

How supply chain management impacts governance and development in context with COVID-19: Implications for poverty in developing countries

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Key words

Agility, COVID-19, Developing Countries, Development, Governance, Poverty, Supply Chain Management,

Abstract

COVID-19 impacts both direct and indirect and at various levels, are currently ominous, and significantly challenge systems in society, economy and environment, influencing governance (GVRN), development (DVMT) and related poverty (PVTY) elements. This research explores relationships between GVRN and DVMT effects in developing countries (DCs), proposing that transport, supply chain and logistics management (TSCLM) incorporating agility, can enable GVRN more supportive and responsive. In so doing, efforts for DVMT and PVTY eradication can improve, alleviating problems for individuals and systems left unprepared, bereft and vulnerable. It is vital to pursue this area of research for theoretical and managerial features in the underexplored contexts are generally still novel.

To heighten research and practical consciousness of interactions between GVRN, TSCLM and DVMT, especially PVTY effects, this paper engages literature review and associated conceptual model with propositions. The conceptual model focuses on relationships and interactions, combining institutional theory and organisational learning theory incorporating networking or collaboration, presenting four propositions to sustain further exploration, management and practice.

In concluding, this researcher presents implications, and suggests future research avenues with respect to interrelationships of GVRN, TSCLM and DVMT. The incorporation of elements to better enable GVRN relationship with DVMT beneficial to PVTY eradication in business context with COVID-19 hindrances, can assist individuals and firms to be more agile and effective in planning, implementation and output systems and to sustain advantageous outcomes. This research contributes to augmenting theory and practice in supply-chain management, GVRN and DVMT, so researchers, managers and others can benefit from value added in improving processes and practices including success with eradicating COVID-19 hindrances to significant attainments.

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Introduction

Overview

In March 2020, the World Health Organisation (WHO) declared outbreak of novel coronavirus, COVID-19, as a global pandemic (Cucinotta and Vanelli, 2020), as spread and severity, both case and country level outside the original detection area around Wuhan in China, became alarming, and search is still on for specific treatment strategies effective for all. Systems in health care, society, economy,

development (DVMT) and governance (GVRN), are challenged significantly by COVID-19 impacts directly and indirectly and at levels including individuals, firms, sectors, countries, and globally. Systems and levels supported by transport, supply chain and logistics management (TSCLM), impacted by COVID-19, can be left unprepared, bereft and vulnerable. For countries with people most vulnerable, poor, or severely impacted, financial and technical support is crucial, so leading economies must take 'coordinated, decisive, innovative policy action' (United Nations (UN), 2020), showing responsibility and unanimity as the world is in severe crisis. Responsiveness of good GVRN is necessary to bolster such support of sustainable development (SD), especially for developing countries (DCs). DCs, with gross national income per head of US\$12,195 or less, collectively encompass 80% of the world population (Ibrahim and Damasceno, 2012). Their immediate context (CTX) is different from developed countries and Oldekop et al (2020) find that there is a need to 'recognise that a more sustainable and equitable world requires transformation of and cooperation with all countries', as preexisting challenges of inequality and deprivation augment the spread of COVID-19 through global interconnections.

Globalisation (GBLN) (Goldberg and Pavcnik, 2007), involves 'flows of goods and services across borders, reductions in policy and transport barriers to trade, international capital flows, foreign direct investment (FDI), multinational activity, outsourcing, increased exposure to exchange rate volatility, and immigration'. With trade and financial liberalisation and reform, it can impact inequality, and while this can be reduced through trade GBLN, financial GBLN including FDI can increase it (Jaumotte et al, 2013). Effects from GBLN can induce firms to not comply with labor market standards or increase proportion of workers in informal economic sector (Goldberg and Pavcnik, 2003; 2004). Price changes induced by GBLN can affect inequality through impacts on consumption or demand reducing earning prospects for the poor (Porto, 2006). Social marginalisation and unemployment persist globally (Woolcock, 2001), so there needs to be more responsiveness to sustainable development goals (SDGs), which 'measure different aspects of the economic, social and environmental DVMT within countries' (DeNeve and Sachs, 2020).

The absolute poverty (PVTY) line involves necessity for essential services (Fuchs, 1965; DFID, 2007), and the measure of inequality, incorporating consumption, is best captured through changes in current income purchasing power (Deaton, 1997; Goldberg and Pavcnik, 2007), to avoid misleading results concerning PVTY (Deaton, 2003). This paper incorporates elements of economic well-being, capability and social exclusion dimensions of PVTY as Goldberg and Pavcnik (2007) call for studies to pursue a more integrative approach to PVTY. Measuring PVTY can involve indicators of incidence, depth and severity (Karim et al, 2013). PVTY and inequality are social welfare concerns crucial to address for improvements in economic opportunities and avoidance of social unrest, so that economy and society can develop with capital and labour efficiently matched for optimal productive capacity, translating to growth (Jaumotte et al, 2013). COVID-19 impacts can lead to aspects of PVTY (Sumner et al, 2020), and nations can experience an economic burden where it affects growth and DVMT, as the virus seems difficult to eliminate, both wealthy and poor being significantly impacted. Gross National Product (GNP) per capita levels can fall, if impacted negatively by productivity of human capital, life expectancy of humans in especially vulnerable age groups, geographical location of nations including logistics (LGS) connections and human movement across borders. Humans with COVID-19 virus, can be more susceptible to other illnesses, and in addition to significant medical costs, rise in morbidity and mortality, reduced hours at workplaces and schools can impact productivity, learning (LNG) and DVMT. Attempts to globally eradicate COVID-19 can involve cost-effective programmes designed to meet needs of nations, groups or individuals, appropriate GVRN targets or expenditures matching critical needs, reducing extremely high global burdens.

GVRN concerns safeguarding and advancing human rights, being a means to DVMT and PVTY reduction (Smith, 2007), 'creating conditions for ordered rule and collective action' (Stoker, 2018), even in case of threat 'to undo or upset opportunities to realise mutual gains' (Williamson, 1999). It incorporates

all processes of governing 'undertaken by government, market, or network, over an entire system, formal or informal organisations, or individuals' part of such system, and through laws, power, contracts, norms and language' (Rukanova et al, 2020; Bevir, 2012). This highlights how institutional constraints and CTX factors (Quatraro and Vivarelli, 2015) are faced and, despite environmental dynamism, best configuration(s) and timing determined utilising resources and capabilities (Penrose, 1959), engaging in beneficial cooperative adaptation. Moreover, 'Corporate GVRN mechanisms are economic and legal institutions that can be altered through political process' (Shleifer and Vishny, 1997). When these internal and external GVRN mechanisms cooperate, the incentives and interactions can affect alignment, monitoring, control and risk reduction (Misangyi and Acharya, 2014), for quality beneficial to stakeholders. Quality of GVRN dimensions in DCs can be improved through international DVMT agencies' (IDAs) assistance (Smith, 2007), but the reform is susceptible to external influences, and the assistance for good GVRN has attached conditionality of donors or lenders with coercion or cooperation measures.

It is vital that institutions, groups and individuals actively, positively participate and cooperate to eradicate COVID-19. However, despite some conformity to policy measures suggested and imposed by GVRN internationally, regionally and nationally, DCs experience vulnerabilities pre-existing and current, some lacking support needed to ensure successful progress towards UN 17 SDGs (UN, 2020). SDGs include 'no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, sustainable cities and communities, climate action, peace, justice and strong institutions, and partnership for the goals' (Barbier and Burgess, 2020). DCs can better pursue paths to progress to become well-endowed, needing to sustain DVMT, avoid stagnation of citizens' well-being (DeNeve and Sachs, 2020), and suitably attain SDGs, chiefly no PVTY.

DVMT incorporates quality of life in terms of capabilities - 'capabilities expansion' distinguished by factors economic and human, measured in terms of growth in gross domestic product (GDP) and human capabilities respectively (Smith, 2007). PVTY alleviation, most important to DVMT (World Bank, 2015; 2016), is part of 17 SDGs to guide global action. Environmental, economic, and social dimensions are pillars of SD (OECD, 2001; Commission of the European Communities (CEC), 2001), mutually interacting, but independent elements can be analysed separately, heeding social 'embedded in the environment and encompassing the economy' (Lehtonen, 2004). Important to all, DVMT involves 'creating an environment in which people can develop full potential and lead productive, creative lives' (UNDP, 2003). SD relates to attentiveness to present generation needs while paying same attention to interests of future generations without compromise (Anand and Sen, 2000), prioritising the poor. For an economy facing recession associated with COVID-19 pandemic, first order supply and demand shocks occur at levels of individual occupations and industries both essential and non-essential, threatening GDP, reducing total wage income, jeopardising jobs (del Rio-Chanona et al, 2020), and SD.

Supply chain management (SCM) involves firms engaged in closely integrated collaboration to achieve significant efficiency effects in areas such as replenishment, promotion, product introduction and store assortment (Skjoett-Larsen et al, 2003). When such collaboration includes information-sharing and relations with proactive approaches incorporating common planning and synchronisation of activities and business processes (Jagdev and Thoben, 2001), the integration and digitalisation can strengthen forecasting and replenishment elements. Initiatives for SCM (Ballou et al, 2000), allow delivery of enhanced value across boundaries. This can occur when parties persist in aligning objectives and integrating resources, considering providers, suppliers and customers as they outsource non-core activities to those with superior capabilities (Harms and Hansen, 2000; Kilpatrick and Factor, 2000; Fawcett and Magnan, 2002). However, individuals and firms are now experiencing supply chain (SC) risks, as

epidemic outbreak of COVID-19, which existence has long-term disruption with high uncertainty, impacts SC performance globally, requiring mitigation and policies to recover in CTX of pandemic (Ivanov, 2014; 2020). When suppliers, manufacturers, warehouses, transporters, retailers, and final customers, are efficiently integrated through synchronised decisions and activities (Li, 2014; Anca, 2019), there can be greater focus on cost minimisation and meeting of stakeholder requirements leading to sustainable advantages from such SCM.

Logistics (LGS) supports SCM, for with strategic management of firms and their marketing channels, and techniques and technologies to sustain elements such as procurement, movement and storage of materials, parts and finished inventory, customer needs can be fulfilled cost effectively (Martin, 2011). LGS capabilities including relationships upstream and downstream, are crucial in promoting flexibility in SC (Novillo et al, 2017), and support reliability, quality and competitive advantage (Martin, 2011). GVRN can improve decision making concerning location, LGS and alliances, advantageously improving elements of innovation, infrastructure and raw materials availability (Cantwell, 2009; Mann, 2012). In the event of disruption of SC, they can then be able to crucially minimise risk exposure by engaging major elements contributing to agility and flexibility, including managerial support, information technology (IT), resources alignment, external collaboration (Skipper and Hanna, 2009), and networking (NWG).

In CTX incorporating COVID-19 pandemic, restrictions on travel and transport have disrupted movement of labour and goods (Food and Agricultural Organisation (FAO), 2020). Transportation (TSPN) infrastructure such as road, rail, ports and customs, can be improved and more closely aligned to facilitate and enhance trade, relations and global SC transformation (Estache and Garsous, 2012). Global SCs are additionally impacted by export regulations, duty rates, and exchange rates (Beamon, 1998). However, stakeholders can cooperate more, utilising advanced physical and other technologies such as face recognition, artificial intelligence (AI), biometrics, robotics, laser, infrared and block chain, to enhance transparency and traceability (Koh et al, 2020). Firms that can overcome restrictions and disruptions hindering flexibility and agility, utilising supporting elements of TSCLM, are more likely to sustain profitable outcomes. Flexibility is a tactic to organise for responsiveness to effects or uncertainty in planning or DVMT (Sager, 1990; Sanchez, 1995). Agility is 'a business-wide capability that embraces organisational structures, information systems, LGS processes and in particular, mindsets' (Christopher and Towill, 2001). Planners rarely scrutinise agility or flexibility theoretically, but they can facilitate synchronisation (Sager, 1990; Wadhwa and Roe, 2003).

This paper addresses linkages between GVRN and economic, social and environmental aspects of DVMT, highlighting roles, rights and responsibilities, and focuses on TSCLM relationship with GVRN and DVMT in CTX with COVID-19. Research acknowledges that market economies function best through good legal foundations and well-defined property rights, vital to GVRN framework and quality promoting economic DVMT (ED) and well-being (Claessens and Yurtoglu, 2013). However, the literature has limited focus and sparse research on DCs, even though they are more vulnerable to risks from market forces. There are gaps whereby theory and practice can better highlight realities and results concerning linkages between different aspects of DVMT and well-being of individuals, firms, sectors and countries, beneficial to human and societal welfare, and economic growth, especially in DCs. As literature can focus more on relationship between GVRN and DVMT, these aspects also form the purpose of this paper, to fill these gaps. This paper additionally seeks to answer the call for more research on SC flexibility and integration (Fabbe-Costes and Jahre, 2009), given dynamic CTX, for in addition to focusing on ports, popular tourist destinations, and occupations or activities highly labour-intensive, 'more complex and contextualised policy efforts are needed in order to achieve SD while optimising for well-being' (De Neve and Sachs, 2020). There is limited research examining GVRN and DVMT relationships with TSCLM as mediator in DCs CTX to improve flexibility and integration. Although it is research necessary to advance

theory (Smith and Hitt, 2007), few researchers have explored TSCLM as enabler to DVMT and reduction in the hindrance of PVTY to SD in underexplored CTX. Moreover, attention is given to the COVID-19 pandemic impacts, for further research can be conducted to determine correlation between PVTY and COVID-19 transmissions, and if causal links in both directions, how great are implications for DVMT.

Relevant literature is reviewed, supporting identification of research gaps, conceptual model, discussion, implications, limitations and areas for further research. Literature reveals that good corporate GVRN framework and quality are important, to enhance DVMT and well-being. Moreover, GVRN can more closely consider the poor, especially in policy and implementation areas such as managing risks and transferring resources effectively. In considering the impact of policy reform on PVTY in DCs, Winters et al (2004), find that 'the poor may be less well placed in the short run to protect themselves against adverse effects and take advantage of favorable opportunities. This paper therefore finds it relevant to study issues and interactions in GVRN, DVMT, economy and PVTY, through the combined perspectives of Institutional Theory (INST) and Organisation Learning Theory (OLT), in CTX of global economy and COVID-19. For GVRN to well implement policy to accelerate DVMT, institutions need to be strong, or policies institutionally robust (Elsbach, 2002; Rodrik, 2009), especially for sustainability in DCs. This paper examines aspects of GVRN-TSCLM-DVMT relationships and interlinkages, CTX factors and COVID-19 pandemic, and impacts on individuals, firms and nations, highlighting PVTY reduction especially in DCs. Evaluating elements involve answering the main research question:

What is the effect of transport, supply-chain and logistics management on the relationship between governance and development and how does this impact poverty in context with COVID-19 crisis?

Sub-questions generated from the main research question include

- 1 What is the relationship between GVRN and DVMT?
- 2 How is GVRN facilitated by TSCLM?
- 3 How can TSCLM systems benefit DVMT?
- 4 What TSCLM, GVRN and CTX impacts, need better management to alleviate PVTY in DCs?

Types of GVRN are included in the analysis but the primary focus is on GVRN-TSCLM interlinkages for DVMT effectiveness and efficiencies. Emerging themes include firstly, that although there has been upheaval in consideration of good GVRN in contemporary times, especially with recurrence of corporate malfeasance, its magnitude and effective rectification, novel attention is needed to avoid adverse impacts. Secondly, where there exist significant deficiencies in GVRN, corrupt behavior has significant adverse consequences for efficient and equitable outcomes and DVMT. Thirdly, evidence exist that TSCLM phenomena can be modeled in line with GVRN and DVMT principles, and the level of responsiveness of stakeholders to checks and penalties is also subject to influencing factors such as relevant incentives and market forces. Policymakers can interlink, interchange or substitute alternate forms and techniques of TSCLM and GVRN while adapting to changes in dynamic CTX in short run or long run. Ultimately, their ability to do so can influence decision making concerning procedures and application in practice to facilitate SD and reduce PVTY and related problems. As PVTY is regarded from main dimensions of economic well-being, capability and social exclusion (Karim et al, 2013), this can assist the improvement in maturity levels in consideration of ways to eradicate it, empirical work to enhance its measurement, and contribution to academic literature encompassing these areas. Elements from this paper complements other work as it incorporates types of GVRN relevant to TSCLM linkages and inter-relationships beneficial to DVMT and identifies how policies and practices for PVTY reduction and eradication can be developed by enhancing understanding of influencing factors currently in CTX of DCs.

The structure of this paper is as follows. The Introduction incorporates definition of main terms GVRN, economy, DVMT, PVTY and DCs, highlighting the scope, objectives and motivation for this work focusing on how GVRN supports DVMT. This is followed in Section 2 with the Methodology and theoretical perspectives supporting the analysis. Next is presented Theoretical Framework and Discussion of Conceptual Model in Section 3 with Propositions supporting how individuals, firms, sectors and markets especially in DCs are impacted. Section 4 presents Conclusions with summary, implications, limitations, and directions for further research.

2 Methodology

COVID-19 pandemic has severely affected DCs (Ahmed et al., 2020, Sumner et al., 2020), impacting their systems of GVRN, TSCLM and DVMT, so they have not made significant PVTY reduction. Certain factors influence dimensions of GVRN effected through a country's institutions and firms' resources and affect PVTY in dynamic CTX with COVID-19 pandemic. This paper looks at these through GVRN-TSCLM-DVMT relationships or interlinkages, heeding moderating contextual factors and COVID-19 global pandemic, and highlighting effects on PVTY reduction especially in DCs. McNulty et al (2013), find it viable to develop research on corporate GVRN through qualitative methods. Qualitative approach is used to answer questions about experience, meaning and perspective, with analysis of texts, databases and documents (Hammarberg et al, 2016), such as journal articles, so issues can be revealed, variables linked and emerging themes from knowledge learned, to sustain analysis. Relevant literature is reviewed, following its successful use (Alfalla-Luque and Medina-Lopez 2009; Fabbe-Costes and Jahre, 2009; Fabbe-Costes et al, 2009), specially to focus on TSCLM in disaster response or humanitarian concerns. It supports identification of constructs and research gaps. From review, observation and analysis of content and themes also, a conceptual model with propositions is discussed with theoretical framework supporting implications, limitations and areas for further research. Peng (2002) supports utility of examining business strategy through an institutions-based perspective; and Oliver (1997), supports combining theoretical perspectives to better explain strategic management or GVRN phenomena. Such approaches allow analysis regarding who, what, how and when participants and stakeholders perform roles impacting GVRN-TSCLM-DVMT relationships, supporting agility and performance, improving associated frameworks or practice.

