by the 'undertaker's spirit' or the *unternehmergeist*, s/he embarked on a path of 'creative destruction' which not only added value to the economic output but would ultimately lead to radically new ways of doing business. At the national and supra-national levels, such creative destruction would even lead to new forms of social and economic relations. There has been a lot of focus on the small & medium enterprise space in South Africa and globally. It is the space where it is relatively easy for a person or a partnership to enter into business and/or into economic value-creation. Yet the statistics consistently point to huge failure rates in new business start-ups and to mediocre performance by the already established SMEs. Key to this, it is submitted, is the dearth in real entrepreneurship. Statistics show that there is an increasing number of people who are

'self-employed', largely due to the country's very high and rising unemployment rate. Most of these are 'survivalist' owner-managers, who would take up any other better opportunity if it came up. It is for this reason that efforts should be made to rediscover true entrepreneurship. Interventions by funding agencies and "SME development" agencies, including training institutions, should be reviewed to incorporate aspects of true entrepreneurship. The training and mentorship programmes of SME owner-managers should now focus on stimulating their innovativeness. Innovative entrepreneurship models and case studies should be showcased more and more. Even the individuals involved in undertaking such ventures ought to be infused with the *unternehmergeist*. This paper reviews the current state of entrepreneurship in South Africa, focussing on the SME sector. It argues for an innovative approach to SME development. This new approach, it is submitted, should be undergirded by the broad-based National Systems of Innovation Framework (Broad-based NSI). The rationale for the SME focus is discussed first, to justify the need to prioritize innovative entrepreneurship at that level (as opposed to the large industry and large organisational level). That rationale is then followed by an overview of the definitions of "Small businesses" in South Africa. The broad and not-so-useful definition of Small and Medium Sized enterprises is problematized as not being very helpful in the development of true entrepreneurship, an entrepreneurship that is predominantly innovative. The prevailing conceptual frameworks for SMEs are then reviewed. The National Systems of Innovation (NSI) approach is then discussed, focusing on the political economy-wide perspective of NSI. It is argued that there should be a radical shift in the approach to SME development. The approach should focus on two primary elements, one is the entrepreneur, who ought to be "innovationized" and the second is the overall system or paradigm of Innovation Systems, which ought to inform all SME development policies and programmes in the country. With this new approach and paradigm, the quantity of SMEs will drop drastically, but the quality of new ones and the remaining will improve exponentially, as will output and aggregate welfare.

Key words: Broad-Based National System of Innovation; Development as 'Hanging-in; Stepping Up and Stepping Out'; Entrepreneurship; Global Entrepreneurship Monitor (GEM); Innovation; Small, Medium Enterprise (SME); National System of Innovation (NSI); System of Innovation (SI); *Unternehmergeist* (Undertaker's spirit).

JEL: D78; D91; J24; L53; L25; L26; M13; O3; O38

Rationale for SME focus

“Small enterprises are the apex of sustained economic development”, according to the Chairperson of the Small Enterprise Development Agency, Dr. Ivor Zwane (SEDA Annual Report, 2017-2018: 12).

Furthermore, it has been asserted that:

“Small enterprises will reshape the South African Economy in a number of ways:

Being agile and able to adopt to the global economic uncertainties

Exploit nascent sectors, e.g. renewable energy, robotics and Fourth Industrial Revolution

Foster inclusion of previously disadvantaged demographics into mainstream economic activities”

(Minister Lindiwe Zulu, Foreword: SEDA Annual Report, 2017/18: 10-11).

Significance of SMEs in South Africa

Small medium-sized enterprises play a very unique role and make a distinct contribution to the South African economy. They are the only ‘size-category’ of enterprises that registered an upward growth of 1.65 % in the ‘number of entities’ from 2014-2016 (Annual Review of Small Businesses and Co-operatives, Department of Small Business Development (DSBD 2018: 1). The contribution of SMEs to the country’s Gross Domestic Product (GDP) is also very significant. The contribution of SMEs and Co-operatives to GDP increased from 46.65% in 2014 to 48.04% in 2016 (Department of Small Business Development, DSBD, 2018: 1). They thus account for almost half of the country’s total economic output, which makes them very significant players in the economy. There is thus nothing “small” about the SME and co-operative sector when viewed collectively in terms of their value. Even within the very important area of employment, their contribution increased from 62.9% in 2014 to 63.98% in 2016 (DSBD, 2018: 1). Almost two-thirds of the employment in South Africa is by and from the “SME and co-operative sector”. Its contribution will definitely rise, proportionally, as the public sector continues to “down-size” compounded by the diminishing contribution from the “big business” sector, which has been mostly behind the country’s erstwhile “job-less” growth. Small and medium-sized enterprises are also the most natural entry point for many aspirant entrepreneurs. It is only in the “narrow-based” black economic empowerment model of the country, whose failure is now legend, where new “entrepreneurs” take charge of very large companies, even then, not operationally. At any rate, the country is much better-off if most of its employment as well as its GDP growth is generated by real entrepreneurs, who start, manage and grow innovative, value-adding enterprises, than its erstwhile overreliance on “big government” and “big business” to create jobs. It is public knowledge that the public service will continue to be “right-sized”, leading to the loss of thousands of jobs over the next few years. As far as GDP growth is concerned, the “big business” sector cannot be relied on to be the major contributor in that regard either, as the statistics already point to the SME sector contributing almost half of the country’s GDP in 2019, and rising. The focus on SMEs makes economic as well as socio-psychological sense, developmentally, for the country.

Definition of small business

The official definition and classification of small businesses in South Africa is found in the National Small Business Act (102: 1996) as amended by the National Small Business Amendment Act (26:2003).

SMEs are measured along 5 categories:

- Standard industrial sector (in which that particular SME operates)
- The subsector of above
- Equivalent of paid employees
- Turnover

- Asset value, excluding fixed property.

Most recent studies and Reports ignore the “turnover” and “asset value” indicators due to their varying nature; difficulty of measurement and/or of verification and questions that usually arise about the reliability and veracity of “subjective information” from entrepreneurs on these indicators (e.g. The SEDA national study by the Bureau for Economic Research (BER, 2017); the National Department of Small Business Development’s Annual Review of Small Business & Co-operatives in South Africa (DSBD, 2018). The BER (2017) as well as the DSBD (2018) use the “number of employees” as the key criterion. The general measure is that-:

- Very small = 5-10 employees
- Small = 20-49
- Medium-sized = 50-200

(DSBD, 2018: 13), based on the Department of Trade & Industry (DTI, 2003; 2005).

“Business-Owners” are defined as “Owners of SMME’s” (DSBD Annual Review, 2018: 13).

“Entrepreneurs”, on the other hand, are defined as people who are “in the early stages of business activity”. It is apparent that this definition is not qualitative at all, and says nothing about the value-creation of the enterprise; the quality of the goods and/or services, let alone the innovativeness.

The definitions in this space are too general and ‘arbitrary’, with too many ‘grey areas’. This creates obvious challenges, statistically, in keeping track of the size and shape of the sector, because the number of employees can vary for a particular employer from time-to-time, so that, over a few years, that employer vacillates between ‘small and medium’; ‘medium and large’, etc. This makes the sample very fluid and would render a lot of the longitudinal data spurious. Using revenue and/or turnover would also not solve this, as these latter variables also suffer from the same challenge, which would necessitate the employment of ‘sampling of overlapping clusters’ techniques. There is no evidence of any such statistical techniques being utilized in the datasets on the SME sector in South Africa. Besides, the real focus ought to be on the quality of the ‘entrepreneur’ that South Africa is producing, rather than on the quantity of people who are establishing their own businesses. In a country of such high and rising unemployment, many people will start their own ventures as a survival strategy. The state ought to be able to distinguish between people who are seeking to “hang-in” for survival and livelihood purposes (Dorward, 2009), and those who are seeking to “step-up” from basic livelihoods levels to real businesses (see the developmental model of Doward, below). The focus should be on those who are either genuinely ‘stepping’ up in terms of value-adding, or those who are ‘stepping out’ of primary and secondary sectors (such as retail) into manufacturing; beneficiation; green economies and other higher value-adding activities. Furthermore, the ‘innovative entrepreneurship’ approach to business should go beyond the particular or current enterprise (its size; growth, etc.) to focus on innovativeness as a principle; attribute and trait, regardless of where the individual is applying such innovativeness. These points will be re-visited in the conclusions. For now we continue to review the current SME approaches in South Africa.