This paper focuses on impacts on individuals/investors, firms and countries, highlighting good GVRN with reduced risk of economic/financial crisis, and better interactions between suppliers, customers and other stakeholders, to improve relationships social, labour or environmental, and contribute to DVMT reducing PVTY and inequality. Although there are nascent GVRN and markets in DCs, in areas such as Barbados, the Caribbean and Latin America, further DVMT is needed to avoid a state of flux (Ramguttty-Wong 2000; Muttakin, et al. 2015; Khine et al. 2017). Such countries with CTX under-researched, need further exploration to improve responsiveness and reduce negative elements exacerbating PVTY. A country's institutional characteristics impact its level of market DVMT (Beck at al, 2000; Claessens and Laeven, 2003), elements vital to sustainability for DCs. To sustain significant interconnections, key issues are examined to answer research questions, contribute to theory and assist meeting requirements by individuals, academics, other professionals and practitioners. Governments and citizens in developed and DCs continue to be concerned with the scourge of PVTY and its spillover effects, and while there are huge variations in PVTY levels among them, qualitative research can make great contribution to understanding social science phenomena PVTY (Balarabe Kura, 2012). It assists formulation and evaluation of strategies and interventions to reduce PVTY (Jeanty and Hibel, 2011), helping to understand the problem of DVMT in different areas or cases (Patton, 1990; Yin, 2013). It permits utilisation of a small number of individuals/firms/cases to study responses, to avoid being

unwieldy (Boddy, 2016), facilitating revelations of how individuals or organisations select and engage activities and cooperative networks (Gao, 2005). The nature of phenomena in PVTY, and research guidelines (Creswell, 1998), make apt contribution through constructive and qualitative research (Lukka, 2003; Churchill and Iacobucci, 2005), methodology allowing review of literature and experiences examined to be reinforced with trialling.

The conceptual model is therefore derived through cognizant research gaps and theoretical perspectives. Heeding the call from Bjorkman (1990), to engage diverse perspectives, INST and OLT are combined to better focus on collaboration and LNG. While INST and OLT have some similarities, institutions can have stability-inducing roles conflicting with LNG that can be induced by circumstances changing and innovation capacity (Duit and Galaz, 2008). OL also incorporates tensions of exploration or risky innovation with exploitation or efficient refinement (March 1991), requiring balance. Relating INST and OLT, allows GVRN to be more critically examined, and presentation enriched through TSCLM with agility to more flexibly, innovatively and beneficially improve outcomes of DVMT incorporating reduced PVTY, so contributions can enhance theory and practice. This paper includes market and collaborative GVRN approaches similarities and contrasts, and entrepreneurship aspects (Spencer and Gomez, 2004; Rauch et al, 2009). These, dimensions and choices are discussed heeding CTX, flexibility and agility impact on GVRN and DVMT factors (Christopher and Towill, 2001; Yang, 2014). Use of academic journals allow the researcher to represent advances in practice and academic rigor (Hällgren 2012), while analysis of documents databases particular to firms purposefully selected (Babbie, 2010), and discussions with specialists, assist pertinent findings. Qualitative data analysis (Miles and Huberman 1994; Miles et al, 2014), supports processes to be valid and reliable, collaborations and interrelationships analysed maintaining validation of framework, findings or implications to sustain contributions. Impacting constraints include time, financial or other scarce resources, links or conditions. Future investigations can use approaches quantitative, qualitative or mixed methods (Balarabe Kura, 2012), to further explore behavior and outcomes concerning individuals or institutions involved with TSCLM, GVRN and DVMT in developed and DCs, and globally.

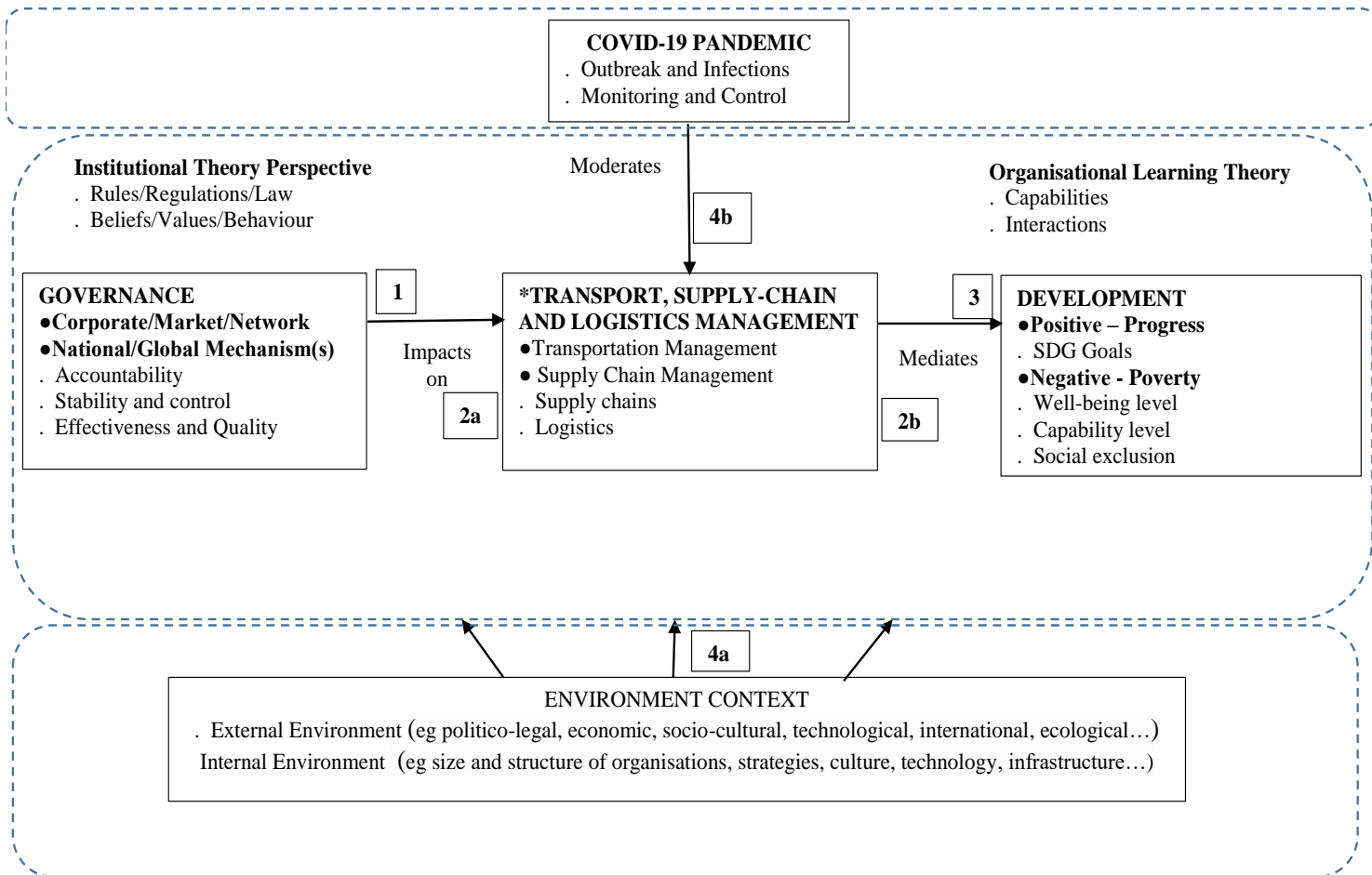
INST provides a viewpoint to strategies and practices for adoption in SCM (Kauppi, 2013), using management of quality, digitalisation and operations in CTXs with institutional and other pressures experienced by DCs. Institutions, formal or informal, constitute factors of regulations and values (Scott, 2008a; 2008b), enforced by guardians, such as governments or professional associations that can impose penalties, affecting legitimacy (Ruef and Scott, 1998; Scott, 2005), and GVRN. Where institutions constrain individuals and organisations that have to comply, the dominance impacts on firms that seek legitimacy can lead to 'isomorphic behavior' according to INST (DiMaggio and Powell 1983; Orrù et al, 1991; Dacin et al, 2002; Scott 2008a). The mimetic behavior supports adoption of top-management strategic decisions (Oliver, 1997), obligations or justifications determined socially, supported by economic motives, conformity to culture and tradition (Berger and Luckmann, 1997; Palmer and Biggart. 2002). Institutional mechanisms, vital, present opportunities or barriers to transforming capability into human well-being (Goldberg and Pavcnik, 2007), impacting LNG and PVTY.

OLT perspective is relevant (Hitt, 2011), for incorporating NWG and knowledge, it complements SCM research for CTXs such as DCs where dynamism currently strongly impacts. OLT (Argote and Miron-Spektor, 2011), promotes better understanding of interactions, supporting GVRN, TSCLM and DVMT, allowing better reflection and integration of elements or effects heeding risks and effectiveness. Regard can be made to factors such as collaboration, innovation, progress, culture and CTX (Jones and Coviello, 2005; Todeva and Knoke, 2005). It allows more focus on interdependencies, coordination or responsiveness to support interlinkages and agility, so stakeholders can benefit from internal or external knowledge and experience facilitating diverse configurations (Zuchella et al, 2007). Moreover, it can

enhance the appropriate elements combined for analysis and LNG, including resources, capabilities, networks, structures and management, to attain efficiency and performance (Kuivalainen et al, 2010; Tang and Liu, 2011). Improvements in capabilities including LNG, sharing and agility (Ghosh and Fedorowicz, 2008; Yang, 2014) can assist TSCLM and GVRN to help DVMT outcomes favourable to PVTY alleviation. Combining INST and OLT is to enhance understanding of their explanatory value for GVRN, TSCLM and DVMT, allowing underexplored research avenues and contributions to be better developed. Better linking OLT and INST with TSCLM can augment appreciation of complementarities and integration in GVRN-TSCLM-DVMT relationships. Identifying elements and dimensions, the framework was developed to facilitate analysis and implications. Figure 1 conceptual model presents GVRN-TSCLM-DVMT relationships, interactions, related propositions and associated PVTY effects, and the theoretical framework assists exposition and analysis of major gaps in the literature.

3 Theoretical Framework and Discussion of Conceptual Model

Figure 1 Conceptual Model, results from literature relating to GVRN, TSCLM, DVMT, COVID-19 and CTX inter-relatedness. It illustrates TSCLM as a mediator vital to facilitating GVRN-DVMT relationship, and related successes with PVTY eradication (Grindle, 2004). GVRN comprises means to DVMT, PVTY reduction (Smith, 2007), infusing order and maintaining opportunities for gain (Williamson, 1999), as individuals and institutions utilise resources and capabilities (Penrose, 1959), including LNG, to engage in beneficial cooperation. All aspects of sectors can be improved to secure good GVRN, but strategies need to be responsive to what needs to be done, when and how (Grindle, 2004). Propositions and discussions support how firms, sectors and markets in DCs are impacted by interactions of GVRN, TSCLM, DVMT, CTX and COVID-19 influences. Figure 1 Model, heeds elements of external and internal CTX, examining mediating and moderating impacts on GVRN-TSCLM-DVMT relationships, outcomes or consequences. Operationalisation of concepts is allowed, studying behavior of firms, individuals, or institutions involved in elements formal, informal, and network (Granovetter, 1985; Williamson, 1985; 1999; North, 1991; Verner and Alda, 2004; Goldberg and Pavcnik, 2007). Engaging risks, resources, collaboration or transformation; choices, offerings and performance can be enhanced for SD, from perspectives of INST and OLT (March 1991; Hitt, 2011; Argote and Miron-Spektor, 2011).



* **Transport, Supply-chain and Logistics Management (TSCLM)**

Figure 1: Conceptual Model of Governance-TSCLM-Poverty Interactions

Figure 1 helps understand the scope and current state of GVRN and DVMT relationships and impacting factors. It is to assist definition of measures and establishment of metrics to enable maintenance of standards and successes, while contributing to alleviating chronic PVTY especially in DCs. It facilitates review processes related to GVRN mechanisms incorporating planning, execution and evaluation, and better pursuit of requirements using resources to realise success.

3.1 Governance

3.1.1 Procedures, Practices and Facilitating Factors

GVRN involves ordered rule, collective action, progress, poverty reduction (Smith, 2007; Stoker, 2018), and all other processes of governing (Williamson, 1999; Rukanova et al, 2020; Bevir, 2012). There are institutions of GVRN, and GVRN structures include firms and markets which differ in their cost and competence globally (Williamson, 1985; 1998; 1999; Jones and Coviello, 2005; Duit and Galaz, 2008). Political and other processes can alter Corporate GVRN mechanisms, both economic and legal institutions (Shleifer and Vishny, 1997), and functions such as sharing, transferring and managing resources and risks (Claessens and Yurtoglu, 2013; Misangyi et al, 2014), are impacted by market complexity. In GVRN framework, nations, organisations and individuals face institutional constraints and dynamic CTX factors (Quatraro and Vivarelli, 2015). However, they still determine how and when best to reconfigure core or distinctive competencies (Penrose, 1959; Gao, 2005), and utilise resources and differential LNG within and between them to efficiently coordinate cooperative adaptation elements beneficial to markets and DVMT. Such collaborative GVRN supports inclusion and innovation, its orientation to DVMT of policy and programmes being flexible, creative and demand-driven, adhering to deliberation and transparency values, but its utility has associated risks and benefits (Gash, 2016). Nevertheless, it supports good GVRN involving policies for SD, and government that is democratic, decentralised, empowering and accountable (Smith, 2007). GVRN in DCs can enhance mechanisms incorporating policy, integrating synergistic innovations or incentives with strategy that promotes DVMT, viable and sustainable. COVID-19 immediate effect has been primarily in urban areas, but economic impact quickly spread to rural areas, with consequence of eventual contagion for most, the vulnerable poor and insecure suffering from the economic contraction (World Bank, 2020), as some DCs are unprepared to deal with crisis impacts. In CTX with COVID-19 crisis, rural poor will reduce dietary diversity as they experience reduced incomes, increasing prices, disproportionate burdens and reduced economic opportunities (FAO, 2020); so, to mitigate impacts worldwide, measures for planning, response or recovery are being addressed.

There can be significant deviations amid GVRN types, rules and compliance, so more 'institutionally robust' policies can be implemented, and weak institutions avoided (Barbier and Burgess, 2019), for bad GVRN is ranked as a DVMT pitfall (Moore, 2001; Collier, 2007). Albassam (2013), finds that economic crisis has affected all aspects of life, resulting in political instability, personal financial troubles, and a growing number of business bankruptcies. This highlights the interrelatedness of aspects of worldwide GVRN indicators (WGI), such as Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption (World Bank, 2020). Evaluating WGI from 1996 to 2002, Kaufmann and Kraay (2002) find strong positive correlation between per capita incomes and quality of GVRN across countries. GVRN and management impact productivity and performance (Van de Walle and Bouckaert, 2007), and corporate GVRN is important for DVMT of economies and well-being of sectors, firms and individuals (Claessens and Yurtoglu, 2013). With dynamics of changes in GVRN, greater attention can be paid to choice of GVRN types heeding increase or decrease in transactions complexity, codification abilities, and capabilities of supplier base (Williamson, 1979; 1998; Loader, 1997; Nagpal, 2004), highlighted in Table 1, comparison of Market and Collaborative Types of GVRN.

3.1.2 Models of GVRN, especially incorporating TSCLM

This research considers GVRN models incorporating institutional and of social relations or networks (Granovetter, 1985; Williamson, 1985; 1999; North, 1991; Verner and Alda, 2004; Nee, 2005; Goldberg and Pavcnik, 2007; Duit and Galaz, 2008). Sound GVRN is perceived as synonymous with NWG, especially for DCs with weak local government capacity who can benefit from partnership-based administration given impacts such as IT growth, GLBN and growth of informal economy or third sector (Asaduzzaman et al, 2016). Such new paradigm, public-private partnerships, are approaches to network and reduce GVRN challenges (Bingham et al, 2005; Asaduzzaman and Virtanen, 2018). As this paper considers mediating effect of TSCLM, it focuses on highly relevant GVRN types (Humphrey and Schmidt, 2002; Ponte, 2008), incorporating cooperation and strong supply-base capabilities, highlighting NWG, complexity, capabilities, novel demands and accomplishments. Table 1 assists comparison of key elements, evaluating GVRN types best suited to particular situations. GVRN measures can also focus on greatest vulnerabilities, including marginalised residents, elderly, children, caregivers, chronic poor, long-term unemployed, and social protection including resilient, secure food systems (FAO, 2020), impacting effectiveness and DVMT. GVRN models with NWG incorporate capabilities for high level of diversity, flexibility, capacity for LNG, adapting, cooperating and interaction opportunities in changing, uncertain CTXs (Duit and Galaz, 2008). Stakeholders can choose to collaborate, involving government, private and civil society, to improve GVRN capacity to better attain sustainability, mitigating problems of 'social exclusion and fragmentation in delivery of services and products' (Asaduzzaman et al, 2016). Information resulting from mature institution structures and markets in developed countries such as Australia, New Zealand, UK and USA (Purushothaman et al. 2000; Post et al. 2011), or other CTX, reveal a relationship between good GVRN and ED. GVRN processes can encourage or limit growth, so they can be redesigned, involving new LNG capabilities, networks, and new business practices and results, to better balance facilitating and resisting forces (Richey et al, 2010).

3.2 Transportation, Supply Chain and Logistics Management

3.2.1 People, Practices and Performance Factors

SCM is 'an integrated process wherein a number of various business entities work together in an effort to acquire raw materials, convert these raw materials into specified final products, and deliver these final products to retailers' (Beamon, 1998). By engaging in closely integrated collaboration to achieve significant effects (Skjoett-Larsen et al, 2003), including value chains and other operational efficiencies, there can be better support of effective strategic initiatives and SCM (Ballou et al, 2000; Porter, 2001; Cao and Zhang, 2011). Despite risks in CTX with uncertainties and disruptions impacting performance of SCs globally, recovery can occur with improved policies and actions mitigating impacts from environment and COVID-19 pandemic (Ivanov, 2020; Loske, 2020). Stakeholders competing in dynamic global CTX, can therefore employ a viable strategy, forging collaborations externally to increase capability-based efficiency (Richey et al, 2010), while sharing resources, relations, and proactive approaches (Jagdev and Thoben, 2001)

Characteristics	Governance Types		
	Market	Collaborative	
		Modular	Relational
Focus	<ul style="list-style-type: none"> ● Relationships and Reputation Distant or 'hands-off' 	<ul style="list-style-type: none"> ● Networking 	<ul style="list-style-type: none"> ● Mutual Relations. Reputation. ● Regulated through proximity/ties ● Networking
Assumptions	<ul style="list-style-type: none"> ● Bounded Rationality. ● Buyer has little power ● Alternate arrangements for purchase/supply easy 	<ul style="list-style-type: none"> ● Power through coordination ● Some very complex buyer-supplier interactions 	<ul style="list-style-type: none"> ● Power through coordination. Trust ● Pattern of future relations ● Lead firm controls supplier
Orientation	<ul style="list-style-type: none"> ● Dynamic Governance: Price 	<ul style="list-style-type: none"> ● Dynamic 	<ul style="list-style-type: none"> ● Relational Governance
Key Drivers impacting Product Technology Regulatory	<ul style="list-style-type: none"> ● Buyer provides little information ● Little cooperation or switching costs 	<ul style="list-style-type: none"> ● Provide product or service to customer specifications. ● Supplier - process technology; generic machinery 	<ul style="list-style-type: none"> ● Customer specifies product. ● Differentiated by complexity, quality, origin... ● High switching costs
Asset Specificity	<ul style="list-style-type: none"> ● Non-specific purchases ● Outsource with classical Contract 	<ul style="list-style-type: none"> ● Mixed and highly specific purchases ● Outsource with neo-classical contract 	<ul style="list-style-type: none"> ● Mixed and highly specific purchases ● Relational contract Bilateral; Unified ● Procure outside if scale economies exist
Capabilities ◇ Information complexity ◇ Transactions complexity ◇ Codification Abilities ◇ Supply-base competencies	<ul style="list-style-type: none"> ● Easily transmitted ● Low as Standardized ● Occasional eg equipment ● Recurrent eg material ● High ● High 	<ul style="list-style-type: none"> ● High volume flows inter-firm ● High as Non-standardized ● Occasional specific equipment ● Low but interactions manageable ● High 	<ul style="list-style-type: none"> ● Knowledge sharing. Dense. ● Difficult to codify, transmit, learn ● High as Non-standardized (customized) ● Recurrent eg specific mat/equip. ● High ● High
Options for Improvement	<ul style="list-style-type: none"> ● Enhance stakeholder input 	<ul style="list-style-type: none"> ● Reduce complexity in interactions ● More evenly spread risks 	<ul style="list-style-type: none"> ● Enhance relational linkages and reduce costs

Sources: Adapted from Williamson (1979; 1996); Loader (1997); Nagpal (2004)
Table 1: Market and Collaborative Governance relevant to GVRN-TSCLM-DVMT relationships

By strengthening elements while outsourcing non-core activities to those with superior capabilities (Harps and Hansen, 2000; Kilpatrick and Factor, 2000; Fawcett and Magnan, 2002), they can deliver superior value across frontiers.

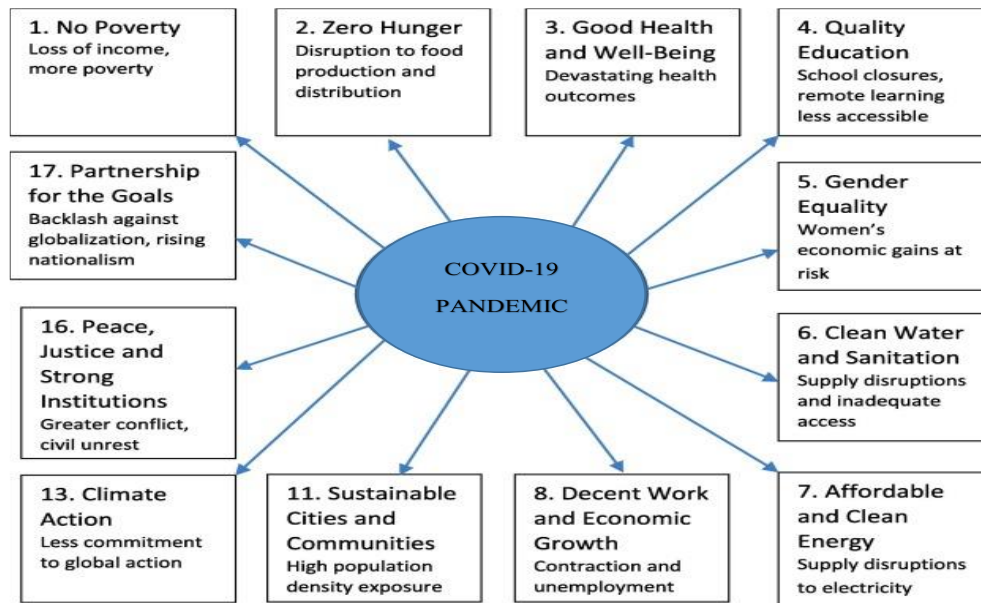
3.2.2 Models of TSCLM, especially incorporating agility

Beamon (1998) finds four categories of multi-stage design and analysis SC models including deterministic, stochastic, economic and simulation, and provides a basic framework of SCM integrated processes with, at highest level, production planning and inventory control, as well as distribution and LGS. This framework informs this research incorporating agile TSCLM facilitating GVRN-DVMT relationships and outcomes. Capabilities incorporate agility that can advance LNG, sharing, timeliness and performance embracing changing mindsets, organisational structures, information systems and LGS processes (Christopher and Towill, 2001; Ghosh and Fedorowicz, 2008; Yang, 2014). Agility relates to willingness and speed to adapt to changes, so to facilitate TSCLM to enable better GVRN to assist DVMT for more favourable outcomes alleviating or eradicating PVTY. It is crucial to support TSCLM, and Christopher and Towill (2001), provide a model for enabling agile SC, incorporating supporting elements of transport and LGS. Sustainable advantages can be attained with SCM when greater focus is given to minimising cost and fulfilling stakeholders' requirements, through synchronisation enabling efficient integration (Martin, 2011; Li, 2014; Anca, 2019). With LGS capabilities supporting upstream and downstream relationships, infrastructure, strategic management, marketing channels, techniques and technologies, there can be improvements in flexibility, quality, reliability, innovation and availability (Cantwell, 2009; Mann, 2012; Novillo et al, 2017). Stakeholders in DCs can utilise flexibility (Sager, 1990; Sanchez, 1995), as a tactic to assist organising and responding when uncertain elements impact planning and DVMT, and agility (Christopher and Towill, 2001; Wadhwa and Roe, 2003), as complementary capability facilitating synchronisation. These elements allow exposure to risks and disruptions to be minimised, and GVRN with TSCLM collaboration and resources alignment including managerial and IT (Skipper and Hanna, 2009), supports the attaining of competitive advantage and DVMT.

3.3 Development

3.3.1 Purposes, Processes, Drivers and Mediating Factors

The DVMT and advancement of society are from foundations of capacity of the GVRN system to act and integrity of its actions, as influences from GLBN create novel requirements (Jreisat, 2004). How individuals, organisations and nations are endowed in terms of infrastructure as well as conditions such as market, economic, legal, political, technological, cultural or social (Quatraro and Vivarelli, 2015), determines impacts enabling or hindering performance and SD. There is evidence that as a country becomes more well-endowed, without sustainability of its economic growth, its citizens' well-being stagnates (DeNeve and Sachs, 2020), so there can be greater agility in addressing inequality in SDGs. According to Barbier and Burgess (2019), COVID-19 pandemic is likely to have adverse impact on 12 of the 17 SDGs as shown in Figure 2, for extreme PVTY is still experienced by approximately 736 million persons. Moreover, by the time period 2030, SDGs 1-4, 6 and 7 can still not be attained by 28 poor countries (Moyer and Hedden, 2020). PVTY is currently a primary SDG (Winters et al, 2004; UN, 2020). Some individuals can experience life with income PVTY and multidimensional resources deprivation persistent over three years (Muffels and Fouarge, 2001).



Sources: Barbier and Burgess (2019); UN (2020)

Figure 2: The Impact of COVID-19 on the SDGs.

Where exogenous support from government, partners or non-governmental organisations is absent, individuals or groups can be maintained in the 'poverty trap' unable to meet basic needs and even with voice of freedom non-existent (DFID, 2007; Karim et al, 2013). Persons poor for over five years are 'very unlikely to escape PVTY' (Green and Hulme, 2005), the chronic poor tending to remain so most of their lifespan, have PVTY designated to their offspring, and more easily die of easily preventable demises (Hulme and Shepard, 2003). The absolute PVTY line involves minimum requirement for food, shelter, clothing, or other essential services such as TSPN, sanitation, health and education (ILO, 1976; UNDP, 2000; DFID, 2007), but can change according to change in relative and subjective economic and societal standards (Fuchs, 1965). Each human being should have capacity to make informed decisions and live a life that is long and healthy (Sen, 1992). Such capability is perceived as the cornerstone of innovation and economic progress (Florida et al, 2015), impacting levels of income and wealth, as various alternatives are better perceived.

Social exclusion dimensions involve aspects individual and institutional, impacting PVTY economically, politically and culturally (Goldberg and Pavcnik, 2007). Social institutions and orders/policies impose barriers on individuals and can restrict or deny participation in economic activities such as labour or entrepreneurship (Gallie and Paugam, 2000; Verner and Alda, 2004). They can exclude persons from citizenship rights and political equalities (IILS, 1996), and deny access to civic or cultural activities (White, 1997). Such traditions and guidelines can therefore have outcomes of barring NWG, the reflection of needs and interests, and synergistic effects (Putnam, 1993; UNDP, 2000; Wagle, 2000). Positive DVMT across the human lifespan is a focus in contemporary theories, models or relational approaches of DVMT (Lerner, 2007). Heeding the need to enhance DVMT, individuals, organisations, sectors and nations can collaborate more, aligning strategies and incentives to increase opportunities and alleviate PVTY (Winters et al, 2004; Brugmann and Prahalad, 2007; Best, 2013), and the stakeholders

involved in poverty-alleviating initiatives can adopt tools and techniques to enhance efficacy and sustainability. Poverty-alleviation approaches can include base-of-the pyramid, micro-finance, DVMT assistance for SMEs, programs for enabling environment, and value chain (Prahalad and Hammond, 2002). Policies can concentrate more on building capabilities, and ensuring that individuals, groups and societies have the freedom to convert economic wealth into outcomes they desire, so as to avoid risks that abrupt changes in elements increase vulnerability to external shocks or irreversibly reduce resilience (Ballet et al, 2003; Olate, 2003; Lehtonen, 2004). Low-wage occupations are especially vulnerable to adverse supply and demand-side economic shocks (del Rio-Chanona et al, 2020), as experienced with COVID-19 pandemic, and the poor subsisting on such wages can find it unsustainable. The poor need to actively contribute to making markets work for them (World Bank, 2001), and given the multidimensional nature of PVTY be involved in its alleviation (Sen, 1999). The poor in some DCs can find products less affordable than the rich in some developed countries by over ten times more (Prahalad and Hammond, 2002; Fellowes, 2006), especially in the current business CTX and impacted by COVID-19 constraints. However, this can be a source of business opportunity for entrepreneurs, as they broaden the search for new markets and new sources of supply with a view to increasing income, reducing costs, and contributing positively to DVMT.

3.3.2 Governance Influencing Development

GVRN, institutions and social capital play a role in the DVMT process (Lehtonen, 2004; Early and Scott, 2010; Aguilera and Jackson, 2010). Social welfare concerns such as PVTY and inequality are crucial considerations if economic opportunities are to be improved, social unrest avoided, and factors of production effectively balanced facilitating productive capacity to efficiently attain growth (Deaton, 1997; 2003; Goldberg and Pavcnik, 2007; Jaumotte et al, 2013; Karim et al, 2013). GVRN can better heed social capital, 'the norms and networks that facilitate collective action', and the nature of its well-being (Woolcock, 2001; Stone and Hughes, 2002), as SDGs are being pursued. Additionally, more complex and contextualised policy efforts are needed to achieve SD while optimising for well-being (De Neve and Sachs, 2020). Good GVRN is positively related to DVMT (Smith, 2007), favourable performance signified by progress, while unfavourable features of GVRN can hinder, encompassing negative aspects such as PVTY. When an individual lacks a given amount of wealth or material possessions, food, water, shelter, adequate income, is without medical care or access to education, and where there is collective destitute or dissatisfaction with basic essential needs, such situation of PVTY (Green and Hulme, 2005; DFID, 2007; Karim et al, 2013), jeopardises SD.

Empirical linkages exist between SDGs and human well-being (DeNeve and Sachs, 2020). Such linkages support that GVRN can concentrate more on improving DVMT and do more to assure that the poor are not left behind (Ravillion, 2018), especially in DCs, and stakeholders can do more to strengthen political will. Significant support for GVRN interventions is provided by resources such as IDAs, which international law identify 'bad GVRN' as a major impediment to economic growth and improved well-being in poor countries (Moore, 2001). It is difficult to win the fight against PVTY without 'good' GVRN or at least 'good enough' GVRN (DFID, 2007), for significant DVMT can exist where there is 'no poverty' but rather economic well-being, capability and social inclusion. Strategies - economic, education, FDI and financial development - help eradicate PVTY (Varshney, 1993; El Ghak et al, 2018; Barbier and Burgess, 2019). To improve GVRN interest and commitment, measures can be taken to enhance interactions of institutions interested in a policy area, and to bring about change in behavior of individuals to motivate them to achieve a higher socio-economic status (Nagpal and Rose, 2014), reduce PVTY and enhance DVMT. PVTY reduction also results from public administrative reform, public financial management and reduced corruption (DFID, 2007).

GVRN measures to enhance DVMT can better encourage entrepreneurship, a driving force of innovation, and engine for ED (Audretsch et al, 2006; Van Praag and Versloot, 2007; Koellinger and Thurik, 2012). It plays a crucial role in fostering competition and emergence of new sectors, new firms ultimately contributing to overall market growth and job creation (Spencer and Gomez, 2004; Dejardin, 2011; Malchow-Møller et al, 2011). However, rate of new firm creation and ED differs between advanced and DCs (Wennekers et al, 2005; Ligthelm, 2011). Amoròs and Cristi (2008) interpretative framework analysing Latin America evidence, based on Porter's (1990) factor-driven, efficiency-driven and innovative-driven stages of country ED, find a U-shaped relationship between level of DVMT and rate of entrepreneurship. Entrepreneurs of types innovative, defensive and necessity (Baumol, 1990; Desai, 2009; Naudé, 2010), can sustain activities of street vending, production and services (Ihrig and Moe, 2004; Maloney, 2004; Sonobe et al, 2011), building enterprises (Klapper et al, 2010) in all sectors in DCs. Small and medium-sized enterprises (SMEs) can little increase economic performance but reduce inequalities as they impact wealth distribution (Amoròs and Cristi, 2011), improving individual and societal DVMT (Naudé et al, 2011).

3.3.3 Governance and Development in context of DCs and COVID-19 pandemic

Some DCs (Ibrahim and Damasceno, 2012), such as in Barbados, the Caribbean and Latin America, can have GVRN and markets that need further DVMT to avoid a state of flux, although some are nascent (Ramguttty-Wong 2000; Muttakin, et al. 2015; Khine et al. 2017). It is these countries with under-researched CTX that need better and further exploration to enhance awareness and growth. Good GVRN agenda can impact DCs constitutionally, politically, administratively and strategically (Smith, 2007). While acknowledging levels of firms, sectors and countries, Claessens and Yurtoglu (2013), reveal the necessity for strong GVRN, finding that 'better corporate GVRN benefit firms through greater access to financing, lower cost of capital, better performance, and more favorable treatment of all stakeholders. Sound economic policies are essentially complemented by good GVRN, which is fundamental to building and sustaining an environment that fosters DVMT that is robust and equitable (McKensie, 2005; World Bank, 2013; Artuc et al, 2020), the implementation capacity an enabling framework for growth of markets and economies. Naude (2004) finds that factors such as policy, institutions and geography can impact economic growth, while Luo and Tung (2007) show that enterprises in DCs can benefit from such factors in international expansion.

'GVRN is one of the critical factors explaining divergence in performance across DCs' (Khan, 2007). GVRN supporting good policy and strategy, can allow excellent management of change (Jarocki, 2014), and conformity to standards and policies. Conversely, GVRN of poor quality, including 'weak governmental structures, administrative incompetence, corruption, lack of accountability and openness, and an absence of the rule of law, can cause policies of structural adjustment and economic liberalisation to fail (Smith, 2007), detrimental to PVTY alleviation. The informal economy in most DCs accounts for a significant portion of economic activity (Schneider and Enste, 2000), contributing to DVMT. However, efforts for reform can heed that significant DVMT requires capacity to achieve and sustain high investment rates and policy implementation, meaningfully supporting rapid acquisition and LNG of new technologies (Khan, 2007). The GVRN in DCs can empower more the beneficiaries of DVMT programmes and improve effectiveness of projects (Smith, 2007), examining conditions and constraints impacting institutions and strategies. Heeding a viable GVRN structure (Ahrens and Rudolph, 2006), factors influencing DVMT outcomes for DCs are to be considered carefully, GVRN to assure feasibility, committing significantly to implementing and enforcing DVMT processes, policies and practices. The quality of GVRN and DVMT can be enhanced by building viable institutions supportive of sustainable

livelihoods (Ahrens, 2002), or else risk of disaster such as COVID-19 intensifies, requiring timely relief operations for the susceptible.