Quantification of SMEs in South Africa

The statistics on small businesses in South Africa incorporate ‘Small, Micro, and Medium’ or SMME enterprises. They do not deal with SMEs only. Of the 2.2 million ‘SMMEs’ in South Africa, most (944.5 thousand) operate in the domestic trade (wholesale and retail) and accommodation sector of the economy, followed by the community, social and personal services sector. However, the turnover of ‘SMMEs’ in the various sectors differs largely. On the high side, SMMEs in the mining sector had an average turnover of R16 million (annualised) in the first quarter of 2015, compared to only R360 000 in the community and social services sector (Bureau for Economic Research, BER, 2017: 19). Most informal

SMMEs operate in the trade and accommodation sector. The formal SMMEs have a more equal distribution across the different industries. Only the financial and business services and the electricity, gas and water industries have more formal SMMEs than informal ones. Mining seems to have only informal SMMEs, according to the QLFS proxy, perhaps a gauge of illegal mining activity in South Africa. (BER, 2017: 21).

Table 1: The demographic breakdown of SMMEs in South Africa is as follows:

SMMEs (2008Q1)	Number				Number (2015Q2)			
	Total	Formal	Informal	Other	Total	Formal	Informal	Other
	2 182	666 501	1 420	95 389	2 251 821	667 433	1 497 860	86 528
Demographics	823		933					
Black	1 523	199 430	1 278	44 985	1 604 601	228 178	1 325 672	50 750
	219		803					
Coloured	101 047	37 399	60 039	3 608	92 171	33 236	52 454	6 481
Indian	64 669	47 989	16 061	619	94 889	66 596	27 470	823
White	493 889	381 683	66 030	46 176	460 160	339 423	92 264	28 474

Source: StatsSA, BER (2017: 23).

Over the seven years (2008-2015), the number of SMMEs in South Africa increased by only 3%, from 2.18 million in 2008Q1 to 2.25 million in 2015Q2. This growth is significantly less than the 14% expansion in GDP over the same period. Among the provinces, Limpopo had the highest growth rate in its number of SMMEs (34%), followed by Gauteng (14%). The Northern Cape lost the largest portion (31%), followed by the Free State (16%). (BER, 2017: 21).

‘SMMEs’ are mostly found in those industries with low start-up costs (low capital layout and ease of entry), namely trade and accommodation and other service-related sectors. Industries such as mining, with a large capital outlay, remain the territory of large enterprises (BER, 2017: 32). It is for this reason that the focus should be on SMEs, rather than the Micro-enterprises. In terms of Andrew Doward’s model of ‘Development as Hanging in; Stepping Up and Stepping Out”, most of the ‘micro-enterprises’ are largely at the ‘hanging-in’ level of development. Unless established otherwise, they ought to be approached along social development lines and in terms of endowment and entitlement mapping (Sen; Dreze and Sen), rather than as serious economic value creators. Small and Medium Enterprises should be assisted in terms of ‘stepping up’ and ‘stepping out’ (Doward, 2009) the value chains or stages of development. The vehicle for this being ‘innovativeness”. This innovativeness should be technological; marketing-wise; in their management of human resources; and in financial management. That way, innovativeness, becomes the engine for stepping up (the value chain) and stepping out into other sectors (e.g. out of retail into food processing or out of raw materials into finished products. ‘Stepping out’ could also be in terms of scales, e.g. from local to global trade.

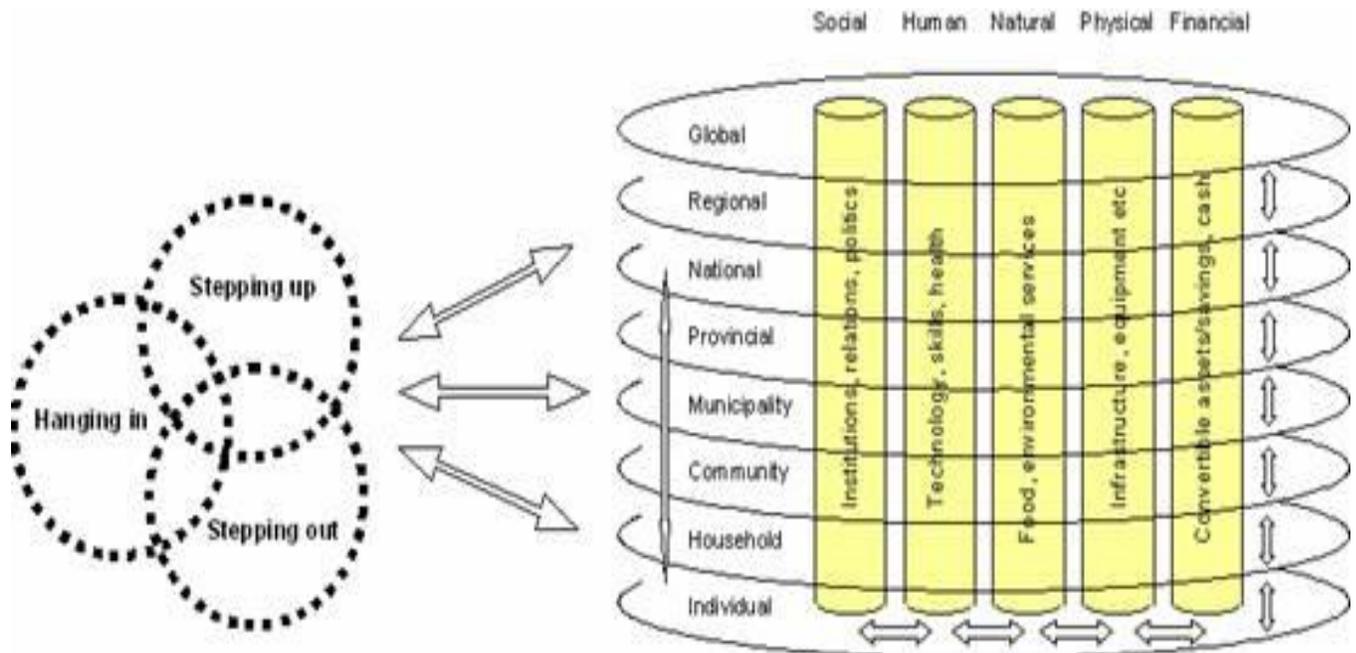
Figure A: Development as Hanging in; stepping up and stepping out.



Andrew Doward (2009: 137)

The general approach of the country to the development of SMEs should be along the lines that Doward (2009) proposes for development in general. In the entrepreneurship space, individuals and groups should be assisted to 'step up' from the modes of operation that they are in, into higher and better modes. These modes should be improving in efficiency; time; quality and all the other key competitiveness indicators. They should also be encouraged; assisted and resourced to step-up the value chains (in whatever sectors they are in). The key to such improvement (inside the intersections), it is argued, should be innovation and 'innovativeness'. Others who have already 'stepped up' should be assisted to 'step out' of primary sectors into secondary sectors; and those who are already well-established in secondary sectors should be encouraged and assisted to step-out into tertiary sectors; or into more advanced modes of operation (e.g. from basic agricultural activities toward commercial plantation of crops; from commercial plantation of crops. An example would be the case of communities and/or some individuals who are involved in the planting of serials such as e.g. sorghum and or soy beans (both of which are also used in the production of biodiesel, globally as well as in terms of the South African biofuels policy and strategy. These individuals and/or groups can then be assisted to 'step up' from the traditional planting of serials/ crops toward diversification into cultivating bio-feedstock. They can be assisted to switch into 'fourth-generation' bio-feedstock, such as *jatropha curcas* trees or other energy-rich plants/ crops that grow in arid areas and that do not compete with food (*jatropha curcas*, for instance is not edible, grows in the wild (even in deserts) and thus does not require a lot of inputs, nor the same type of land as ordinary crops). Similar trees or plants with similar features and oil/energy content, which are native to Africa should be investigated as part of the 'innovation' and the advancement of SMEs into the biofuels space. From there others may step-out into producing bio-diesel via small refineries (i.e. move away from merely supplying feedstock. In the soya bean example, these entrepreneurs would be assisted to procure their own processing machinery, so that they can produce soy-milk; soy-meal; and, of course, soy-biodiesel. From there a few can step-up into alternative energy sources and even supply electricity and biofuel nationally. The model thus goes on and on, promoting this constant upward transformation and outward growth.