The exposure of DCs to GBLN can include engagement in international markets, involving imports or exports, and related impacts on GDP, FDI, capital flows, exchange rate volatility, and inequality increases (Goldberg and Pavcnik, 2007). DCs are some of the most vulnerable in times of crisis, and as the current COVID-19 pandemic impacting globally exposes the entire international community, it is difficult for leading economies to mobilise support financially and technically for all vulnerable and chronic poor (UN, 2020). However, individuals and organisations involved in diverse social networks or associations have strong positioning when in confrontation with PVTY or vulnerability (Woolcock and Nayaran, 2000; Hulme and Shepard, 2003). The networks and institutions to assist with ED and reduction of PVTY, can allow individuals to 'get by' and 'get ahead' (Kozel and Parker, 2000). DCs cost-effective, revenue-generating strategies to enhance DVMT given COVID-19 crisis, can include measures to improve economic aspects including business activities, creating jobs, improving effects on health and the environment (Barbier and Burgess, 2019). If implementation of these strategies is timely and effective, savings and gains can positively impact efforts to eradicate PVTY and make significant progress towards SDGs. Needs and earnings levels of the poor can be disproportionate, so interventions can also consider affordability and easy payment options.

There are arguments concerning the relationships between GVRN and DVMT (Kaufmann and Kraay, 2002; Albassam, 2013). However, Van de Walle and Bouckaert (2007), propose that relationships taken for granted may not be straightforward, or unidirectional, for contradictory processes and subjective indicators can impact. Linkages between GVRN and economy have been contested in extant literature. Albassam (2013), finds that this relationship is strong both in economic crisis and non-crisis times. For example, corporate GVRN deficiencies endanger financial stability globally (Claessens and Yurtoglu 2013), significantly impacting economies, with corporate malfeasances or scandals generating insolvencies. Social behavior of firms is therefore affected by the system of GVRN and degree of DVMT of markets (Karim et al, 2013; Jia and Zhang, 2014; Gao and Hafsi, 2015; Labelle et al, 2015). Firms have such behavior embedded in CTX institutional, this being especially so for those located in advanced regional institutions and more dynamic industries (Pan et al, 2018).

Proposition 1: Governance is positively related to development outcomes.

unfavourable aspects of governance hindering development, increase poverty

3.4 Mediating Role of TSCLM in the Relationship of Governance with Development

3.4.1 Linking Governance and TSCLM

In TSCLM, GVRN assists with the management of cooperation, through coordinating resources and activities and mitigating risks, so operational GVRN of formal or relational types are employed, and contractual GVRN with agreements on safeguards including penalties (Raue and Wieland, 2015). Richey et al (2010), call for an extension of GVRN research into LGS and SCM, acknowledging that GVRN can both facilitate, and hinder integration afforded through SCM. Where SC network of relationships are formed to ensure that value is received by the end customer, the integration needs to be governed (Fawcett and Magnan, 2004; Tate et al, 2010), for SCM is impacted by GBLN and CTX. GBLN (Goldberg and Pavcnik, 2007), increasing interdependence, impacts economy and society of DCs such as Barbados, and adverse factors can impact the disadvantaged more. Good GVRN is crucial, incorporating attributes of constitutional, political, administrative and public policy content (Smith, 2007). In 2020, AM Best international credit rating agency, placed Barbados at Risk Tier 4, signifying high level of country risk, by moderate political risk and high economic and financial system risk, with economic contraction since 2017 and fiscal policy tightened to lower debt levels (Cumberbatch, 2020), situation expected to exacerbate

given COVID-19 pandemic. Business activities as part of strategies to enhance DVMT include measures for entrepreneurship, which plays a crucial role in fostering competition and emergence of new sectors (Dejardin, 2011; Tracey and Phillips, 2011), new firms ultimately contributing to overall market growth and job creation (Malchow-Møller et al, 2011). However, the rate of new firm creation and ED differs between advanced nations and DCs (Wennekers et al, 2005; Ligthelm, 2011). With Porter (1990) three stages in a scheme of country ED, and Amoròs and Cristi (2008) interpretative framework, supporting analysis of level of DVMT and rate of entrepreneurship relationship, findings from Latin America evidence and micro perspective, are that entrepreneurs of types 'innovative', 'defensive' and 'necessity', coexist (Baumol, 1990). Activities of necessity entrepreneurs diffused in DCs (Naudé, 2010; Desai, 2009), can range from street vending to traditional and personal services in the informal economic sector (Ihrig and Moe, 2004; Maloney, 2004; Sonobe et al, 2011), particularly SMEs (Klapper et al, 2010; Desai, 2009).

There can be decline in GNP per capita levels and competitiveness (Delgado et al, 2012), if impacted negatively by human capital productivity, life expectancy especially in vulnerable age groups, geographical location including LGS connections, and human movement across borders. With collaboration focusing on interdependencies (Todeva and Knoke, 2005; Drori et al, 2006), responsiveness and linkages can be improved, especially where pro-poor policies are planned or implemented to benefit tourism, agriculture or other industries crucial to DCs DVMT. Where there exist production problems, with shortage of capital, credit, investment in particular sectors, and effective technical assistance, as well as inappropriate technology and market entry difficulties, supplies can be inconsistent or of poor quality (Torres and Momsen, 2004). To reduce hardships amid the most vulnerable, implementation barriers such as information gaps or political or economic realities, can be identified or overcome using effective communication or advocacy, to change policymaking, programming and budgetary allocations in DCs (Nagpal and Rose, 2014). 'Pro-poor' tourism DVMT strategies can target increase in benefits and reduction in negative impacts, and incorporate private-sector initiatives, community endeavours, private-public joint ventures, public-sector infrastructure enhancement, forward and backward linkages, and top-down or bottom-up approaches (Torres and Momsen, 2004). Firms that can overcome restrictions and disruptions, using supporting elements of TSCLM, are more likely to sustain profitable outcomes. Stakeholders in DCs can utilise capabilities of flexibility (Sager, 1990; Sanchez, 1995), and agility (Wadhwa and Roe, 2003; Christopher and Towill, 2001), to manage, respond and synchronise for DVMT. Based on resources and capabilities, internal flexibility can support exposition of external flexibility focusing on strategic goal attainment (Eisenhardt and Martin, 2000; Reichhart and Holweg, 2007). GVRN is positively related to its degree of flexibility afforded through levels of TSCLM agility supporting strategies impacting DVMT and PVTY.

3.4.2 Linking TSCLM and Development

The COVID-19 pandemic has worldwide imposed vulnerabilities on millions in terms of human sustenance, changing lifestyles, extensive loss of jobs and business closures, plummeting stock markets, and slowdown in economic activities impacting crucial sectors, with flight cancellations and closed TSPN systems (He et al, 2020; Loske, 2020; Saadat et al, 2020). Expenditures on measures undertaken to prevent, reduce, stop or eradicate COVID-19 are significant. Containment measures including stay at home orders, physical distancing, closing of schools, prohibition of gatherings, closure of nonessential businesses and activities, and travel and transport restrictions, have significantly impacted economic and social activities (FAO, 2020). The design, development, testing, manufacture, implementation and large-scale distribution of boosters and vaccines (European Centre for Disease Prevention and Control (ECDC), 2020; WHO, 2020a), are measures still in early stages to further reduce transmissions and spur eradication. However, some countries utilising these measures have experienced second- and third wave of COVID-19, new

infections occurring after a decline, highlighting necessity for further collaboration for proactive actions to avoid jeopardising future DVMT. Significant cooperation and integration can be achieved by TSCLM stakeholders collaborating (Skjoett-Larsen et al, 2003), improving planning, communication, relations and synchronisation (Jagdev and Thoben, 2001; Todeva and Knoke, 2005), strengthening LNG, forecasting and renewal. By uniting in objectives, resources, contracts and subcontracting to enhance benefits from activities and superior capabilities (Harps and Hansen, 2000; Kilpatrick and Factor, 2000; Fawcett and Magnan, 2002), through SCM initiatives (Ballou et al, 2000), the partners facilitate enhanced value across boundaries considering stakeholders. Customers' interests in external flexibility can surround product, mix, volume or delivery, being perceptive to introduction and change of offerings, and alterations (Reichhart and Holweg, 2007), effecting responsiveness. However, with COVID-19 epidemic outbreak long-term disruption and high uncertainty, that impacts SC performance globally, SC risks being experienced by individuals, firms and nations, now require more mitigation and policies to recover in CTX forbearing pandemic (Ivanov, 2020).

There is severe negative impact of COVID-19 pandemic on SCs, especially where lockdowns lead to irrational behavior including buyer stockpiling, dumping of perishables by suppliers where broken SC occurs (Sharma et al, 2020), and restriction on movement of stakeholders. With these constraints, there are likely demand shocks constraining output for sectors of transport, and supply shocks for manufacturing, mining and services, while both demand and supply shocks constrain industries with entertainment, restaurants and tourism (del Rio-Chanona et al, 2020). Competitive advantage is usually attained by more efficient performance of strategically relevant or value-chain activities, related interactions or output, basis for differentiation such as high-quality procurement (Porter, 1990). Policymakers and regulatory bodies need to design and develop more efficient systems to facilitate DVMT including measures to reduce restrictions on traffic and hindrances to TSPN or LGS, supporting more resilient SCs (Ivanov et al, 2014; Pettit et al, 2019). In uncertain CTXs, SCM enables achievement of greater collaboration, so resources and knowledge of suppliers and customers can be leveraged to attain or sustain advantages (Cao and Zhang, 2011) while organisation and physical networks can be better developed in terms of location, accessibility and affordability.

Manufacturing and LGS activities can be effectively represented by production-distribution, related with transport systems, but more advantageous influences on DVMT, especially for DCs, can be pursued through a coordination network, vital for action and closer interactions among stakeholders (Hansen, 2013). Intensive anti-COVID-19 interventions (European Medicines Agency (EMA), 2020), are also assisted by socioeconomic DVMT locally, regionally and internationally. In addition to measures to limit contact, waste, risk and environmental management deal with challenges and opportunities direct and indirect (Gasmi et al, 2020; Sharma et al, 2020; Zambrano-Monserrate et al, 2020), and the need for innovation still in these crisis times. There are restrictions on travel and transport (He et al, 2020; Loske, 2020; Saadat et al, 2020), contraction in some productive sectors, negative effects on SCs, and global recession resulting from sudden decline in both demand and supply from developed countries most impacted by COVID-19 contagion (FAO, 2020). Min et al (2005) find collaboration to be a capability strongly supporting effective SCM and best practices, but rewards may not be evenly distributed. This is supported by Fawcett et al (2011), finding that SC collaborative capability as enhanced by IT can improve performance and competitive advantage. GVRN and SC collaboration can improve advantages influencing performance, so greater synergies, results and sustainability can be attained (Todeva and Knoke, 2005; Cao and Zhang, 2011). DVMT choices can be positively influenced through TSCLM enhancing flexibility, impacting strategies and activities to reduce PVTY and enhance wellbeing. This is supported by the below propositions.

Proposition 2a: Governance impacts TSCLM, the impact moderated by COVID-19 pandemic elements

Proposition 2b: TSCLM impacts development levels, the effect moderated by COVID-19 pandemic elements

3.4.3 Governance, TSCLM and Development

GVRN involves encouraging rights, order and wider participation in design and delivery of goods and services through partnerships among governments, business and civic organizations (Smith, 2007; Bevir, 2012; Stoker, 2018; Misangyi et al, 2014). With regard to GVRN and TSCLM, nations, firms and individuals can appropriately combine and sequence capabilities including LNG, to achieve effective implementation in dynamic CTX (Eisenhardt and Martin, 2000). For stakeholders in a global CTX to prosper economically and socially, SCs need to function, successfully enabled by TSPN means and networks (Hansen, 2013). However, COVID-19 global pandemic (Cucinotta and Vanelli, 2020), is a disruptive factor presenting risks and significant impacts, with restrictions affecting how goods, individuals and information are conveyed (Ivanov, 2020). Skipper and Hanna (2009) find that to minimise risk exposure where SC disruptions occur, appropriate strategies can be developed by managers and planners, that incorporate flexibility utilising external collaborators, IT, alignment of resources and top management support. Infrastructure and operations of businesses experience significant reduction in transport volume and traffic in CTX of COVID-19 pandemic. The economic operation of maritime, rail, air, and road TSPN networks is impaired by responses to COVID-19 outbreak, including government policy and restrictions to reduce spread of the virus (Loske, 2020). This is exacerbated by restrictions on trade, demand, labour and mobility, and by labour scarcity (Aloi et al, 2020; Ivanov, 2020; Luke and Rodrigue, 2008). Disaster recovery that is sustainable is necessary to support restoration measures (Nakagawa and Shaw, 2004). By so doing, both actuality and opportunities for recovery can occur, allowing all a chance to improve well-being, while unsettled networks (Smith and Wenger, 2007) can be reconnected and improved.

SC integration incorporating internal, inter-organisational and external elements, requires DVMT of both novel capabilities and new social norms, and improvement in management and performance to sustain long-lasting change (Wong et al, 2011; Alfalla-Luque et al, 2013). Table 1, Comparison of Market and Collaborative Types of Governance relevant to GVRN-TSCLM-DVMT relationships; complements Figure 1, supporting the examination of mediating effects of TSCLM on GVRN-DVMT relationships. It focuses on SC governance types of market, modular and relational (Humphrey and Schmidt, 2002; Ponte, 2008) found to have strong capabilities in supply base, heeding that increasing complexity of transactions and need for codification, can decrease capabilities of suppliers to meet demands that are novel. With focus on key elements characterising each GVRN type, comparing across elements, the evaluation helps clarify which type is best suited to particular situations being experienced by stakeholders in DCs. Where information is better communicated and disseminated, activities correctly specified through avenues of TSCLM, stakeholders can be more informed and encouraged to actively and positively learn, participate and cooperate to make and adjust demand and supply to help cope in crisis and assist eradication of COVID-19 negative impacts. With better specification and implementation of such measures, enhancing LNG, encouraging positive response to safely interact, handle, disinfect and transport products or dispose of waste appropriately, actions can be more effective, boosting flexibility to positively affect rather than hinder progress elements.

Sustainable advantages can be accessed through TSCLM, where systems provide for efficient integration of stakeholders, synchronisation of decisions and activities, minimization of cost, and fulfilling of stakeholder requirements (Martin, 2011; Li, 2014; Anca, 2019). Where individuals, firms and nations garner SC flexibility, with resources, IT, alliances, and LGS capabilities (Novillo et al, 2017), enhancing

reliability, quality or competitive advantage (Martin, 2011), this can improve elements of innovation, infrastructure and raw materials availability (Cantwell, 2009; Mann, 2012). Such elements can further enable GVRN to minimise risk exposure and positively impact DVMT (Todeva and Knoke, 2005; Skipper and Hanna, 2009). As CTX is more uncertain with COVID-19 pandemic, disruptions constrain systems transporting people/labour and merchandise (FAO, 2020). TSPN infrastructure can be more closely aligned and improved to enable and increase trade, relationships and SC transformation globally (Estache and Garsous, 2012). With GLBN, industries such as Tourism have rapidly spread, attracting challenges to enhance positive impacts while reducing costs to poor individuals and nations (Torres and Momsen, 2004). To overcome disruptions and restrictions, GVRN, IDAs and other stakeholders can better engage agility and cooperate more in utilising advanced technologies to improve transparency, traceability (Wadhwa and Roe, 2003; Williams et al, 2013; Koh et al, 2020), and PVTY. Improvements in GVRN that enhance flexibility and agility in TSCLM systems, develop mobility, and reduce restraints on business/trade, demand and labour (Prater et al, 2001; Richey et al, 2009), can therefore result in benefits translated to enhance DVMT and reduce or prevent PVTY, heeding CTX. Hence the below proposition.

Proposition 3: TSCLM mediates the relationship between Governance and Development, both economic and social, and therefore impacts poverty levels.

3.5 Environment CTX with COVID-19 Impacts GVRN-TSCLM-DVMT Relationships

3.5.1 Environment CTX and GVRN-TSCLM-DVMT relationships: National; International

Context and institutional factors (Geroski and Schwalbach, 1991; Audretsch, 1995; Roland, 2004), impact individuals, firms and industries. The main sectors where a country shows comparative advantage, impacting performance and ED more, and relative stage of industries' lifecycle determining firms exit and growth dynamics (Klepper, 1997) are vital in GVRN decisions on strategies or application for SD. Resources and capabilities, infrastructure, regulatory framework, economic state and cycles, and level of market success, can constrain opportunities (Pisani and Pagan, 2004; Nichter and Goldmark, 2009). Where opportunities exist PVTY can persist as GVRN shift strategies and increase vulnerabilities (Adger, 2006; Hyden, 2014). COVID-19 pandemic impacts institutions globally, threatening UN SDGs implementation and attainment (Free and Hecimovic, 2020). Financial and technical support is crucial especially for countries severely impacted or people most vulnerable, the onus on leading economies with the duty to be innovative, decisive and collaborative in policy and action (United Nations, 2020), in unison to save a world in severe crisis. For SD to persist in crisis, good, responsive GVRN can bolster, for DCs collectively encompass 80% world population (Ibrahim and Damasceno, 2012; Sumner, 2020). All nations therefore need to be involved for cooperation and transformation to affect a more sustainable, equitable world (Oldekop et al, 2020), as prior challenges of inequality and PVTY amplify COVID-19 pandemic spread given worldwide interlinkages.