Figure B: The Pillars of Development



Source: adapted from Dorward (2009) p. 137.

Hanging in, stepping up, and stepping out

The above model is used by Doward to divide the livelihood aspirations of poor people into three broad objectives which (following Dorward 2009) we are referred to as 'hanging in', 'stepping up', and 'stepping out'.

- **'Hanging in'** takes place when people engage in activities with the objective of clinging onto the assets they currently possess or control. It refers to their effort not to lose assets as a result of unfavourable trends and shocks. Examples include smallholders trying to maintain the fertility of their soils, trying to keep hold of their land in the face of competing claims on it, trying to avoid stress-induced sales of livestock and other assets. In the entrepreneurship space, it is submitted that these would be the typical 'micro-enterprises'. Although there are large enterprises in the 'informal sector' and some of them remain 'informal' for purposes of 'rent-extraction', a lot of 'informal businesses' are also micro and almost all 'micro-enterprises' are informal. It is for this reason that this paper focusses on the Small-to-medium scale of enterprises. It is also recommended that 'survivalist-type' of enterprises should be treated along 'livelihoods' lines and be given the necessary support to 'hang-in'.
- **'Stepping up'**, in terms of Doward, occurs when people enhance the productivity of their existing assets and activities through investments in new assets, such as new equipment, better skills and technology, or more land. Examples include smallholders investing in new seeds and improved irrigation technology to enhance the productivity of their land. For us, this is the

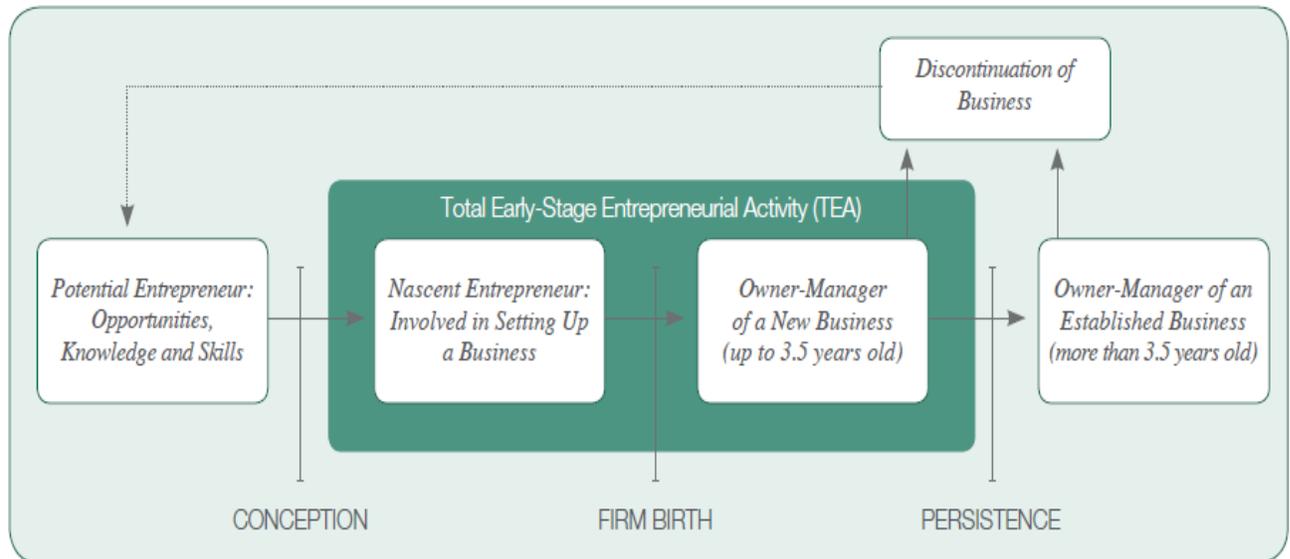
innovation aspect of SMEs. Our submission is that innovation should be promoted and used as a key means by which enterprises can 'step-up' their value chains as well as their scales.

- **'Stepping out'**, in the development framework of Doward, takes place when people's livelihoods shift to new, more productive, activities, and is associated with the accumulation of a new set of assets. Examples include smallholders investing in off-farm enterprises or investing in education and skills in order to qualify for urban jobs. In the SME space, this should entail diversification of businesses. It involves enterprises that were based on one particular tender or business opportunity (whether public or private) expanding beyond that particular business or opportunity. An example would be a group that was given a tender to build a few houses, using that experience and those resources to get into solar energy and to produce solar panels (e.g. Photo-Voltaic Cell (PVC) driven, using locally-sourced lithium iron. This, of its own, can create local demand for lithium ion raw material manufacturing (Backward Production Linkages). Or a company that was doing cleaning of some government/ municipal departments diversifying into producing some cleaning chemicals and better cleaning equipment, which it then sells in the mass market. It will thus move up from being a 'cleaning' company in the 'services' sector, to being a chemical manufacturer on the one hand and an equipment manufacturer on the other. Such a companies will have 'stepped up' from one sector into another, and also 'stepped out'. Innovation would be at the centre and heart of such growth and value-addition.

The Global Entrepreneurship Monitor (GEM) approach

Currently, the foremost indicator of entrepreneurship, globally, is the Global Entrepreneurship Monitor (GEM). The approach and the indices of GEM are worth considering, given its wide-scale use and acceptance by policy-makers; academics and practitioners in the SME space, globally. The Global Entrepreneurship Monitor (GEM, 2018: 22) follows a 'process' approach which breaks down entrepreneurs and small medium enterprises in terms of the various stages in the business formation value chain. The GEM "Entrepreneurial Process and Operational Definitions" Framework is reproduced below. This is the narrower version of the GEM model, just focussing on the entrepreneurship 'value chain'. There is a broader model that factors in the environment and other variables. This is covered later on.

Figure C: The Entrepreneurial Process and GEM Operational Definitions



Source: Adapted from the GEM Report (2010; 2018: 22).

The ‘potential entrepreneur’ is recognized by the GEM model (above). S/he is the person who still has an idea, but who has not operationalized anything yet. Next is the ‘nascent entrepreneur’, who tries to set up a business, up to the ‘owner-manager’ of an established business. For an ‘established business’ to qualify as an “SME” it has to be less than 4 years in existence, otherwise if older, they are seen as “exiting” the process of being ‘small’. This approach may be useful for planning the different interventions to assist ‘SMEs’. Such interventions would vary, so that the assistance required by someone who is still planning a business would be very different from the one who is experiencing sustainability challenges after 3 years. The nature and quality of such ‘assistance’ is what is at issue. Generally the focus of SME support is on the financial needs of the ‘business’ at a particular point in time, which are usually linked to markets or access to markets. The actual ‘entrepreneurial spirit’ as well as the ‘innovativeness’ are ‘taken as given’. This ‘black box’ approach to what ought to be an endogenous variable is the actual problem. It should not be assumed that ‘all the individual socio-psychological, cultural and environmental variables’ are constant. They are never constant and should therefore not be taken as ‘*ceteris paribus*’. It is submitted that treating the latter variables as exogenous, is at the heart of the constantly poor success rates of SME development programmes in South Africa. A new approach is required that should endogenize them; investigate them amongst applicants; highlight and develop them.

The GEM survey, being international as it is, tends to be very mechanistic and technician in its approach. Yet its framework does acknowledge the significance of ‘exogenous’ factors. These include the social and political context. They also include the individual attributes. So GEM takes us closer to this much-needed examination of the individual. It does not yet include innovativeness as a serious ‘variable’ to assess. It does not do so at present, but the newly launched Global Entrepreneurial Spirit Index (GESI), by GEM (2018), is a step in the right direction. The broader GEM model is revisited later. A critical issue in the discussion of SMEs is the construct of ‘entrepreneurship’ itself. In the spiritual domain, it would not be sufficient to monitor the number of new mosques or new churches or new synagogues or temples; as a barometer of spiritual progress and development. One would need to interrogate the nature of the

mosque; church or synagogue; or temple, in terms of its approach; its 'spiritual value-addition'. These factors would be driven by the type of leadership behind the individual institution (the Imam; Priest; Pastor; Rabbi; the Pujari or Archaka). Yet, with SMEs, the policy environment has been more focussed on monitoring the establishment; growth and/or decline of the Buddhist Temples, rather than on the Buddha. Innovation must be driven by individuals, and encouraged and supported by the nation.