In a globalised context, there is increased exposure to immigration components and volatility in exchange rates, but with reduced barriers to trade in policy and transport areas, goods and services flow across borders, aided by elements such as international capital flows, multinational activity, and outsourcing (Goldberg and Pavcnik, 2007). Despite spread of culture, information, knowledge, technology, FDI and other factors, with GLBN, social marginalisation and unemployment still persist globally (Woolcock, 2001). In addition to increase in workers in the informal sector, some firms can be induced to non-compliance with labour market standards (Goldberg and Pavcnik, 2003; 2004), and price changes can impact consumption, demand and earning prospects for the poor (Porto, 2006), especially in areas of non-tradable services. Financial liberalisation and GLBN can also increase inequality (Jaumotte et al, 2013), but it can be reduced through greater responsiveness to SDGs (De Neve and Sachs, 2020), as well as trade GBLN (Jaumotte et al, 2013), and good GVRN. In the region, the Caribbean Development Bank

(CDB) supports the promotion of good GVRN, concentrating on processes, practices and systems conforming to applicable standards, and the advancement of inclusive and sustainable growth, to help reduce inequality and extreme PVTY by 2025 (CDB, 2020). The existence of deprivation and PVTY still hinder formal opportunities globally (Hulme and Shepard, 2003). With escalation of disparity between rich and poor, entrepreneurship is vital to economies in DCs, to help creativity, innovation, employment and economic growth to significantly increase (World Bank, 2015; Rolle et al, 2016; Rolle and Kisato, 2019). However, there can be substantial barriers to work or entrepreneurship accessibility, especially in certain sectors.

In DCs, any evidence of marketplace failure tends to hinder desirable growth (Vivarelli, 2012; 2013; Karim et al, 2013). Added to this, where there is limited access to credit and equity (Beck et al, 2005; Lian et al, 2011), prospective entrepreneurs can become risk averse, especially if there exist high levels of bureaucracy, taxation and scrutiny. Micro-finance can be more successfully diffused in DCs, as this can significantly influence growth (Akoten et al, 2006; Fogel et al, 2011). Studies also reveal that infrastructure facilities impact growth (Aterido et al, 2011; Goedhuys and Sleuwaegen, 2010). Yet, while good in certain DCs, such as Barbados, those susceptible to chronic PVTY may not have significant access to good roads or railways, basic utilities, or networks such as ICT facilitating LNG, performance and DVMT. Pandemic such as COVID-19 further exacerbate existing problems.

Significant persistence is required to encourage and engage in entrepreneurship phenomena (Fritsch and Mueller, 2007). Individuals may gain such incentives from capabilities, previous wealth or income, expected profit, familiarity of sector or geographical area (Lévesque and Shepherd, 2004; Vivarelli, 2004; 2013), need to escape unemployment (Premand et al., 2012), and personal, family or societal encouragement (Vivarelli, 2004). Persons encouraged to actively participate, help alleviate negative elements or provide avenues to improve mobility, emboldened out of poverty traps. GVRN in DCs can improve advantages by helping to establish more initiatives connected to selecting and financing entrepreneurial projects with significant promise (Kerr and Nanda, 2011), for differing CTXs impact firms and sectors contributing to DVMT in diverse ways. Small, more mature firms need to realise minimum efficient scale and be in business for significant time to grow and avoid failure (Agarwal and Audretsch, 2001), but are better able to deal with dynamic CTX, access credit and technological advancement, and generate jobs. Constrained by limited collateral, information and capital markets, there is heavy reliance in DCs on trade credit, overdrafts or informal loans as additional sources of capital (Bigsten et al, 2003), which can impede early growth. Where CTX does not support good orientation to strategy and LRN opportunities, on average entrepreneurs and their firms do not survive (Burgelman, 1983; Geletkanycz and Hambrick, 1997; Barr, 1998; Hillman et al, 2000; Eagly, 2003). Social NWG can be expanded by previous experience, prior managerial capabilities enabling persons to utilise abilities to well coordinate complex activities (Vivarelli, 2004).

3.5.2 Moderating Impacts of COVID-19 Pandemic: Determining, Diminishing, Developing

A country's ED is significantly related to the main sectors that exhibit its comparative advantage (Quatraro and Vivarelli, 2015), and in DCs such as Barbados, reliant on International Trade, Tourism and Financial Services for example, the Tourism Sector has been experiencing significantly negative impacts in a COVID-19 environment. If investors with fear of contracting COVID-19, start to shun regions or countries where COVID-19 is endemic, such lack of or removal of investment, especially FDI, can negatively impact GNP, GDP, economic growth, and DVMT. By 20 September 2020 (numbers real-time, <https://www.worldometers.info/coronavirus/>), with over 30 674 934 cumulative cases and 954 417 deaths from COVID-19 virus worldwide, 156 economies, representing nearly two-thirds of the global population, were committed to or eligible to receive vaccines through the COVAX Facility (WHO, 2020b).

However, by 11 February 2021, there are increases to 107 861 756 cumulative cases and 2,365,114 deaths from COVID-19 virus worldwide (numbers real-time, <https://www.worldometers.info/coronavirus/>), and almost 130 countries, with 2.5 billion people, are yet to administer a single dose of vaccine (WHO, 2021). Moreover, with business, social and environmental CTX impacted by COVID-19 pandemic, travel and transport restrictions still disrupt movement of labour and goods (FAO, 2020). When they halt works or completion of infrastructure, this severely impacts efforts to more closely align TSPN elements for greater facilitation and enhancement of trade relations and transformation of global SC (Estache and Garsous, 2012). Where TSCLM facilitates greater collaboration, this can also allow increase in the utilisation of advanced technologies enhancing transparency and traceability (Koh et al, 2020). Stakeholders benefiting from such physical and other technologies, can avoid or overcome hindrances to flexibility and agility (Wadhwa and Roe, 2003; Williams et al, 2013), and improve competitiveness and DVMT.

Barbier and Burgess (2019), find that strategies are needed to deal with COVID-19 crisis and to immediately support social and economic factors, policy mechanisms to incorporate innovativeness and synergies, removing distortions and other elements inhibiting SD. Evaluation of the strategic implementation can also be based on ex-post rather than forecast impacts, to assist more realistic reporting of results. The COVID-19 pandemic imposes greater uncertainty in the CTX of nations (Oldekop et al, 2020), and with resilience undermined, willingness to cooperatively build, pursue and attain objectives can be affected, impacting social and ED. Heeding greater challenges with strategy options, DCs can focus on multiple manageable goals (Barbier and Burgess, 2019; Moyer and Hedden, 2020), synergistically implementing aspects such as creating jobs, improving economy, renewable energy and energy efficiency, to simultaneously attain several SDGs including PVTY alleviation and health improvement. Crucial areas such as Tourism can be bolstered through greater integration with aspects of sectors such as Agriculture, Maritime Affairs and Blue Economy.

Albassam (2013), recommends that solutions to crises economic, political, financial or personal, cannot merely be by use of monetary policy, but appropriate means to generate economic recovery and DVMT in the long term, and can best combine a governing system that is both effective and efficient. Such good GVRN can enhance monitoring and control, while processes and practices supporting inclusiveness, such as pro-poor policies, can be incorporated as core component in programmes for DVMT aid, to reduce PVTY and enhance status for those disadvantaged. Monetary reforms do not increase inequality (Bergh and Nilsson, 2010), but integration of microcredit into the banking and credit schemes of commercial banks and microfinance institutions in Barbados (Knight et al, 2009) and other DCs, is key to promoting good GVRN and SD. If the rights of creditors and shareholders are advanced, improving credit rating, access to finance, financial and market DVMT, and enforcement (Djankov et al. 2008; Jackson and Roe, 2009), adverse effects such as inefficiencies and cost of debt can be reduced (Anderson et al, 2004; Beck et al, 2005; Lian et al, 2011), while adding value. It is crucial that policy or measures employed during COVID-19 pandemic, and post-pandemic strategies implemented in DCs are impactful, affordable and synergistic in pursuing SD to yield immediate progress with the 17 SDGs, specifically targeting PVTY, while reducing reliance on external funding. While enhancing entrepreneurship and GDP, GVRN support to individual, social and ED (Ahrens, 2002; Ahrens and Rudolph, 2006; Quatraro and Vivarelli, 2015), can also incorporate timely, affordable projects and activities targeting realistic outcomes, outputs to include improvement in sanitation, irrigation, relevant subsidies, alternative energy, and other routes to cost reduction and efficiencies. The above-mentioned factors support the below propositions.

Proposition 4a: The relationship between GVRN and DVMT, expressed in proposition 1, is impacted by the environment CTX, so that the effect of GVRN on DVMT declines if impacts from the environment CTX both internal and external, are significantly negative.

Proposition 4b: COVID-19 pandemic elements moderate the effects of TSCLM on the GVRN-DVMT relationship, and therefore PVTY levels, and this impact is affected more by CTX factors in DCs.

3.6 Summary

This section focused on review of literature, revealing the below research gaps:

- Processes crucial to good GVRN enhancing DVMT and reducing PVTY in contemporary times, are under-researched
- There is sparse research on GVRN activities supporting PVTY alleviation outcomes
- TSCLM influences incorporating agility contributing to GVRN beneficial to DVMT outcomes are underexplored
- Literature is sparse on TSCLM capabilities supporting GVRN and DVMT in dynamic context of DCs incorporating global pandemic.
- SD processes and practices for PVTY eradication in DCs context incorporating COVID-19 global pandemic are still underexplored

These revelations underpin the aims including:

1 to reduce gaps in the theoretical framework regarding the GVRN-TSCLM-DVMT relationships incorporating cooperative tenets and PVTY

2 to enhance theory regarding TSCLM processes supporting GVRN and DVMT, beneficial to PVTY measurement and eradication, from viewpoint of OLT and INST combined to enhance understanding of phenomena or relationships promoting value

3 to improve practice contributing to effective SD, especially innovative and relevant TSCLM elements necessary for academics, practitioners and other stakeholders to attain crucial outcomes in DCs or other contexts hitherto underexplored.

Literature and gaps enabled derivation of theoretical perspectives OLT and INST, combined, framework to Figure 1 Conceptual Model, with associated Figure 2, Table 1 and Table 2 (Governance-TSCLM-Development Interactions, Implementation and Outcomes), supporting answers to the research question

‘What is the effect of TSCLM on the relationship between GVRN and DVMT and how does this impact poverty in CTX with COVID-19 crisis?’

This research is necessary to develop theory (Smith and Hitt, 2007), and TSCLM as enabler to SD and PVTY alleviation in DCs or other underexplored CTX, and support to strategies and outcomes flexible and agile to remove COVID-19 pandemic negative impacts. These elements can assist decision making or outputs, to sustain outcomes targeted or attainable. The next section presents conclusions, highlighting contributions with implications and directions for further research.

Elements	From	Towards	Supporting Literature	Main Themes	Gaps
Strategies and Policy	○Political decision processes	●Multiple interactions	Richey et al, 2010; Vivarelli, 2013 Quatraro & Vivarelli, 2015	Networking Innovativeness	Poverty
Interface of Policy Planning and Implementation	○Separation ○Information	●Interaction ●Integration ●Collaboration	Bourgon, 2007 Goldberg & Pavcnik, 2007 Cao & Zhang, 2011	Networking Market Dynamics	Agility
Principles	○Acquiescence	●Results within law/guidelines ●Networking	Christopher & Townhill, 2001 Misangyi et al, 2014; UN, 2020	Control	Poverty Flexibility
Exercise of Discretion	○Based on rules	Accountability constraints	Smith, 2007; UN, 2020 DeNeve & Sachs, 2020 Anand & Sen, 2000	Accountability Stability	TSCLM Flexibility Agility
Role of Government or Governance	○Legislation ○Representing interests of citizens	●Deliberation ●Capacity and Integrity ●Advance public good ●Realize public interest ●Promote discussion and integration	Williamson, 1999; Kilpatrick & Factor, 2000; Ahrens, 2002 Jreisat, 2004; Adger, 2006; Smith, 2007 Ahrens & Rudolph, 2006 Bevir, 2012; Misangyi et al, 2014 Karim et al 2013; Raue & Wieland, 2015 Rukanova et al, 2020; UN, 2020	Capabilities, Quality Stability, Partnerships Responsibility Institutional Dynamics	TSCLM Inclusiveness Unanimity Flexibility Agility
Role of Business	○Production ○Services	Responsibility	Geroski & Schwalbach, 1991 Klepper, 1997; Harps & Hansen, 2000 Pisani & Pagan, 2004; Jaumotte et al, 2013	Corporate, Market Quality, SCM	Integration Poverty
Individual Involvement	○Individual and special interest ○Legal being rights	●Rights and responsibilities as member of community ●Common (shared) interests	UNDP, 2001; Porto, 2006 Fawcett & Magnan, 2002 del Rio-Chanona et al, 2020	Interactions	Integration Poverty
Societal Involvement	○Non-interference ○Compliance	●Participation ●Co-production and distribution	Granovetter, 1985, Sen, 1992 Adger, 2006; Fawcett et al, 2011 Fawcett & Magnan, 2002 Jaumotte et al, 2013 Sumner et al, 2020	Social Relations Institutions Poverty, Exclusion Vulnerabilities	TSCLM Inclusiveness Agility
Context Factors	○Uncertainty	●Risk Mitigation, ●Networking	Audretsch, 1995; Skipper & Hanna, 2009	Pandemic Agility TSCLM	Collaboration

Table 2: Governance-TSCLM-Development Interactions, Implementation and Outcomes
Sources: Adapted from Bourgon (2007)

4. Conclusions

This paper examines aspects of GVRN-TSCLM-DVMT relationships and interlinkages, CTX factors and COVID-19 global pandemic, and impact of these on individuals, firms and nations, highlighting PVTY reduction especially in DCs. It establishes novel foundations from which to better understand these relationships, evaluating elements, and answering the research question of 'What is the effect of TSCLM on the relationship between GVRN and DVMT and how does this impact PVTY in CTX with COVID-19 crisis?'. The literature reveals GVRN as safeguarding and advancing human rights, being a means to DVMT and PVTY reduction (Williamson, 1999; Smith, 2007; Bevir, 2012; Karim et al, 2013; Stoker, 2018; Rukanova et al, 2020). In GVRN processes, firms and individuals face constraints from institutional and CTX elements but determine best configurations and utility of resources and capabilities (Penrose, 1959; Schleifer and Vishny, 1997; Drori et al, 2006; Quatraro and Vivarelli, 2015). Collaborating with stakeholders and mechanisms, they reduce risks and attain goals (Smith, 2007; Misangyi et al, 2014; Pettit et al, 2019). However, pre-existing and current vulnerabilities are still being experienced by DCs, especially lacking successful progress towards SDGs (Winters et al, 2004; DeNeve and Sachs, 2020; Moyer and Hedden, 2020; Saadat et al, 2020; Sumner et al, 2020; UN, 2020). COVID-19 global pandemic impacts GVRN and all aspects of SD, disruptions significantly risky, and restrictions affecting systems supporting TSCLM (Cucinotta and Vanelli, 2020; Ivanov, 2020). Stakeholders need appropriate, flexible strategies involving agility, collaboration, IT, NWG, management and alignment of key resources and capabilities (Skipper and Hanna, 2009). Models of GVRN include a market approach, contrasted with more collaborative approaches (Humphrey and Schmidt, 2002; Bingham et al, 2005; Verner and Alda, 2004; Nee, 2005; Goldberg and Pavcnik, 2007; Asaduzzaman and Virtanen, 2018). Christopher and Towill (2001) provide an agile SCM model, while Prahalad and Hammond (2002), concentrate on models for PVTY alleviation, supporting DVMT (UNDP, 2003), and capabilities expansion. The literature also reveals appropriateness of combining OLT (March 1991; Argote and Miron-Spektor, 2011) and INST (DiMaggio and Powell 1983; Palmer and Biggart. 2002; Goldberg and Pavcnik, 2007; Scott, 2005; 2008a), contributing crucially to analysis and enhancing understanding of interrelationships, interactions and outcomes. This section presents implications including contributions, limitations and directions for further research.

4.1 Implications

Implications are that TSCLM applied as an enabler to enhance GVRN-DVMT relationships, improves theory on GVRN, and supports GVRN systems that need to be robust, with good balance of exploration and exploitation elements, dealing well with change. This is also supported by Duit and Galaz (2008), and Ahrens and Rudolph (2006). New insights provided highlight the impact of GVRN on TSCLM systems, individuals and organisations, involving planning, choices, resource usage and outcomes, including duration, spread and degree of resources commitment. This is reinforced by the first proposition. By incorporating flexibility complemented with agility to enhance synchronisation in planning and DVMT systems and related outcomes, stakeholders in DCs can better organise and respond in dynamic CTXs. This is supported by theory and practice (Sager, 1990; Sanchez, 1995; Christopher and Towill, 2001; Wadhwa and Roe, 2003; Reichhart and Holweg, 2007), and enhances literature on GVRN and TSCLM.

Heeding Richey et al (2010), elements discerned from GVRN and TSCLM models incorporating DVMT are better related, and means for reducing PVTY in DCs, complement greater considerations to improve understanding about key factors in GVRN. Strategic configurations incorporate diverse factors such as entrepreneurship, risks, responsibilities, flexibility, agility and timeliness, impacting cooperative and integrative measures, progress with these, and success levels associated with outcomes (Min et al, 2005; Fawcett et al, 2011; Tracey and Phillips, 2011; Koellinger and Thurik, 2012; Williams et al, 2013; WHO, 2020b). Highlighted in Figure 1 and Proposition 2, these impact effectiveness and efficiencies in

policy implementation, influencing attainment of DVMT. This includes fostering new firms, jobs, competition and growth, supported in theory and practice (Naudé, 2010; Dejardin, 2011; Klapper et al, 2010; Malchow-Møller et al, 2011; Koellinger and Thurik, 2012), crucial focus on SDGs and pillars of SD (OECD, 2001; CEC, 2001).

Heeding OLT (March 1991; Argote and Miron-Spektor, 2011) and INST, the third proposition recognizes interconnections to better balance facilitating and limiting factors (Goldberg and Pavcnik, 2007; Richey et al, 2010), impacting GVRN, TSCLM, DVMT and PVTY. Institutions can improve processes to more positively support efforts of individuals and firms influencing progress environmentally, socially and economically (Lehtonen, 2004; Tate et al, 2010). By promoting LNG individual, group and organisation-wide, networks supporting TSCLM, can become more comprehensive nexus accentuating agility, flexibility and performance (Li, 2014), for TSCLM can assist the management of concentration and configurations involved with GVRN and NWG. This allows resources availability and outcomes to be positively maintained, for better performance, the flexibility and risk management supporting PVTY eradication. This enhances INST. Firms that intend to improve upstream and downstream aspects of SC, can better heed crucial internal and external interactions, and seek to rectify gaps in LNG, knowledge and experience (Khan, 2007; Reichhart and Holweg, 2007; Tate et al, 2010). Cao and Zhang (2011), support these, as most appropriate cooperative measures and configurations can be attained to advantageously augment capacity, use of resources and transfer of capabilities. Where goals incorporate enhanced outcomes at levels individual, organisational, national and international, interrelationships concerning supplier and distribution networks, and interaction of stakeholders, are crucial to enhancing LNG and performance (Tate et al, 2010; Argote and Miron-Spektor, 2011). This adds to OLT.