Entrepreneurship

'Entrepreneurship' is also important as a social-and psychological attribute. The approaches to entrepreneurship vary from the technical to the spiritual. The Global Entrepreneurship Monitor (GEM, 2018: 21-22), in its "GEM Conceptual Framework", confines "entrepreneurship" to "Total Early-Stage Entrepreneurial Activity" (TEA), which refers to people who are either in the process of starting a business ("nascent entrepreneurs") or those who have started a business and have been running it for less than 3.5 years (or 42 months). The next group are the "Established Business Owners". These are "transactional definitions". They assume that if one has started an enterprise or claims to have done so, then s/he is an "entrepreneur". On the other hand, there are deeper approaches to entrepreneurship, which include the "spirit of entrepreneurship" as an independent variable, existing before and apart from business-formation (*a la* Joseph Schumpeter, 1934; 1943).

Conceptually, the "spirit of entrepreneurship" (or "*unternehmergeist*") should drive the creation of new, opportunity-driven and productive ventures, according to that classic Harvard University Professor, Joseph Schumpeter (1943; 1949). In the context of the broad approach to Systems of Innovation (Scerri 2016), it is very important that the country should move away from transactional and 'business-type and size' approaches to SME development, toward a stronger focus on innovation, as a central individual trait as well as driver of SME growth. This shift must include a deeper understanding of entrepreneurship to discern the "*unternehmergeist*" (or "undertakers' spirit") in South Africa. The purpose being to promote such a spirit amongst South Africans in all walks of life, from early childhood to retirement, generally, but to fore-ground it in the SME space. This, in turn should result in a boom in innovation in general, and innovative-entrepreneurship in particular. The outcome will then be to move South Africa from the "efficiency-driven" economic mode, where it currently seats in the world (GEM, 2018: 27), to the "innovation-driven" mode. Such an intervention and programme shall see positive results ("spill-overs") in other aspects of life. In recognition of the significance of the "Spiritual" element in the "Entrepreneurial Framework Conditions"; the "Social Values", as well as the "Individual Attributes", the Global Entrepreneurship Monitor (GEM, 2018: 29) has launched a new Index, the "Global Entrepreneurship Spirit Index" (GESI). This is still a very broad composite index (Based on a Principal Component Analysis of the three GEM Indicators of Entrepreneurial Awareness; Opportunity Perception and Entrepreneurial Self-efficacy) (GEM, 2018: 29). There is still a lot of work that ought to be done on the "soft" aspects which ought to be the endogenous causes of entrepreneurship undertaking in South Africa.

Identifying and dealing with the social and political constraints to entrepreneurship development is very important. These are the "National Framework Conditions" for entrepreneurship (GEM, 2018: 22) and they are "above the waterline" in David McClelland's Organisational Iceberg model (McClelland, 1985; 1987). There is also a need for research into the deeper, nuanced and less obvious socio-psychological factors and attributes, which are "below the waterline" (McClelland, 1985; 1987). The promotion of the

correct and conducive values, principles, risk-taking propensity and; need for achievement (McClelland, 1985; 1987) ought to be researched and then added into the programmes.

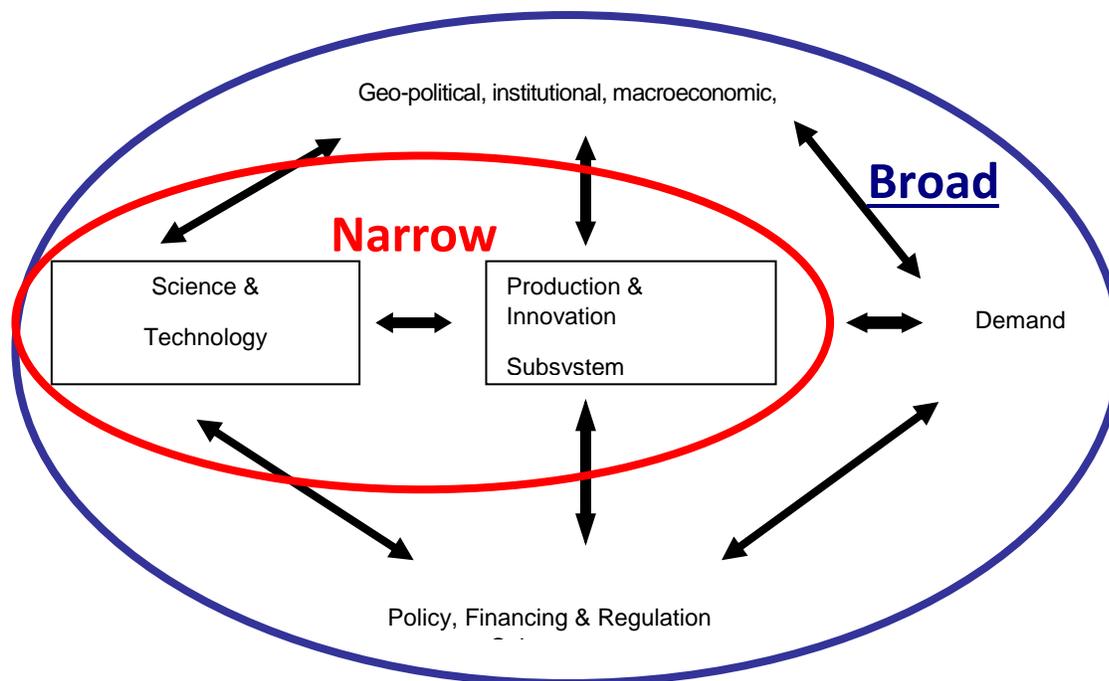
The challenge with the prevailing paradigm of SME and 'entrepreneurship' development in South Africa, the current *zeitgeist*, is one of a deficiency in the fundamental philosophy that underpins the framework. Without a reconstruction of this fundamental philosophy, the country will continue pouring millions of rands toward the promotion of small, medium and even 'micro' enterprises with a very low input: output ratio. These allocative inefficiencies arise from a focus on the symptoms of entrepreneurship rather than on its fundamental causes. The country is keen to assist as many people as possible to succeed in their own ventures, which is a very noble and understandable goal. But this assumes that 'entrepreneurship' is a given and that we have the correct qualities and quantities of it. It assumes that all that is necessary are the resources and institutional support. The qualitative aspects of entrepreneurship are taken for granted. "Innovation" seems to be considered to be a 'pleasant surprise' or some accidental discovery (in the same manner that the self-taught engineer Percy Spencer discovered the microwave oven. He discovered it accidentally, whilst working on an active radar set in his garage in 1941. The fact that Spencer was a self-taught engineer who, apparently, never completed primary school, makes 'innovation' sound simple and at the same time it makes it look like something that cannot be planned.* (FOOTNOTE: *Please note that this is referring to what came to be the 'microwave oven', not the discovery of microwave radiation (in the universe). The latter has many 'discoverers', foremost being the Scottish Mathematical Physicist, James Clerk Maxwell, who formulated the classic theory of electromagnetic radiation: uniting electricity; magnetism and light. (See Maxwell, J.C.; 1865, "A Dynamical Theory of Electromagnetic Field"). Albert Einstein famously singled out Maxwell as the man on whose shoulders he had stood, rather than Isaac Newton. Hence Einstein's (1905) famous 3-page paper, with his iconic formula: $E=mc^2$ (for more, see N. Turok, 2012: 110, "From Quantum to Cosmos: The Universe within").

What is needed is an innovation philosophy for entrepreneurship that is accompanied by the appropriate framework. Policies and Programmes on SME development should then be built upon this philosophy and framework. The National System of Innovation (NSI) is one such framework. Whilst still 'work-in-progress, and itself, subject to ongoing 'innovation' and development, the NSI is developed enough for South Africa to adopt it to the field of entrepreneurship and small business development. We turn now to an elucidation of the National System of Innovation.

The National System of Innovation Approach

Entrepreneurship and SME Development ought to be approached from a framework that incorporates the geopolitical, institutional, macro-economic, social and cultural content (e.g. Scerri, 2016: 23-48). This approach also recognizes the significance of the "exogenous" environment, including policy, financing and regulation subsystem. Scerri (2016: 27) aptly summarises the broad version of the National System of Innovation and distinguishes it from the traditional or classical approach. The latter is a narrow approach that views innovation within the very limited prism of "Science, Technology Subsystem" as the input, which results in the "Production and Innovation Subsystem". This is summarised in the Figure below:

Figure D: The Broad and Narrow Versions of the National System of Innovation



Source: Scerri (2016: 27) (Adapted from Cassiolato and Lastres, 2008).