CTX factors incorporating COVID-19 pandemic, impact GVRN and strategic elements, resources and capabilities, and these effects the GVRN-TSCLM-DVMT relationships and outcomes. Elements and interrelationships are emphasised in Figure 1 Model, key impacts supported in Table 1 Comparison of Types of Governance most relevant to GVRN-TSCLM-DVMT relationships. The theoretical, practical and managerial implications incorporated, allow individuals, executives, practitioners and researchers to better understand how TSCLM can best enable DVMT diverse ranges including opportunities and attainments, reduce PVTY and sustain well-being. Literature supports focus on reducing vulnerabilities (Green and Hulme, 2005; Fellowes, 2006; Ravillion, 2018; del Rio-Chanona et al, 2020; He et al, 2020; Loske, 2020). Consequently, instituting capabilities, individuals and organisations can pursue DVMT choices considering cooperative means, while heeding GVRN and other structures to eliminate PVTY and enhance sustainability (Anand and Sen, 2000; World Bank, 2015; 2016; El Ghak et al, 2018; del Rio-Chanona et al, 2020). GVRN can be improved, incorporating better strategic planning and goals that are clearer to enhance capabilities and resources available for effective implementation to better mitigate COVID-19 pandemic disaster elements. Heeding CTX, and with stakeholder involvement and awareness enhanced, options and accountabilities can be clarified, and recovery efficiently attained, securing long-term SD. This is crucial, supported by literature (Audretsch et al, 2006; Nakagawa and Shaw, 2004; Smith and Wenger, 2007; Aguilera and Jackson, 2010; Free and Hecimovic, 2020), and enhances theory on SD.

The closely integrated collaboration of firms (Skjoett-Larsen et al, 2003), allows significant efficiency effects through SCM and related initiatives, and proactive sharing of information and relations assist synchronisation (Ballou et al, 2000; Harps and Hansen, 2000; Kilpatrick and Factor, 2000; Jagdev and Thoben, 2001; Fawcett and Magnan, 2002), and enhanced value. Table 2 supports these elements that improve theory and practice in NWG and TSCLM, as internal and external network features can sustain capabilities enhancement. SC integration combining internal, inter-organisational and external elements, necessitates DVMT of new capabilities and social norms, and progress in terms of management and attainments to support change in the long term. Wong et al (2011) and Alfalla-Luque et al (2013) support

this. However, with COVID-19 epidemic outbreak disrupting globally in the long term, jeopardising performance and prospects for individuals and organisations, SC risks are higher. This is held by literature (Ivanov, 2020; Sharma et al, 2020) and Proposition 4. Sustainable advantages can be achieved, however, focusing more on minimising cost, meeting requirements, and efficient integration of stakeholders supporting strategic management and associated techniques and technologies, crucial to flexibility in SC (Martin, 2011; Li, 2014; Novillo et al, 2017; Anca, 2019; Koh et al, 2020). These elements augment theory on SCM and LGS capabilities.

GVRN enhancement of decision making regarding LGS and NWG, supports innovation, flexibility and accessibility of materials and infrastructure, to minimise risks and SC disruptions (Beamon, 1998; Cantwell, 2009; Skipper and Hanna, 2009; Aterido et al, 2011; Estache and Garsous, 2012; Mann, 2012), critical to SC securing advantages and transformation globally. This improves theory on TSCLM. The supporting capability agility crucially sustains structures, systems, LGS processes and mindsets (Christopher and Towill, 2001; Nichter and Goldmark, 2009; Claessens and Yurtoglu, 2013), beneficial to GVRN-TSCLM-DVMT interrelationships. This assist alleviating the gap whereby these relationships can be better integrated, especially in DCs. Individuals and firms who usefully engage collaboration, can by incorporating quality, improve availability and accessibility of capabilities and resources to boost TSCLM system enhancing GVRN. In dynamic CTX such as DCs, stakeholders in GVRN can spur efforts to improve mindsets, eradicate PVTY and bolster SD, but to capitalise on favourable outcomes, there is a need to heed and remove hindrances (Putnam, 1993; UNDP, 2000; Wagle, 2000; EMA, 2020; Gasmı et al, 2020; Zambrano-Monserrate et al, 2020). These elements, supported too by other literature (Sen, 1992; 1999; Christopher and Towill, 2001; Hulme and Shepard, 2003; Adger, 2006; Aterido et al, 2011), and Table 2, highlight necessity of this research to advance theory, as recognised by Smith and Hitt (2007).

This research specifically sought to fill gaps in literature whereby current theories on the GVRN-DVMT relationship, mediated by agility afforded through TSCLM, beneficial to well-being, is sparse. It is a good starting point to build theory as it examines existing literature applicable to GVRN, TSCLM and DVMT, but discerns no theory or conceptual model integrating these with cooperative tenets. As aspects of WGI are interrelated (Kaufmann and Kraay, 2002), elements of models relevant to GVRN-TSCLM-DVMT relationships are closely examined, especially with tenets of cooperation incorporating NWG. This allows understanding and application to be enhanced concerning how agility and flexibility are advantageous to strategic factors generating innovation, management and outcome elements (Audretsch, 1995; Agarwal and Audretsch, 2001; Christopher and Towill, 2001; Jones and Coviello, 2005; Todeva and Knoke, 2005). These diffuse, combining internal and external interactions beneficial to key stakeholders and DVMT. This is supported by literature (Christopher and Towill, 2001; Wadhwa and Roe, 2004; Gao, 2005; Reichhart and Holweg, 2007), and Proposition 3. This research acknowledges similarities in elements of GVRN involved with DVMT, but emphasises differences between types of market and collaborative, while heeding how they support value-chain, SC, LGS and risk management interconnected with PVTY alleviation. Moreover, the interrelations can foster resilience, supported in literature (Ballet et al, 2003; Olate, 2003; Lehtonen, 2004; Torres and Momsen, 2004). Elements also contribute to entrepreneurship, management, and practice in retail and other businesses. Current responses tend to impair networks and restrict trade, demand, labour and mobility (Luke and Rodrigue, 2008; Aloı et al, 2020; Ivanov, 2020; Loske, 2020). Individuals or firms can align with SCs developing complex processes involving satisfying requirements of customers (Anca, 2019), decisions or actions to minimise costs, maximise quality and sustain competitiveness. Despite avenues for cooperation and improving quality in dimensions of GVRN in DCs (Varshney, 1993; Smith, 2007), externalities, conditionality and coercion impacting, can hinder good GVRN, limiting progress. This research need, highlighted in literature (Winters et al, 2004; Smith and Hitt, 2007), supports requirements for DCs and underexplored contexts

still facing unsustainable PVTY levels presenting risks and limitations in systems needing greater flexibility and agility. This research novel value surrounds analysis of GVRN characterised in DCs with individuals and organisations looking to progress through strategies agile and flexible to advance DVMT outcomes, especially PVTY eradication; fulfilling requirements to corroborate current findings, effects and results in novel areas, organisations, and contexts underexplored.

4.2 Limitations and Avenues for Further Research

Impacting limitations or constraints include time, financial and other scarce resources, connections or conditions. This paper concentrated on upstream and downstream activities of TSCLM, highlighting internal and external collaborations and agility as it examined how TSCLM mediates the relationship between GVRN and DVMT. To further determine the extent of the GVRN-TSCLM-DVMT relationships, the model can be more closely investigated empirically, such as can advance more the analysis of impacts and causalities experienced in context with COVID-19, and the level of success or failure with related strategies. Individuals, groups involved in SMEs, or large firms, can be involved in the sample used, either separately or in combination. Individuals and firms in retail or distribution aspects of business can be utilised singly or in combination. A qualitative study and descriptive research (Churchill and Iacobucci, 2005), can involve successful cases and semi-structured questionnaires, permitting the crucial issues selected to be studied in depth (Patton, 1990), the cases (Yin, 2013) revealing how individuals and/or firms choose activities and networks that are cooperative (Gao, 2005). A small number of firms can be utilised for intense study of responses. For data analysis, Miles and Huberman (1994) approach can be utilised, to maintain validity, reliability and triangulation in data collection. Relevant quantitative approach with appropriate techniques such as structured equations modeling can be utilised. This research examined market and collaborative types of GVRN approaches. Other GVRN approaches can be further studied and contrasted. In assessing entrepreneurship aspects (Rauch et al, 2009), Covin and Slevin (1989) questionnaire can be adapted and administered, including more dimension choices and means for assessment, context elements and incorporating flexibility and agility impacts on GVRN and DVMT factors (Christopher and Towill, 2001; Yang, 2014), including PVTY. Although INST viewpoint helps to better understand strategies and practices to be better embraced in SCM (Kauppi, 2013), other theoretical perspectives can be employed. Future investigations can use approaches quantitative or qualitative or combination investigating individuals or institutions in developed and DCs and globally (Balarabe Kura, 2012).

References

- Adger, W.N. (2006). Vulnerability. *Global environmental change*, 16(3), 268-281.
- Agarwal, R & Audretsch, D. B. (2001). Does entry size matter? The impact of the life cycle and technology on firm survival. *The Journal of Industrial Economics*, 49(1), 21-43.
- Aguilera, R. V & Jackson, G. (2010). Comparative and international corporate governance. *The Academy of Management Annals*, 4(1), 485-556.
- Ahmed, F., Ahmed, N.E., Pissarides, C & Stiglitz, J. (2020). Why inequality could spread COVID-19. *The Lancet Public Health*, 5(5), Article e240.
- Ahrens, J. (2002). *Governance and Economic Development - A Comparative Institutional Approach*. Cheltenham, Edward-Elgar Publications.
- Ahrens, J & Rudolph, P. M. (2006). The importance of governance in risk reduction and disaster management. *Journal of contingencies and crisis management*, 14(4), 207-220.
- Akoten, J. E., Sawada, Y & Otsuka, K. (2006). The determinants of credit access and its impacts on micro and small enterprises: The case of garment producers in Kenya. *Economic development and cultural change*, 54(4), 927-944.
- Albassam, B.A. (2013). The Relationship Between Governance and Economic Growth During Times of Crisis, *European Journal of Sustainable Development*, 2(4), 1-18.

- Alfalla-Luque, R & Medina-López, C. (2009). Supply Chain Management: Unheard of in the 1970s, core to today's company. *Business History*, 51(2), 202-221.
- Alfalla-Luque, R., Medina-Lopez, C & Dey, P. K. (2013). Supply chain integration framework using literature review. *Production Planning & Control*, 24(8-9), 800-817.
- Aloi, A., Alonso, B., Benavente, J., Cordera, R., Echániz, E., González, F., Ladisa, C., Lezama-Romanelli, R., López-Parra, Á., Mazzei, V & Perrucci, L. (2020). Effects of the COVID-19 lockdown on urban mobility: empirical evidence from the City of Santander (Spain). *Sustainability*, 12(9), 3870.
- Amorós, J. E & Cristi, O. (2008). Longitudinal analysis of entrepreneurship and competitiveness dynamics in Latin America. *International Entrepreneurship and Management Journal*, 4(4), 381-399.
- Amorós, J.E & Cristi, O. (2011). Poverty and entrepreneurship in developing countries. *The dynamics of entrepreneurship: evidence from global entrepreneurship monitor data*, 209-230.
- Anand, S & Sen, A. (2000). Human development and economic sustainability. *World development*, 28(12), 2029-2049.
- Anca, V. (2019). Logistics and supply chain management: An overview. *Studies in Business and Economics*, 14(2), 209-215.
- Anderson, R.C., Mansi, S.A & Reeb, D.M. (2004). Board Characteristics, Accounting Report Integrity, and the Cost of Debt. *Journal of Accounting and Economics*, 37(3): 315-342.
- Argote, L & Miron-Spektor, E. (2011). Organisational learning: From experience to knowledge. *Organization Science*, 22, 1123-1137.
- Artuc, E., Cull, R., Dasgupta, S., Fattal, R., Filmer, D., Giné, X., Jacoby, H., Jolliffe, D., Kee, H.L., Klapper, L & Kraay, A. (2020). Toward Successful Development Policies: Insights from Research in Development Economics. Policy Research Working Paper Series 9133, The World Bank.
- Asaduzzaman M & Virtanen P. (2018). Governance Theories and Models. In: Farazmand A. (eds) *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Springer. Cham.
- Asaduzzaman, M., Kaivo-oja, J., Stenvall, J & Jusi, S. (2016). Strengthening Local Governance in Developing Countries: Partnership as an Alternative Approach. *Public Organization Review*, 16, 335-356.
- Aterido, R., Hallward-Driemeier, M & Pagés, C. (2011). Big constraints to small firms' growth? Business environment and employment growth across firms. *Economic Development and Cultural Change*, 59(3), 609-647.
- Audretsch, D.B. (1995). Innovation, growth and survival. *International journal of industrial organization*, 13(4), 441-457.
- Audretsch, D. B., Keilbach, M. C & Lehmann, E. E. (2006). *Entrepreneurship and economic growth*. Oxford, Oxford University Press.
- Babbie, E. (2010). *The Practice of Social Research*. Wadsworth: Cengage Learning.
- Balarabe Kura, S. Y. (2012). Qualitative and Quantitative Approaches to the Study of Poverty: Taming the Tensions and Appreciating the Complementarities. *Qualitative Report*, 17, 34.
- Ballet, J., Dubois, J.L & Mahieu, F.R. (2003). Le développement socialement durable: un moyen d'intégrer capacités et durabilité. Paper Presented at the Third Conference on the Capability Approach, University of Pavia, 6-9 September 2003.
- Ballou, R., Stephen, M & Makherjee, A. (2000). New managerial challenges from supply chain opportunities, *Industrial Marketing Management*, 29(1), 7-18.
- Barbier, E.B & Burgess, J.C. (2019). Sustainable Development Goal Indicators: Analyzing Trade-offs and Complementarities. *World Development*, 122, 295-305.
- Baumol, W. J. (1990). Sir John versus the Hicksians, or theorist malgré lui? *Journal of Economic Literature*, 1708-1715.
- Beamon, B.M. (1998). Supply chain design and analysis: Models and methods. *International Journal of Production Economics*, 55(3), 281-294.
- Barr, A.M. (1998). Enterprise performance and the functional diversity of social capital. Working paper number 65. *Centre for the Study of African Economies*, University of Oxford.
- Beck, T., Levine, R & Loayza, N. (2000). Finance and the Sources of Growth. *Journal of Financial Economics*, 58, 261-300.
- Beck, T., Demirguc-Kunt, A & Levine, R. (2005). SMEs, growth, and poverty: cross-country evidence. *Journal of economic growth*, 10(3), 199-229.
- Berger, P.L & Luckmann, T. (1967). *The social construction of reality*. London: Allen Lane.
- Bergh, A & Nilsson, T. (2010). Do liberalization and globalization increase income inequality? *European Journal of political economy*, 26(4), 488-505.

- Best, J. (2013). Redefining Poverty as Risk and Vulnerability: shifting strategies of liberal economic governance. *Third World Quarterly*, 34(1), 109-129.
- Bevir, M. (2012). *Governance: A very short introduction*. Oxford, Oxford University Press.
- Bigsten, A., Collier, P., Dercon, S., Fafchamps, M., Gauthier, B., Gunning, J.W., Oduro, A., Oostendorp, R., Patillo, C., Söderbom, M & Teal, F. (2003). Credit constraints in manufacturing enterprises in Africa. *Journal of African Economies*, 12(1), 104-125.
- Bingham, L.B., Nabatchi, T & O'leary, R. (2005). The new governance: Practices and processes for stakeholder and citizen participation in the work of government. *Public Administration Review*, 65(5), 547-558.
- Björkman, I. (1990). Foreign direct investment: An organisational learning perspective. *Finnish Journal of Business Economics*, 4, 271-294.
- Boddy, C.R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, 19 (4), 426-432.
- Bourgon, J. (2007). Responsive, responsible and respected government: towards a New Public Administration theory. *International Review of Administrative Sciences*, 73(1), 7-26.
- Brugmann, J & Prahalad, C. K. (2007). Cocreating business's new social compact. *Harvard Business Review*, 85(2): 80-90.
- Burgelman, R.A. (1983). Corporate entrepreneurship and strategic management: Insights from a process study. *Management science*, 29(12), 1349-1364.
- Cao, M & Zhang, Q. (2011). Supply chain collaboration: Impact on collaborative advantage and firm performance. *Journal of operations management*, 29(3), 163-180.
- Cantwell, J. (2009). Location and the multinational enterprise. *Journal of International Business Studies*, 40, 35-41.
- CDB. (2020). <https://www.caribank.org/about-us>
- Christopher, M & Towill, D. (2001). An integrated model for the design of agile supply chains. *International Journal of Physical Distribution & Logistics Management*, 31(4), 235-246.
- Churchill, G.A & Iacobucci, D. (2005). *Marketing research methodological foundations*. Mason, Ohio: Thomson, South-Western.
- Claessens, S & Laeven, L. (2003). Financial development, property rights, and growth. *The Journal of Finance*, 58(6), 2401-2436.
- Claessens, S & Yurtoglu, B. B. (2013). Corporate governance in emerging markets: A survey. *Emerging markets review*, 15, 1-33.
- Collier, P. (2007). *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It?* Oxford, Oxford University Press.
- Commission of the European Communities (CEC), 2001. A sustainable Europe for a better world: a European Union Strategy for Sustainable Development. Communication from the Commission (Commission's proposal to the Gothenburg European Council). COM(2001)264 final.
- Creswell, J.W. (1998). *Qualitative research and design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Cucinotta, D & Vanelli, M. (2020). WHO Declares COVID-19 a Pandemic? *Acta Bio Medica Atenei Parmensis*, 91(1), 157-160.
- Cumberbatch, S. (2020). High-risk warning. Midweek Nation, *The Nation Newspaper of Barbados*, 9 September 2020.
- Dacin, M. T., Goodstein, J., & Scott, W. R. (2002). Institutional theory and institutional change: introduction to the special research forum. *Academy of Management Journal*, 45, 45-54.
- Deaton, A. (1997). *The analysis of household surveys. Microeconomic analysis for development policy*, Washington D.C., The World Bank.
- Deaton, A. (2003). *Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)*, NBER Working Paper 9822.
- Delgado, M., Ketels, C., Porter, M. E & Stern, S. (2012). *The determinants of national competitiveness* (No. w18249). National Bureau of Economic Research.
- del Rio-Chanona, R. M., Mealy, P., Pichler, A., Lafond, F & Farmer, D. (2020). Supply and demand shocks in the COVID-19 pandemic: An industry and occupation perspective. *Oxford Review of Economic Policy*, 36(1), S94-S137.
- De Neve, J.E & Sachs, J. (2020). Sustainable development and human well-being. In *World Happiness Report 2020*. Eds Helliwell, J. et al. New York, Sustainable Development Solutions Network.
- Desai, V. (2009). *Dynamics of entrepreneurial development and management* (pp. 119-134). Himalaya Publishing House.