“Systems of Innovation” as an approach is a critique of neoclassical economics. It is a paradigm that was comprehensively developed in the work of Nelson and Winter (1982) and it formed the rationale for the seminal collection of contributions in Dosi *et al* (1988) on the relationship between technical change and economic theory. Scerri (2018) points out that neoclassical economics is quite incompatible with political economy, presenting as it does a mathematical model of the national economy which is fully specified and designed to contain solutions to the model in a predetermined fashion.

Having said that, Scerri (2018) also points out that the Systems of Innovation has promise as an alternative to neo-classical economics but it is not yet there. He notes, in this regard that, the system of innovation approach has yet to develop a comprehensive alternative general theory of the economy and is at best seen as a, often case-study based, contribution to a sub-sector of an economy implicitly formed by the language of neoliberal economics (Scerri, *ibid*). Scerri suggests that the starting point for the development of a general account of the general economy may be found in Lundvall’s definition of the national system of innovation as ‘... **the elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge ... and are either located within or rooted inside the borders of a nation state**’ (Lundvall, 2010: 2). The latter definition emphasizes knowledge rather than technology, which addressed one of the major limitations of the neo-classical approach. It also recognizes the value and role of institutions, broadly defined, as does New Institutional Economics in its critique of

classical and neo-liberal economics. The recognition of formal and informal institutions allows for a significant degree of specificity in the study of systems of innovation (Scerri, 2018).

Nelson (2007) emphasises the need for evolutionary approaches to innovation and development to coalesce into a coherent body of formal theory which can act as an alternative reference point for a practice of an appreciative theory which is more appropriate to rapidly changing economies. However, the acceptance of the practice of appreciative theory can be problematic in the case of neoclassical economics which is so completely mathematically defined that it has little leeway for departures from its highly restrictive assumptions regarding information and the definition of economic agents (Ibid p. 13).

According to Scerri (2018), the development of an alternative general theory of the economy could be built on three closely inter-linked pillars. The first is a revisiting of the theory of value, essentially re-articulating the labour theory of value as an innovation theory of value. A broad enough interpretation of innovation would read all human economic activity, manifest in goods, services and experience, as current innovation or as the embodiment of historical streams of innovation. This re-visiting of value would also help to revitalise the challenge to an exchange theory of value which implicitly runs through the mainstream discourse, even when exceptions are permitted as 'market failure' and 'externalities'. The second foundation for an emerging discourse would be to anchor systems of innovation in specific accumulation regimes. The third pillar would be the conceptual extension of the informal institutional and tacit knowledge base to permeate and ultimately define systems of innovation. This would entail the drawing in of traditional sociology and modern anthropology, and interpretative historical reading within a political economy theoretical framework of evolutionary economics.

“National Systems of Innovation” in the South African context

At the level of the Political Economy of Innovation Systems, the South African historical context is more than adequately covered by Scerri (2016: 23-50); Scerri (2016: 157-177) as well as by Maharajh (2016: 179-224). These scholars detail the history of colonial and apartheid deprivation and retardation of the South African populace, coupled with a very narrow, technology- and science focused “System of Innovation”, which even so, was constrained and almost choked to death during apartheid, but for a very narrow section of the population. This is the legacy that has resulted in the very handicapped and failing “System of Innovation” in the country at present. Mphahlele and Scerri (2016: 233) produce a model of the “layers of human capability provision”. This model outlines the significance of the “Welfare Safety Nets; Social Cohesion and Secure Human Capabilities Development” as the foundation and building blocks of all later innovation in society. Built on those broad foundations is the next level of “primary and secondary education; and further education and training” which is critical in the provision of broad-based skills. How the colonial and apartheid atrocities around the social and educational aspects of people’s lives, particularly black people, would have such a negative effect on the innovation-propensities of future generations, becomes obvious and is covered in depth by Mphahlele *et al* (2016: 227-254) as well as by Maharajh (2016: 179-224). Needless to say the messing up with the social fabric of black people’s lives; the deprived environments that they and their children had to live under, of which millions still continue to do so, as well as the notoriously poor public schooling system, would, as they did and still do, result in the very impoverished output of “Scientists, Engineers and Technologists” (Mphahlele & Scerri, 2016: 233). The latter is the pool from which traditionally most technological and scientific innovations are expected (assuming the narrow approach to NSI). Mphahlele *et al* challenge this notion and point to its

futility as long as the base is not addressed. Engineers and scientists are very unlikely to emerge from a population that is ravaged by poverty; unemployment and whose children are trying to succeed in a very poor and resource-constrained environment at home; school and in society. It therefore is no wonder that Report-after-Report and Study-after-Study will keep lamenting the lack of “progress” by black people into highly specialized areas of life that require highly specialized education, in subjects and areas of study that continue to be “scarce” in the majority of schools where most black parents send their children to. These statistics will continue to be re-enforced by the deprived social and family environments that are not able to support the children, even with the best efforts of some of the parents, where there are still stable family environments left. This is the “constitutive design” of our society. As Mphahlele and Scerri (2016: 247) so aptly affirm, “at a fundamental level, one cannot remedy negative impacts of innovation systems by merely altering regulatory frameworks without correcting that which constitutes them”. The constitutive design has to be revamped and overhauled. This is as applicable to the field of entrepreneurship and the efforts to stimulate innovation in the economy as it is to society in general.

Entrepreneurship development must therefore be located in the broad Systems of Innovation paradigm, as adumbrated by Scerri (2016; 23-50); Pogue & Scerri (2016: 127-156); Maharajh (2016: 179-224); Mphahlele & Scerri (2016: 227-254); Kraemer- Mbula & Sehlapelo, (2016: 255-278); Kraemer-Mbula, (2016: 303-327); Scerri & Maharajh (2016: 351-377). The Systems of Innovation approach sees “innovation” as any value-adding activity;, programme or system in society, ranging from ancient art;, ancient technology;, new ways of organizing communities, including the Ubuntu/ Botho approaches; innovative ways of surviving and living;, new business formations, as well as the common and traditional types of innovation that are associated with science and technology (Scerri, 2016; 23-50; Pogue & Scerri, 2016: 127-156; Maharajh, 2016: 179-224; Mphahlele & Scerri, 2016: 227-254; Kraemer-Mbula & Sehlapelo, 2016: 255-278; Kraemer-Mbula, 2016: 303-327; Scerri & Maharajh (2016: 351-377).