- DFID. (2007). *Governance, development and democratic politics. DFID's work in building more effective states*. London, Department for International Development.
- DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organisational fields. *American Sociological Review*, 48(2), 147-160.
- Dejardin, M. (2011). Linking net entry to regional economic growth. *Small Business Economics*, 36(4), 443-460.
- Djankov, S., Qian, Y., Roland, G & Zhuravskaya, E. (2006). Entrepreneurship in China and Russia Compared, *Journal of the European Economic Association*, 4, 352-65.
- Drori, G. S., Meyer, J. W., & Hwang, H. (2006). *Globalization and organisation: world society and organisational change*. New York: Oxford University Press.
- Duit, A & Galaz, V. (2008). Governance and complexity - emerging issues for governance theory. *Governance*, 21(3), 311-335.
- Eagly, A. H., Johannesen-Schmidt, M. C & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men. *Psychological Bulletin*, 129(4), 569.
- Early, L & Scott, Z. (2010). Assessing the evidence of the impact of governance on development outcomes and poverty reduction.
- Eisenhardt, K. M & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic management journal*, 21(10-11), 1105-1121.
- El Ghak, T., Zarrouk, H & Aloulou, M. (2018). Causes of Poverty Reduction: Re-Examining the Evidence. *International Journal of Advances in Management, Economics and Entrepreneurship*. 5(1), 1-25.
- Elsbach, K. D. (2002). Intraorganisational institutions. In J. A. C. Baum (Ed.), *The blackwell companion to organizations*. Oxford: Blackwell.
- Estache, A & Garsous, G. (2012). The impact of infrastructure on growth in developing countries. Economic Notes. Note 1. *International Finance Corporation*.
- European Centre for Disease Prevention and Control (ECDC). (2020). *Vaccines and treatment of COVID-19*. EU, ECDC.
- European Medicines Agency (EMA). (2020). *Treatments and vaccines for COVID-19 2020* [09/06//20]. Available from: <https://www.ema.europa.eu/en/humanregulatory/overview/public-health-threats/coronavirus-disease-covid-19/treatmentsvaccines-covid-19>.
- Fabbe-Costes, N & Jahre, M. (2009). Integrated and flexible project supply chains and networks-Developing a research platform. In *Proceedings of the 25th Industrial Marketing and Purchasing Group Conference (IMP-conference)*, Marseilles, France, September, pp 3-5.
- Fabbe-Costes, N., Jahre, M & Roussat, C. (2009). Supply Chain Integration: The role of third-party providers, *International Journal of Productivity and Performance Management*. . 58(1), 71-91.
- FAO. (2020). COVID-19 and rural poverty: Supporting and protecting the rural poor in times of pandemic: *FAO's component of the Global COVID-19 Humanitarian Response Plan*. Rome.
- Fawcett, S.E & Magnan, G.M. (2002). The rhetoric and reality of supply chain integration. *International Journal of Physical Distribution & Logistics Management*, 32(5), 339-361.
- Fawcett, S. E & Magnan, G. M. (2004). Ten guiding principles for high-impact SCM. *Business Horizons*, 47(5), 67-74.
- Fawcett, S. E., Wallin, C., Allred, C., Fawcett, A. M & Magnan, G. M. (2011). Information technology as an enabler of supply chain collaboration: a dynamic-capabilities perspective. *Journal of Supply Chain Management*, 47(1), 38-59.
- Fellowes, M. (2006). *From Poverty, Opportunity: Putting the Market to Work for Lower Income Families*. Washington, DC: The Brookings Institute.
- Florida, R., Mellander, C & King, K. (2015). *The global creativity index 2015*. Martin Prosperity Institute.
- Fogel, K., Lee, K & McCumber, W. (2011). Institutional impact on the outreach and profitability of microfinance organisations. In *Handbook of Research on Innovation and Entrepreneurship* (pp. 119-133). Cheltenham, UK, Edward Elgar Publishing.
- Free, C & Hecimovic, A. (2020). Global supply chains after COVID-19: the end of the road for neoliberal globalisation? *Accounting, Auditing & Accountability Journal*. SSRN 3681352.
- Fritsch, M & Mueller, P. (2007). The persistence of regional new business formation-activity over time-assessing the potential of policy promotion programs. *Journal of Evolutionary Economics*, 17(3), 299-315.

- Fuchs, V. (1965). Towards a theory of poverty, In V. Fuchs (Ed.), *The Concept of Poverty*. Washington, DC: The Chamber of Commerce of the United States.
- Gallie, D & Paugam, S. (eds) (2000). *Welfare Regimes and the Experience of Unemployment in Europe*. Oxford: Oxford University Press.
- Gao, T. (2005). Foreign direct investment and growth under economic integration. *Journal of International Economics*, 67(1), 157-174.
- Gao, Y & Hafsi, T. (2015). Government intervention, peers' giving and corporate philanthropy: Evidence from Chinese private SMEs. *Journal of Business Ethics*, 132(2), 433-447.
- Gash, A. (2016). Collaborative governance In *Handbook on Theories of Governance*. Cheltenham, UK, Edward Elgar Publishing.
- Gasmi, A., Noor, S., Tippairote, T., Dadar, M., Menzel, A & Bjørklund, G. (2020). Individual risk management strategy and potential therapeutic options for the COVID-19 pandemic. *Clinical Immunology*, 108409.
- Geletkanycz, M. A & Hambrick, D. C. (1997). The external ties of top executives: Implications for strategic choice and performance. *Administrative Science Quarterly*, 42(4), 654-681.
- Geroski, P & Schwalbach, J. (Eds.). (1991). *Entry and market contestability*. Oxford, Basil Blackwell.
- Ghosh, A & Fedorowicz, J. (2008). The role of trust in supply chain governance. *Business Process Management Journal*, 14(4), 453-470.
- Goedhuys, M & Sleuwaegen, L. (2010). High-growth entrepreneurial firms in Africa: a quantile regression approach. *Small Business Economics*, 34(1), 31-51.
- Goldberg, P.K & Pavcnik, N. (2003). The Response of the Informal Sector to Trade Liberalisation, *Journal of Development Economics*, 72, 463-496.
- Goldberg, P.K & Pavcnik, N. (2004). Trade, Inequality, and Poverty: What Do We Know? Evidence from Recent Trade Liberalisation Episodes in Developing Countries, *Brookings Trade Forum 2004*, 223-269.
- Goldberg, P.K & Pavcnik, N. (2007). Distributional effects of globalisation in developing countries. *Journal of economic Literature*, 45(1), 39-82.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American journal of sociology*, 91(3), 481-510.
- Green, M & Hulme, D. (2005). From correlates and characteristics to causes thinking about poverty from a chronic poverty perspective. *World Development*, 33(6), 867-879.
- Grindle, M. S. (2004). Good enough governance: poverty reduction and reform in developing countries. *Governance*, 17(4), 525-548.
- Hallgren, M. (2012). The construction of research questions in project management. *International Journal of Project Management*, 30, 804-816.
- Hammarberg, K., Kirkman, M & de Lacey, S. (2016). Qualitative research methods: when to use them and how to judge them. *Human reproduction*, 31(3), 498-501.
- Hansen, L. G. (2013). Transport and Logistics as Network Competencies in a Localised Industrial. *Transport Developments and Innovations in an Evolving World*, 191.
- Harps, L & Hansen, L. (2000). The haves and the have nots: Supply chain practices for the new millenium. *Inbound Logistics Journal*, 75(1), 114.
- He, P., Sun, Y., Zhang, Y & Li, T. (2020). COVID-19's impact on stock prices across different sectors - An event study based on the Chinese stock market. *Emerging Markets Finance and Trade*, 56(10), 2198-2212.
- Hillman, A. J., Cannella, A. A & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management studies*, 37(2), 235-256.
- Hitt, M. A. (2011). Relevance of strategic management theory and research for supply chain management. *Journal of Supply Chain Management*, 47(1), 9-13.
- Hulme, D & Shepard, A. (2003). Conceptualizing chronic poverty. *World Development*, 31(3), 403-423.
- Humphrey, J., & Schmitz, H. (2002). Developing country firms in the world economy: Governance and upgrading in global value chains (*INEF Report No. 61*). Duisburg: University of Duisburg.
- Hyden, G. (2014). Governance, development and poverty eradication. UNDP. <http://social.un.org/index/LinkClick.aspx>.

- Ibrahim, M. M & Damasceno, A. (2012). Hypertension in developing countries. *The Lancet*, 380, 611-619.
- Ihrig, J & Moe, K. S. (2004). Lurking in the Shadows: The Informal Sector and Government Policy. *Journal of Development Economics*, 73, 541-57.
- IILS. (1996). Social Exclusion and anti-poverty strategies - A synthesis of findings of the research project on the patterns and causes of social exclusion and the design of policies to promote integration. Geneva: International Institute for Labour Studies (IILS).
- ILO. (1976). *Meeting Basic Needs: Strategies for Eradicating Mass Poverty and Unemployment*, Geneva: International Labour Organization (ILO).
- Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: a simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case, *Transportation Research Part E: Logistics and Transportation Review*, 136, 101922
- Ivanov, D., Sokolov, B & Dolgui, A. (2014). The Ripple Effect in Supply Chains: Trade-off Efficiency-Flexibility-Resilience in Disruption Management. *International Journal of Production Research*, 52(7), 2154-172.
- Jackson, H.E & Roe, M. J. (2009). Public and private enforcement of securities laws: Resource-based evidence. *Journal of financial economics*, 93(2), 207-238.
- Jagdev, H.S. and Thoben, K.-D. (2001). Anatomy of enterprise collaboration, *Production Planning and Control*, 12(5), 437-51.
- Jarocki, L. (2014). One solution for project success. *PMI White Paper*, September 2014.
- Jaumotte, F., Lall, S & Papageorgiou, C. (2013). Rising income inequality: technology, or trade and financial globalisation? *IMF Economic Review*, 61(2), 271-309.
- Jeanty, G. C & Hibel, J. (2011). Mixed methods research of adult family care home residents and informal caregivers. *The Qualitative Report*, 16(3), 635-56.
- Jia, M & Zhang, Z. (2014). Donating money to get money: The role of corporate philanthropy in stakeholder reactions to IPOs. *Journal of Management Studies*, 51(7), 1118-1152.
- Jones, M.V & Coviello, N.E. (2005). Internationalisation: Conceptualizing an entrepreneurial process of behavior in time, *Journal of International Business Studies*, 36, 284-303.
- Jreizat, J. (2004). Governance in a globalizing world. *International journal of public administration*, 27(13-14), 1003-1029.
- Karim, K., Zouhaier, H & Adel, B. H. (2013). Poverty, governance and economic growth. *Journal of Governance and Regulation*, 2(3), 19-24.
- Kaufmann, D & Kraay, A. (2002). Growth without governance. *Economia*, 3 (1), 169-229.
- Kauppi, K. (2013). Extending the use of institutional theory in operations and supply chain management research: Review and research suggestions, *International Journal of Operations & Production Management*, 33(10), 1318-1345.
- Kerr, W & Nanda, R. (2011). Financing constraints and entrepreneurship In Audretsch D, Falck O, Heblich S (Eds) *Handbook on research on innovation and entrepreneurship*, Edward Elgar Publishing.
- Khan, M.H. (2007). Governance, economic growth and development since the 1960s. *DESA Working Paper*, 54, New York, UNDESA.
- Khine, K., Olugbode, M & Petracci, B. (2017). Can board gender diversity promote corporate social performance? *Corporate Governance: The International Journal of Business in Society*, 17(5), 789-802.
- Kilpatrick, J & Factor, R. (2000). Logistics in Canada survey: tracking year 2000 supply chain issues and trends. *Materials Management and Distribution*, 45(1), 16-20.
- Klapper, L., Amit, R & Guillén, M. F. (2010). Entrepreneurship and Firm Formation Across Countries in *International Differences in Entrepreneurship*, 4, 129-158. University of Chicago Press.
- Klepper, S. (1997). Industry life cycles. *Industrial and corporate change*, 6(1), 145-182.
- Knight, T., Hossain, F & Rees, C. J. (2009). Microfinance and the commercial banking system: perspectives from Barbados. *Progress in Development Studies*, 9(2), 115-125.
- Koellinger, P. D & Roy Thurik, A. (2012). Entrepreneurship and the business cycle. *Review of Economics and Statistics*, 94(4), 1143-1156.
- Koh, L., Dolgui, A & Sarkis, J. (2020). Blockchain in transport and logistics-paradigms and transitions, *International Journal of Production Research*, 7, 2054-2062.

- Kozel, V & Parker, B. (2000). Integrated approaches to poverty assessment in India. In Michael Bamberger, ed., *Integrating quantitative and qualitative research in development projects*, 59-68. Washington, D.C, World Bank.
- Kuivalainen, O., Puumalainen, K., Sintonen, S & Kylaheido, K. (2010). Organisation capabilities and the internationalization of small and medium-sized information and communications technology firm. *Journal of International Entrepreneurship*, 8(2), 135-155.
- Labelle, R., Francoeur, C & Lakhil, F. (2015). To regulate or not to regulate? Early evidence on the means used around the world to promote gender diversity in the boardroom. *Gender, Work & Organization*, 22(4), 339-363.
- Lehtonen, M. (2004). The environmental-social interface of sustainable development: capabilities, social capital, institutions. *Ecological economics*, 49(2), 199-214.
- Lerner, R. M. (2007). Developmental science, developmental systems, and contemporary theories of human development. In W Damon and R M Lerner (Eds), *Theoretical Models of Human Development, Handbook of child psychology*, 1-17. Hoboken, NJ: Wiley.
- Lévesque, M & Shepherd, D. A. (2004). Entrepreneurs' choice of entry strategy in emerging and developed markets. *Journal of Business Venturing*, 19(1), 29-54.
- Li, L. (2014). *Managing Supply Chain and Logistics, Competitive Strategy for a Sustainable Future*, Singapore, World Scientific Publishing Company.
- Lian, Y., Sepehri, M & Foley, M. (2011). Corporate cash holdings and financial crisis: an empirical study of Chinese companies. *Eurasian Business Review*, 1(2), 112-124.
- Ligthelm, A.A. (2011). An analysis of entrepreneurship variation in small (informal) business sustainability in South Africa. In *ICSB World Conference Proceedings* (p. 1). International Council for Small Business (ICSB).
- Loader, B. (Ed.). (1997). *The governance of cyberspace: Politics, technology and global restructuring*. Psychology Press.
- Loske, D. (2020). The impact of COVID-19 on transport volume and freight capacity dynamics: An empirical analysis in German food retail logistics. *Transportation Research Interdisciplinary Perspectives*, 6, 100165.
- Luke, T.C & Rodrigue, J. P. (2008). Protecting public health and global freight transportation systems during an influenza pandemic. *American journal of disaster medicine*, 3(2), 99-107.
- Lukka, K. (2003). The constructive research approaches. In Ojala, L. and Hilmola, O-P. (eds.) *Case study research in logistics*. Publications of the Turku School of Economics and Business Administration, Series B 1: (2003) 83-101.
- Luo, Y & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4), 481-498.
- Malchow-Møller, N., Schjerning, B & Sørensen, A. (2011). Entrepreneurship, job creation and wage growth. *Small Business Economics*, 36(1), 15-32.
- Maloney, W. (2004). Informality Revisited. *World Development*, 32: 1159-78.
- Mann, C. (2012). Supply chain logistics, trade facilitation and international trade: A macroeconomic policy view. *Journal of Supply Chain Management*, 48 (3), 7- 14.
- March, J.G. (1991). Exploration and Exploitation in Organizational Learning. *Organization Science*, 2 (1), 71-87.
- Martin, C. (2011). *Logistics and Supply Chain Management: creating value-adding networks*, Edinburgh, Pearson Education.
- McKenzie, D.J. (2005) Measuring inequality with asset indicators. *Journal of Population Economics* 18, 229-260.
- McNulty, T., Zattoni, A & Douglas, T. (2013). Developing corporate governance research through qualitative methods: A review of previous studies. *Corporate Governance: An International Review*, 21(2), 183-198.
- Miles, M.B & Huberman, A.M. (1994). *Qualitative Data Analysis: An Expanded Source Book*. Thousand Oaks, CA: Sage.
- Miles, M. B., Huberman, A. M & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*, Thousand Oaks, CA: SAGE Publications, Ltd.
- Min, S., Roath, A.S., Daugherty, P.J., Genchev, S.E., Chen, H., Arndt, A.D. and Glenn Richey, R. (2005), Supply chain collaboration: what's happening? *The International Journal of Logistics Management*, 16(2), 237-256.
- Misangyi, V. F., & Acharya, A. G. (2014). Substitutes or complements? A configurational examination of corporate governance mechanisms. *Academy of Management Journal*, 57(6), 1681-1705.
- Moore, M. (2001). Political Underdevelopment: What causes 'bad governance'. *Public Management Review*, 3(3), 385-418.
- Moyer, J.D & Hedden, S. (2020). Are we on the right path to achieve the sustainable development goals? *World Development*, 127(104749).

- Muffels, R & Fouarge D. (2001). Social Exclusion and Poverty: Definition, Public Debate and Empirical Evidence in the Netherlands. In *Social exclusion and European policy*, edited by Mayes D.G., Berghman J. & Salais R., Northampton, MA: Edward Elgar, pp. 93-124.
- Muttakin, M. B., Khan, A & Subramaniam, N. (2015). Firm characteristics, board diversity and corporate social responsibility: Evidence from Bangladesh. *Pacific Accounting Review*, 27(3), 353-372.
- Nagpal, P. (2004). Use of Transaction Cost Economics Framework to Study IT Sourcing: Over-Application or Under-Theorising. *Sprouts: Working Papers on Information Environments, Systems and Organizations*, 4(2), 98-110.
- Nagpal, T & Rose, R. (2014). *Message, Method, and Messenger: Literature Survey*, Research Report, Urban Institute.
- Nakagawa, Y & Shaw, R. (2004). Social capital: A missing link to disaster recovery. *International Journal of Mass Emergencies and Disasters*, 22(1), 5-34.
- Naude, W.A. (2004) The effects of policy, institutions and geography on economic growth in Africa: An econometric study based on cross-section and panel data. *Journal of International Development*, 16, 821-849.
- Naudé, W. (2010). Entrepreneurship, developing countries, and development economics: new approaches and insights. *Small business economics*, 34(1), 1.
- Naudé, W. (2011). Entrepreneurship is not a binding constraint on growth and development in the poorest countries. *World Development*, 39(1), 33-44.
- Nee, V. (2005). The new institutionalisms in economics and sociology. *The handbook of economic sociology*, 2, 49-74.
- Nichter, S & Goldmark, L. (2009). Small firm growth in developing countries. *World development*, 37(9), 1453-1464.
- North, D.C. (1991). Institutions. *Journal of economic perspectives*, 5(1), 97-112.
- Novillo Villegas, S. M & Haasis, H. D. (2017). Supply chain flexibility and SMEs internationalisation: A conceptual framework. In *Digitalisation in Supply Chain Management and Logistics: Smart and Digital Solutions for an Industry 4.0 Environment. Proceedings of the Hamburg International Conference of Logistics (HICL)*, 23, 195-212.
- OECD. (2001). *Sustainable Development: Critical Issues*. Paris, OECD.
- Olate, R. (2003). *Local Institutions, Social Capital and Capabilities: Challenges for Development and Social Intervention in Latin America*. Draft Paper Presented at the Professor Douglass North PhD Seminar, Center for New Institutional Social Sciences, Washington University in St. Louis, 29 October.
- Oldekop, J.A., Horner, R., Hulme, D., Adhikari, R., Agarwal, B., Alford, M., Bakewell, O., Banks, N., Barrientos, S., Bastia, T & Bebbington, A.J. (2020). COVID-19 and the case for global development. *World Development*, 134, 105044.
- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views, *Strategic Management Journal*, 18(9), 697-713
- Orrù, M., Biggart, N. W & Hamilton, G. G. (1991). Organisational isomorphism in East Asia. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Palmer, D. A & Biggart, N. W. (2002). Organisational institutions. In J. A. C. Baum (Ed.), *The blackwell companion to organizations*. Oxford: Blackwell.
- Pan, X., Chen, X & Ning, L. (2018). The roles of macro and micro institutions in corporate social responsibility (CSR). *Management Decision*, 56(5), 955-971.
- Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park, CA: Sage Publications, Inc.
- Peng, M. W. (2002). Towards an institution-based view of business strategy. *Asia Pacific Journal of Management*, 19(2-3), 251-267.
- Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. New York: John Wiley.
- Pettit, T. J., Croxton, K. L & Fiksel, J. (2019). The evolution of resilience in supply chain management: a retrospective on ensuring supply chain resilience. *Journal of Business Logistics*, 40(1), 56-65.
- Pisani, M.J & Pagán, J. A. (2004). Sectoral selection and informality: A Nicaraguan case study. *Review of development economics*, 8(4), 541-556.
- Ponte, S. (2008). Developing a 'vertical' dimension to chronic poverty research: Some lessons from global value chain analysis. *Working Paper, #111*, Chronic Poverty Research Center.
- Porter, M. (1990). *The Competitive Advantage of Nations*. New York, Free Press.
- Porter, M.E. (2001). The value chain and competitive advantage. In *Understanding Business Processes*, Barnes, D (Ed). London, UK, Routledge. 50-66.

- Porto, G. (2006). Using Survey Data to Assess the Distributional Effects of Trade Policy, *Journal of International Economics*, 70, 140-160.
- Post, C., Rahman, N & Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility, *Business & Society*, 50(1), 189-223.
- Prahalad, C. K & Hammond, A. (2002). Serving the world's poor, profitably. *Harvard Business Review*, 80(9): 48-57.
- Prater, E., Biehl, M & Smith, M. A. (2001). International supply chain agility - Tradeoffs between flexibility and uncertainty. *International journal of operations & production management*.
- Premand, P., Brodmann, S., Almeida, R., Grun, R & Barouni, M. (2012). *Entrepreneurship training and self-employment among university graduates: evidence from a randomized trial in Tunisia*. Washington, DC, The World Bank.
- Purushothaman, M., Tower, G., Hancock, R & Taplin, R. (2000). Determinants of corporate social reporting practices of listed Singapore companies. *Pacific Accounting Review*, 12(2): 101-133.
- Putnam, R. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Quatraro, F & Vivarelli, F. (2015). Drivers of entrepreneurship and post-entry performance of newborn firms in developing countries. *World Bank Research Observer*, Oxford University Press (OUP), 30 (2), 277-305.
- Ramgooty-Wong, A. (2000). CEO attitudes toward women managers in corporate Mauritius. *Women in Management Review*, 15(4), 184-193.
- Rauch, A., Wiklund, J., Lumpkin, G. T & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship theory and practice*, 33(3), 761-787.
- Raue, J.S & Wieland, A. (2015). The interplay of different types of governance in horizontal cooperations: A view on logistics service providers, *The International Journal of Logistics Management*, 26(2), 401-423.
- Ravallion, M., Jolliffe, D & Margitic, J. (2018). Social Protection and Economic Development: Are the Poorest Being Lifted-Up or Left-Behind?, NBER Working Papers 24665, National Bureau of Economic Research, Inc.
- Reichhart, A & Holweg, M. (2007). Creating the customer-responsive supply chain: a reconciliation of concepts, *International Journal of Operations and Production Management*, 27(11), 1144-1172.
- Richey, R.G., Skipper, J. B & Hanna, J. B. (2009). Minimizing supply chain disruption risk through enhanced flexibility. *International Journal of Physical Distribution & Logistics Management*.
- Richey Jr, R.G., Roath, A. S., Whipple, J. M & Fawcett, S. E. (2010). Exploring a governance theory of supply chain management: barriers and facilitators to integration. *Journal of business logistics*, 31(1), 237-256.
- Rodrik, D. (2009). The New Development Economics: We Shall Experiment, but How Shall We Learn? In Cohen J. & Easterly W. (Eds.), *What Works in Development? Thinking Big and Thinking Small*, 24-47. Brookings Institution Press.
- Roland, G. (2004). Understanding institutional change: fast-moving and slow-moving institutions. *Studies in Comparative International Development*, 38, 109-131.
- Rolle, J. D., Billy, I., Acevedo, R & Kisato, J. (2016). Preparing Students for Entrepreneurship Careers. *American International Journal of Humanities and Social Science*, 2(6).
- Rolle, J & Kisato, J. (2019). The future of work and entrepreneurship for the underserved. *The Business & Management Review*, 10(2), 224-234.
- Ruef, M & Scott, W. R. (1998). A multidimensional model of organisational legitimacy: hospital survival in changing institutional environments. *Administrative Science Quarterly*, 43, 877-904.
- Rukanova, B., Zuiderwijk-van Eijk, A., Das, M., Tan, Y. H & Männistö, T. (2020). Collective Data Analytics Capability Building Processes: A Governance Model. In *Proceedings of Ongoing Research, Practitioners, Workshops, Posters, and Projects of the International Conference EGOV-CeDEM-ePart 2020*. Digital Government Society.
- Saadat, S., Rawtani, D & Hussain, C. M. (2020). Environmental perspective of COVID-19. *Science of The Total Environment*, 728, 138870.
- Sager, T. (1990). Notions of Flexibility in Planning-related Literature. *Nordic Institute for Studies in Urban and Regional Planning*. NORDPLAN, 1990:5.
- Sanchez, R. (1995). Strategic flexibility in product competition. *Strategic Management Journal*, 16, 135-159.
- Schneider, F & Enste, D. H. (2000). Shadow economies: Size, causes, and consequences. *Journal of Economic Literature*, 38(1), 77-114.

- Scott, W. R. (2005). Institutional theory: Contributing to a theoretical research program. *Great minds in management: The process of theory development*, 37(2), 460-484.
- Scott, W. R. (2008a). *Institutions and organizations: ideas and interests* (3rd ed.). Thousand Oaks, CA: Sage.
- Scott, W.R. (2008b). Approaching adulthood: the maturing of institutional theory. *Theory and Society*, 37(5), 427-442.
- Sen, A. (1992). *Inequality Re-examined*. Cambridge, MA: Harvard University Press.
- Sen, A. (1999). *Development as Freedom*. New York: Anchor Books.
- Sharma, H. B., Vanapalli, K. R., Cheela, V. S., Ranjan, V. P., Jaglan, A. K., Dubey, B., Goel, S & Bhattacharya, J. (2020). Challenges, opportunities, and innovations for effective solid waste management during and post COVID-19 pandemic. *Resources, Conservation and Recycling*, 162, 105052.
- Shleifer, A & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Skipper, J.B & Hanna, J.B. (2009). Minimizing supply chain disruption risk through enhanced flexibility, *International Journal of Physical Distribution & Logistics Management*, 39(5), 404-427.
- Skjoett-Larsen, T., Thernøe, C & Andresen, C. (2003). Supply chain collaboration. *International journal of physical distribution & logistics management*, 33(6), 531-549.
- Smith, B.C. (2007). *Good governance and development*. London, Palgrave and McMillan.
- Smith, K.G & Hitt, M.A. (Eds.). (2007). *Great minds in management: the process of theory development*. New York: Oxford University Press.**
- Smith, G. P & Wenger, D. (2007). Sustainable disaster recovery: Operationalising an existing agenda. In *Handbook of disaster research* (pp. 234-257). Springer, New York, NY.
- Sonobe, T., Akoten, J. E & Otsuka, K. (2011). The growth process of informal enterprises in sub-Saharan Africa: a case study of a metalworking cluster in Nairobi. *Small Business Economics*, 36(3), 323-335.
- Spencer, J.W & Gomez, C. (2004). The relationship among national institutional structures, economic factors, and domestic entrepreneurial activity: A multicountry study, **Journal of Business Research**, 57(10), 1098-1107.
- Stoker, G. (2018). Governance as theory: five propositions. *International Social Science Journal*, 68 (227-228), 15-24.
- Stone, W & Hughes, J. (2002). *Measuring social capital: towards a standardised approach*. Paper Presented at the 2002 Australasian Evaluation Society International Conference, Wollongong, Australia, October/November.
- Sumner, A., Ortiz-Juarez, C & Hoy, E. (2020). *Precairety and the pandemic: COVID-19 and poverty incidence, intensity, and severity in developing countries* (No. wp-2020-77). World Institute for Development Economic Research (UNU-WIDER).
- Tang, L & Liu, H. (2011). Leveraging social media networks for classification. *Data Mining and Knowledge Discovery*, 23(3), 447-478.
- Tate, W. L., Ellram, L. M., & Kirchoff, J. F. (2010). Corporate social responsibility reports: a thematic analysis related to supply chain management. *Journal of supply chain management*, 46(1), 19-44.
- Todeva, E & Knoke, D. (2005). Strategic alliances and models of collaboration, *Management Decision*, 43(1), 123-148.
- Torres, R & Momsen, J. H. (2004). Challenges and potential for linking tourism and agriculture to achieve pro-poor tourism objectives. *Progress in Development Studies*, 4(4), 294-318.
- Tracey, P & Phillips, N. (2011). Entrepreneurship in Emerging Markets. *Management International Review*. 51(1), 23-39.
- United Nations (UN). (2020). *Shared Responsibility, Global Solidarity: Responding to the socio-economic impacts of COVID-19*. UN Secretary General, New York, March 2020.
https://www.un.org/sites/un2.un.org/files/sg_report_socioeconomic_impact_of_covid19.pdf
- UNDP. (2000). *Overcoming Human Poverty: United Nations Development Programme Poverty Report 2000*. New York: United Nations Development Programme (UNDP).
- UNDP. (2003). *Human Development Report 2003: Millennium Development Goals – A Compact Among Nations to End Human Poverty*, New York, Oxford University Press.
- Van de Walle, S & Bouckaert, G. (2007). Perceptions of productivity and performance in Europe and the United States. *International Journal of Public Administration*, 30 (11), 1123-1140.
- Van Praag, C. M & Versloot, P. H. (2007). What is the value of entrepreneurship? A review of recent research. *Small business economics*, 29(4), 351-382.
- Varshney, A. (1993). *Beyond urban bias*. London, Frank Cass and Routledge.

- Verner, D & Alda, E. (2004). Youth at risk, social exclusion, and intergenerational poverty dynamics: a new survey instrument with application to Brazil. *Policy Research Working Paper Series*, No. 3296. Washington, DC: World Bank.
- Vivarelli, M. (2004). Are All the Potential Entrepreneurs So Good? *Small Business Economics*, 23, 41-9.
- Vivarelli, M. (2012). *Drivers of entrepreneurship and post-entry performance: microeconomic evidence from advanced and developing countries*. Washington, DC, The World Bank.
- Vivarelli, M. (2013). Is Entrepreneurship Necessarily Good? Microeconomic Evidence from Developed and Developing Countries, *Industrial and Corporate Change*, 22, 1453-95.
- Wadhwa, S and Roe, K.S. (2003). Flexibility and Agility for Enterprise Synchronisation: Knowledge and Innovation Management Towards Flexagility, *Studies in Informatics and Control*, 12 (2), 1-28.
- Wagle, U. (2000). The policy science of democracy: The issues of methodology and citizen participation, *Policy Sciences*, 33(2), 207-223.
- Wennekers, S., Van Wennekers, A., Thurik, R & Reynolds, P. (2005). Nascent entrepreneurship and the level of economic development. *Small business economics*, 24(3), 293-309.
- White, G. (1997). Civil society, social exclusion and poverty alleviation, In C. Gore & J Figueiredo (Eds.), *Social Exclusion and Anti-Poverty Policy: A Debate - Research Series 110*. Geneva: International Institute for Labour Studies (IILS).
- Williams, T., Worley, C.D & Lawler, E. E. (2013). The agility factor. *Strategy and Business*. Columbia Business School.
- Williamson, O. E. (1979). Transaction-cost economics: the governance of contractual relations. *The journal of Law and Economics*, 22(2), 233-261.
- Williamson, O.E. (1985). *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, The Free Press, New York, NY.
- Williamson, O.E. (1998). Transaction Cost Economics: How It Works, Where It is Headed. *De Economist*, 146, 23-58.
- Williamson O.E. (1999). Strategy research: governance and competence perspectives. *Strategic Management Journal*, 20(12), 1087-1108.
- Winters, L.A., McCulloch, N & McKay, A. (2004). Trade Liberalization and Poverty: The Evidence So Far. *Journal of Economic Literature*, 42 (1): 72-115.
- Wong, C. W., Lai, K. H & Cheng, T. C. E. (2011). Value of information integration to supply chain management: roles of internal and external contingencies. *Journal of Management Information Systems*, 28(3), 161-200.
- Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. The contribution of Human and Social Capital to Sustained Economic Growth and Well-Being. *International Symposium Report*. Human Resources Development Canada (HRDC) and OECD. Chapter 5, pp. 65-88
- Woolcock, M & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The world bank research observer*, 15(2), 225-249.
- World Bank. (2001). *World Development Report 2000/2001: Attacking Poverty*. Oxford: Oxford University Press.
- World Bank. (2013). *Global financial development report 2014: Financial inclusion* (Vol. 2). Washington, DC, World Bank Publications.
- World Bank. (2015). *World Development Report 2015: Mind, Society, and Behavior*. Washington, DC: World Bank.
- World Bank. (2016). *World Development Indicators, 2016*. Washington, DC, International Bank for Reconstruction and Development/The World Bank.
- World Bank. (2020). *World Development Indicators: Sustainable energy for all*. Washington, DC, International Bank for Reconstruction and Development/The World Bank.
- World Health Organisation (WHO). (2020a). *Draft landscape of COVID-19 candidate vaccines* [Internet]. Geneva: WHO; 2020 [updated 31 July 2020; cited 10 August 2020]. Available from: <https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines>.
- WHO? (2020b). *Boost for global response to covid-19 as economies worldwide formally sign up to covax facility*. The World Health Organization. URL: (accessed 9.26.2020). Available from: <https://www.who.int/news-room/detail/21-09-2020-boost-for-global-response-to-covid-19-as-economies-worldwide-formally-sign-up-to-covax-facility>

- WHO? (2021). *In the COVID-19 vaccine race, we either win together or lose together*. The World Health Organization. URL: (accessed 10.02.2021). Available from: <https://www.who.int/news/item/10-02-2021-in-the-covid-19-vaccine-race-we-either-win-together-or-lose-together>.
- Yang, J. (2014). Supply chain agility: Securing performance for Chinese manufacturers. *International Journal of Production Economics*, 150, 104-113.
- Yin, R. (2013). *Case study research: Design and Method*. United Kingdom: Sage publication.
- Zambrano-Monserrate, M. A., Ruano, M. A & Sanchez-Alcalde, L. (2020). Indirect effects of COVID-19 on the environment. *Science of the Total Environment*, 138813.
- Zucchella, A., Palamara, G & Denicolai, S. (2007). The drivers of the early internationalisation of the firm. *Journal of World Business*, 42: 268–280.
-