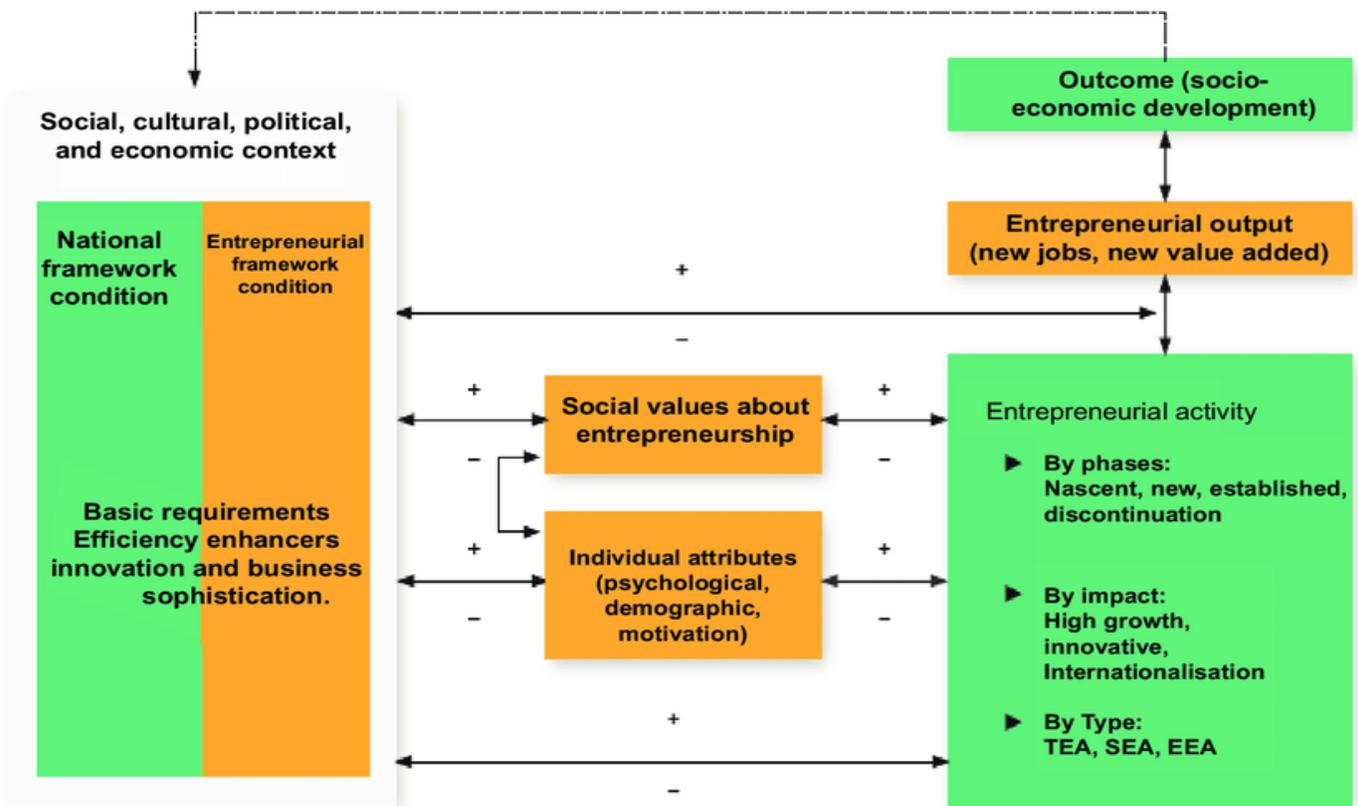
Scerri *et al* (2016) posit a “political economy” approach to Systems of Innovation, whereby the entire society and its activities should be innovation-centric, in the anthropological; social; psychological; scientific and technological sense. Mphahlele and Scerri (2016) insist on a “Human Capabilities” paradigm of innovation (as opposed to the neo-classical “Human Capital Development”). This Human Capabilities framework recognizes a multiplicity of sciences. It must seek to employ interdisciplinary, multidisciplinary and transdisciplinary approaches (Mphahlele & Scerri, 2016: 249). The Human Capabilities approach also respects and promotes the Ubuntu/ Botho socio-cultural values; norms and principles, which ought to permeate art; business; science and technology (Mphahlele et al, 2016: 227-377). The proposed approach also recognizes the continuum between the so-called informal sector and the so-called formal sector (Kraemer-Mbula, 2016: 303-327). It acknowledges that a lot of creativity and innovation takes place “informally” and this needs to be nurtured and developed, including in business. We therefore posit a broad political economy approach to entrepreneurship and SME creation and promotion, with a very strong bias in favour of the poor and marginalized sectors of society, including townships and rural areas.

This approach is in line with the sentiment expressed by the Department of Small Business Development, when they state in their Annual Review of Small Business and Cooperatives, that emphasis should be “on the development of the Small Enterprise Development Ecosystem as a whole” (DSBD, 2018: 1). The focus should therefore be on the development of entrepreneurs and SMEs within a broad System of Innovation, focusing on the “SME Ecosystem” as a whole.

Application of the NSI Framework to the SME sector globally and in South Africa

The Global Entrepreneurship Monitor (GEM, 2018: 22) provides a useful overall framework for the study and analysis of SME and entrepreneurship. Most of the components that are critical in the SME and Entrepreneurship Policy- (Support-; Development-; Financing- and Growth-) value chain are in the Framework. This is at the broad level. The “financing” element, and other similar detail appear in the Appendix E, which is the more elaborate version of the GEM Model (GEM, 2010). ‘Financial Market Sophistication, for instance, appears under “Efficiency Enhancers” within the overall ambit of the “Social, Cultural, Political, Economic Context”, which is the first Box of the more elaborate model. First is the Broader Framework; which is in line with the broader-NSI Framework, to a large extent. The broader GEM Framework can thus be adapted to fit into the NSI. Consequently the “GEM Conceptual Framework” is reproduced below as the overall template for analysing SMEs in South Africa.

Figure E: The GEM Conceptual Framework



Adapted from the Global Entrepreneurship Monitor (GEM, 2018: 22)

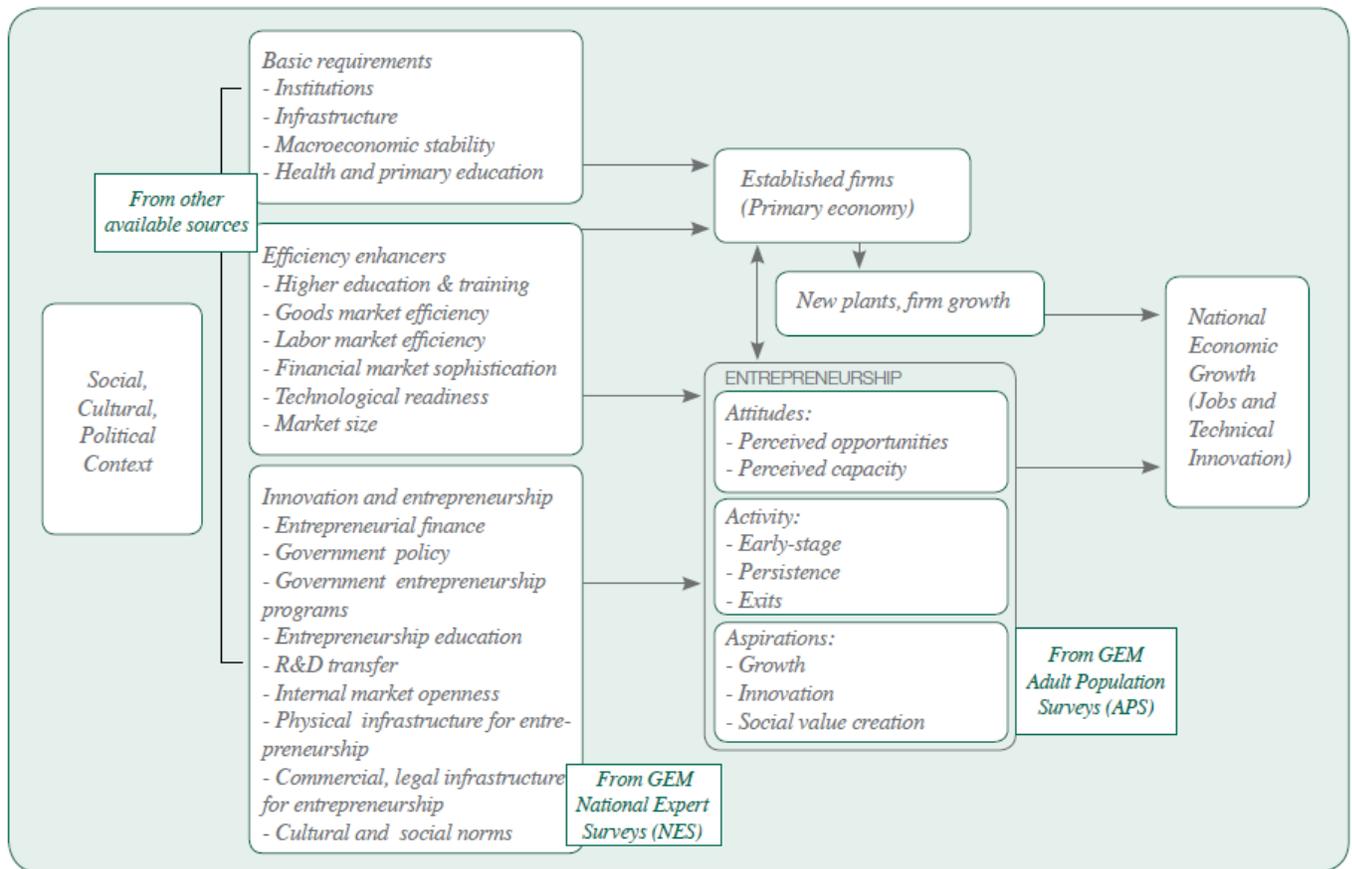
Legend:

- TEA = Total Early Stage Entrepreneurship
 (“Nascent entrepreneurs” and those with businesses > 3.5 years or > 42 months)
 Can be enriched by including:
 - Motivation - Opportunity versus necessity-driven
 - Inclusiveness - (Race, Gender, Age, Disability, Rural-base, etc.)
 - Industry sectors - (Formal versus Informal; Manufacturing; Retail, etc.)
- SEA = Social Entrepreneurial Activity (Entrepreneurial activity “with a social goal”).

EEA= Entrepreneurial Employee Activity (Employees who are involved in entrepreneurial activities within their work environment) (E.g. Developing or launching new goods or services, or setting up a new business unit, a new establishment or a subsidiary).
 GEM (2018: 23)

The GEM Report of 2010 was more robust in its elaboration of the various elements and as such it is also very useful in building an NSI framework for entrepreneurship. The enhanced GEM Model (2010) is reproduced below. The NSI- and innovation-type of interventions should then zoom into each element.

Figure F: The GEM Model (enhanced with more detail on each component):



Source: GEM Report (2010).

The above model is helpful when it comes to the development of specific programmes and interventions to promote entrepreneurship in South Africa. It starts with overall Social, Cultural and Political context. This is how an NSI Framework also starts. The only major addition should be the historical context. The three elements of the GEM's (2010) Framework include Basic Requirements; Efficiency Enhancers, as well as Innovation and Entrepreneurship. "Basic Requirements" contains "institutions" which are also

important in an NSI analysis (see Maharajh, 2014 and Scerri, 2019, forthcoming). The third element of “innovation and entrepreneurship” is the one of direct concern to this particular review. In spite of the sub-title of ‘innovation and entrepreneurship’, there is no other mention of innovation in the components of the “innovation and entrepreneurship” box. Instead the focus is on ‘entrepreneurial finance’ and ‘government policy’ which is not defined. This is exactly the gap and lacunae that must be addressed. It is a well-known business school shibboleth that ‘finances follow strategy’. To focus on entrepreneurial finance before the actual entrepreneurial prowess; skills; attributes; philosophy is like financing the purchase of new aircraft without checking on the quality of the pilots

A really useful model of entrepreneurship should start with ‘entrepreneurial and innovation philosophy; attributes; and techniques’. “Entrepreneurial innovation” should be an endogenous variable that is researched; where entrepreneurs can be trained in it; mentored and also be exposed to international best practices. Government policies and programmes on entrepreneurship development should therefore be undergirded by this “Innovative Entrepreneurial Philosophy; Spirit and Practice”. SME training and development institutions should also start with the assessment of ‘*innovapreneurship*’ and they should spend a major part of their time and resources developing it; infusing it and promoting it among SMEs.

Social, cultural, political, economic context

The “Policy, Financing and Regulation Subsystem” of the NSI broad framework (e.g. Scerri, 2016) and model is akin to the GEM component of “Social, Cultural, Political, Economic Context”. Space does not allow for a detailed elaboration of each of the components of the model. A few components will be discussed below. Maharajh (2014) insists that an NSI analysis must needs include a historical as well as a social and political context. History and context are distinguishing features of the broad NSI framework that is being recommended (Maharajh, 2014); they are not peripheral to the model.

The point was made in the beginning about the devastating effects of social and cultural inequalities and the negative impact that this has had on the quality as well as the quantity of innovation in South Africa (see Mphahlele & Scerri, 2016: 227- 277, for detail). The history of apartheid and the deprivation that resulted from its deliberate policies has been referred to and it is adequately covered by Maharajah (2016). Interventions that seek to promote entrepreneurship in general and SMEs in particular ought to be alive to this basic and fundamental challenge. Interventions that start and end at the individual levels will not really succeed in the long run. The differential histories of South African, which correlate with differential degrees of disadvantage have had a major effect on the propensity to innovate. Even exposure to industry and commerce was very limited for the majority of the African black population, including a lot of coloured people as well as people from the Indian communities. This ‘exposure’ is important for giving nascent entrepreneurs ideas regarding what ventures they must embark on. It also assists in boosting the confidence of entrepreneurs to innovate in technological; organisational and other ways. Training programmes and SME support programmes must therefore seek to correct this historical bias. Prospective; nascent and established entrepreneurs must be constantly exposed to innovative models; innovative ways of thinking as well as innovative alternatives to the manner in which they do business. Case studies of successful innovation in the rest of Africa and in the developing world should be used to inspire these SME entrepreneurs. Short-courses by IERI, for instance, could be of great value in this regard.

The Legal and policy context

The SME development space is covered by various policy- as well as legal instruments, *inter alia*:

1. White Paper on SMME Development (1995).
2. Integrated Small Business Development Strategy (1995), a creature of the latter White Paper.
3. National Small Business Act (102: 1996), and National Small Business Amendment Act (26: 2003).
4. Preferential Procurement Policy Framework Act (2000) as amended.
5. Broad-Based Black Economic Empowerment Act (2003), as amended in 2014.
6. National Policy on Broad Based Black Economic Empowerment (2003), a creature of BBBEE Act
7. BBBEE Regulations and Codes (2007) amended in 2014 and with ongoing amendments.
8. BBBEE Charters and specific “Enterprise Development” and “Preferential Procurement” targets.
9. National Skills Development Act (1998) and Skills Levies Act (2001) with regard to training.
10. 22 Sector Education and Training Authorities and their policies and programmes, related to the creation and support of SMEs directly, via “Enterprise Development” as well as Preferential Procurement. The SETAs are a creature of the Skills Development Act, although they were moved from the Department of Labour to the Department of Higher Education.
11. Higher Education Acts; the creation of TVETS and related skills development policies
12. Small Enterprise Development Agency (SEDA) and its constitutive Act.
13. Small Enterprise Finance Agency (SEFA) and its constitutive Act.
14. National Youth Development Agency (NYDA) and its constitutive Act.
15. Technology Innovation Agency (TIA) and its constitutive Act.
16. National Empowerment Fund (NEF) and its constitutive Act.

There are also a number of key stakeholders that are active in the SME and co-operative space:

- i. Development Finance Institutions (DFIs), which also seek to assist in the SME space, nationally and provincially (DTI; Land Bank; Provincial Economic Development Corporations as well as Provincial Finance Corporations, e.g. Ithala in KZN; ECDC in the Eastern Cape and others that focus on specific sectors, e.g. Agri-Business; Rural Development Finance Corporations, etc.).
- ii. Many private sector Funds and Entrepreneurship Programmes (Banks; corporations; BBBEE, etc.). Most major and traditional banks in South Africa have “SME Desks” and packages.
- iii. International NGO’s who are involved in the SME and co-operative business space (ILO, etc.).
- iv. Major donor foundations by Philanthropists nationally as well as globally and their requirements (Motsepe Foundation; Black Umbrellas (Formerly Shanduka); Bill & Melanie Gates.
- v. Union; church and civil society initiatives; programmes, including stokvels.

The Current Political Context

The main strategic and policy document for South Africa, the National Development Plan (NDP, 2012) demonstrates a lot of faith in the SME sector. Of the 11 million jobs that the NDP envisages for 2030, 90% of them are meant to be generated by the SME sector. There is a strong commitment by the ruling party, the African National Congress (ANC) to the promotion of the SME sector. This commitment is evident in the speeches and in the election manifesto of the ruling party. In the State of the Nation Address (February 2019) as well as in the Election Manifesto of the Ruling Party (March- May 2019), President Ramaphosa makes specific and special mention of SMEs. In particular, President Ramaphosa affirms that, “Micro, small and medium-sized enterprises, socially-owned enterprises, such as co-operatives and revitalization of township and village economies are critical for economic transformation, including growth and job-creation, **and can help drive innovation**” (our own emphasis) (ANC Election Manifesto, 2019: 32-33).

Furthermore, other SME-specific commitments are:

- There will be “decentralization and transformation of the economy, opening it up to participation by small and medium enterprises” (ANC Election Manifesto, 2019)
- There will be “More concerted focus on SMMEs, co-operatives and township and village enterprises” (ANC Election Manifesto, 2019: para. 5)
- “Will help to grow Small Enterprises, Co-operatives and the Township and Village economies, for economic transformation, job creation and encourage all forms of entrepreneurship” (ANC Election Manifesto, 2019: para. 8).
- “Scale-up support for micro, small and medium enterprises, co-operatives and township and village enterprises, including through rapid implementation of measures contained in the Competition Amendment Bill”. (Ibid, para. 8).
- Support for enterprises to include enterprise development, public and private procurement and access to funding and enterprise development (ibid).
- “Will combat discrimination against SMMEs in the economy, including the abuse of buying power, unfair, excessive and predatory prices, and other trading conditions that are imposed on small enterprises” (ANC Election Manifesto, 2019: 32).
- “End abuse and dominance by large, vertically-integrated firms” (ibid).
- “Will set up incubation centres in the townships and rural areas”
- “Establish a Township and Rural Economy Fund” to support the productive activities (Ibid: 33).
- “The ANC government will work with the financial sector on implementing its R100 Billion commitment to support mainly black-owned enterprises, over the next 5 years”. (ANC Election Manifesto, 2019: 34).

Thus there is more than adequate awareness of the significance of the SME sector in South Africa, at the highest political leadership level. The significant thing about the commitments made by President Ramaphosa, above and elsewhere in key policy speeches, is that they are backed-up by the establishment of institutions, such as incubators, as well as by the mobilization of real funds (in the billions of rands). Whether this materializes or not is dependent on constant vigilance by various stakeholders in South Africa, including interest groups and lobby groups (as per Political Economy principles). Of significance to us is that ‘innovation’ and its promotion has got political support, as is SME development. What must be done is to define such innovation and to infuse it.

The Economic Context for SMEs and entrepreneurship in South Africa

- The National Development Plan (NDP, 2012) has, *inter alia*, the goal of creating 11 million jobs in South Africa by 2030. 90% of these (about 10 million) are expected to come from the “small business” sector (SEDA Annual Report, 2018: 28).
- SEDA (2018: 28) notes that the SME sector is particularly vulnerable, given the large concentration of ‘SMME’s in the “internal trade” sector. This sector is highly affected by domestic demand, consumer confidence and inflation.
- South Africa struggles with an alarmingly high national unemployment rate (25% in Q2, 2015) (StatsSA). In Q2 2018 the Quarterly Labour Force Survey of StatsSA recorded the unemployment rate at 27.2%, an increase of 0.5% from Q1 2018.
- There has also been an observed shift of SMMEs from the formal to the informal sector, during 2016-2017, with increased pressure on profitability (SEDA, 2018: 28).

- The heightened rate of “informalization of small businesses” in the SMME sector is also due to the high and rising levels of unemployment (ibid).
- The SEDA Review of the SMME Sector in South Africa, that was conducted by the Stellenbosch University’s Bureau of Economic Research (BER, 2017) found that SMMEs were still challenged by:
 - Lack of access to finance
 - Lack of access to markets
 - Poor infrastructure
 - Labour laws (that SMMEs found rigid, “particularly when it comes to laying off staff during difficult times or during a ‘lean season’) (BER, ibid).
 - Crime
 - Skills shortages (particularly for high-tech and expertise-driven)
 - Bureaucratic inefficiencies (registration; tax; payments, etc.).

(BER, 2017: 3)
- Yet, the economic and financial environment has never been more conducive for the promotion; support and development of SME and entrepreneurs in South Africa. Politically and economically there are major enablers to the advancement of innovation amongst SMEs in South Africa. Apart from the commitments by the Ruling Party as outlined by President Ramaphosa above, there are also other Funds and initiatives:
 - ❖ The Minister of Finance, Mr. Tito Mboweni, announced that there was R300 Billion rand in pledges by the private sector to “accelerate inclusive economic growth and create jobs”. (Budget Speech, Ministry of Finance, 20 February 2019).
 - ❖ The Small Enterprise Development Agency (SEDA) was allocated a budget of R481 by the Minister of Finance, “to expand Small Business Incubation Programme”.
 - ❖ R3.7 Billion rand was set aside to assist emerging farmers seeking to acquire land to farm (these are potential entrepreneurs and SMEs). (Ministry of Finance, 2019).
 - ❖ Support from the State includes a new, 2 Billion Rand Fund that will be drawn from three Departments, the Department of Small Business Development (DSBD); the Department of Science & Technology (DST) and the National Treasury (SEDA Annual Report, 2017/18: 10).
 - ❖ The above Fund will be launched in the 2019/20 Financial Year. It will be for funding to small enterprises at the early or ideation stages.
 - ❖ In April 2018 the “Employment Promotion through SMME Support Programme” was launched. A Partnership Fund between the DSBD and the European Union (South Africa), was created with some Euro: 52 Million (~ R832 Million).
 - ❖ The above Fund “will support SMME’s through Business Development Services; access to markets; improve access to finance and help ease the administrative and regulatory burden on small businesses.” (SEDA Annual Report, 2018: 10).

Adding the various Funds, the ones from the President and the ones noted above, there will be more than R100 Billion rand available for SME and entrepreneurship development in South Africa. The exact figure is impossible to compute at the moment, because some of the Funds are only being set up now, with no stated amount (e.g. the Township and Rural Economy Fund, noted earlier). From the above-noted Funds and initiatives, it would appear that the challenge of finance for SME is being addressed. Of course, experience tells us that not all these good intentions and resources achieve their intended purposes (for instance there is always that issue of rent-seeking and kleptocracy. The good news is that the state seems to be very serious in dealing with cases of fraud; embezzlement and corruption. Already a few senior

managers were suspended by the Minister of Small Business Development in March/ April 2019 for the disappearance of a few million rands of funds that were earmarked for SME support. Now, in political economy, this is a very good environment that is being set up, whereby resources will go toward their intended purposes; political principals will conduct the necessary oversight and bureaucrats will focus on the necessary implementation. We as academics will focus on conducting the necessary reviews; including empirical evaluations of success; the development of appropriate and effective models and the training of entrepreneurs as well as policy makers and implementers on the utilization of those models.

Recommendations

The major recommendation, which has been highlighted throughout this paper, is that entrepreneurship development and support in South Africa should be under-girded by a philosophy and spirit of innovation. This *unternehmergeist*, is the old 'under-taker's spirit' that Schumpeter espoused and promoted as the *motive force* of economic development. Innovation is generally supported in entrepreneurship models, including the Global Entrepreneurship Monitor. It is also supported in political policy documents and in the manifesto of the ruling party. But it is not elaborated upon and it is not unbundled into any identifiable components. Innovation is taken as 'exogenous' to SME Development models, when it should be endogenous. Further work and research is required to unpack the construct of innovation so that it can be identifiable in the SME space. Once it is identifiable, in terms of its components, it can then be assessed; promoted and supported. This is work that an Institute such as IERI ought to be seriously seized with over the next two-to-three years. As part of the unpacking of the 'spirit of innovation'; its philosophy as well as its psychology, for entrepreneurs, should be further work on the construct of an "Innovative Entrepreneurship Index" (IEI). The World Bank already has an "Innovation Index" that is linked to national and international productivity. That Index ought to be reviewed and critiqued. It is mostly based on the very narrow approach to "innovation" rather than on the broad approach that is espoused in this paper. A South African Innovative Entrepreneurship Index is required, focusing on innovation in the informal sector; semi-formal sector; traditional sector; cultural sector; SME sector as well as in the formal sector. These various sectors should have their own specific indicators of innovation and be recognised; captured; show-cased and encouraged to grow and develop. This IEI should use the deconstructed "innovapreneurship" components (resulting from above process) to develop an instrument for the assessment of its prevalence in the country and even regionally. The assessment of absence; growth, prevalence and nature of "Innovative Entrepreneurship" will become a critical variable in the monitoring of the country's economic growth and development. It will also become a major barometer of economic value addition in the country; which can be scaled out regionally. It will include all sectors, not only formal.

Short courses for the development of 'innovative entrepreneurship' must be developed by institutions such as IERI. A 3-day course on 'innovative entrepreneurship' will go a long way in assisting current as well as prospective entrepreneurs to become more innovative in their approach. Various case studies of successful innovation should be presented to the participants. Mentorship and coaching should also be given to assist the entrepreneurs to explore innovations within their current enterprises. This is an initiative that can be done in partnership with the Department of Trade and Industry, as well as its various sister organisations (National Empowerment Fund; Small Enterprise Development Agency, etc.). There are also other important institutions that will benefit from such training; mentorship and coaching (e.g. regional enterprise development agencies, like Khula in KZN; ECDC in the Eastern Cape; NGO's etc.). The innovative paradigm of entrepreneurship should therefore result in practical gains for the individuals involved; the institutions involved; as well as the country as a whole. This will bring it closer to the "historical-materialist dialectic" of the classical Marxist school, with the materialist aspect being the applied/ practical interventions, informed by the historical; policy and empirical conditions on the ground.

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