GSB UNIVERSITY OF CAPE TOWN | DEFIC DEVELOPMENT FINANCE CENTRE | MCom

Exploring the catalytic influence of development finance institutions (DFIs) on South African venture capital (VC)

A Dissertation
presented to

The **Development Finance Centre (DEFIC)**
Graduate School of Business
University of Cape Town

In partial fulfilment
of the requirements for the Degree of
Master of Commerce in Development Finance

by

Renée Hunter
HNTREN004

July 2022

Supervisors: Xolisa Dhlamini
Assoc./Prof. Abdul Latif Alhassan

University of Cape Town

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

University of Cape Town

Plagiarism declaration

1. I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.
2. I have used the APA convention for citation and referencing. Each contribution to, and quotation in, this dissertation from the work(s) of other people has been attributed, and has been cited and referenced.
3. This dissertation is my own work.
4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.
5. I acknowledge that copying someone else's assignment or essay, or part of it, is wrong, and declare that this is my own work.

Signed:

Signed by candidate

Renée Suzanne Hunter

Table of contents

Plagiarism declaration 1

Table of contents 2

Abstract 4

List of acronyms and abbreviations 6

Acknowledgements 8

Chapter 1: Introduction 1

1.1 Background and context 1
1.2 Research problem statement 2
1.3 Research objectives 3
1.4 Significance of research 4
1.5 Constraints 4
1.6 Organisation of the research 6

Chapter 2: Literature review 7

2.1 Introduction 7
2.2 Definition of terms and concepts 7
2.2.1 Private equity and venture capital 7
2.2.2 VC activities 7
2.2.3 DFIs and development banks 9
2.2.4 DFI operational principles 11
2.2.5 The mechanisms of DFIs 12
2.2.5.1 Financial mechanisms 12
2.2.5.2 Non-financial mechanisms 13
2.2.5.2.1 General market support 13
2.2.5.2.2 Project pipeline support 14
2.2.5.2.3 Project assistance 15
2.3 Private equity and development finance: The role of DFIs in private sector growth 15
2.3.1 Fostering private sector growth 15
2.3.2 Bridging financial gaps 16
2.3.3 Addressing market failures 17
2.3.4 Market incubation 18
2.4 Empirical literature 19
2.4.1 Description and comparison of DFIs 19
2.4.2 DFI's developmental impact 19
2.4.3 DFIs' impact measurement and reporting 20
2.5 Conceptual framework 20
2.6 Chapter summary 21

Chapter 3: Methodology 23

3.1 Introduction 23
3.2 Research approach 23
3.3 Research design 24
3.3.1 Population and unit of analysis 24
3.3.2 Sampling and data collection 24
3.3.3 Data analysis 25
3.3.4 Research quality assurance 26
3.3.4.1 Credibility 27
3.3.4.2 Transferability 27
3.3.4.3 Dependability 27
3.3.4.4 Confirmability 27
3.3.4.5 Reflexivity 27
Chapter 4: Discussion of findings 29
4.1 Introduction 29
4.2 Profile of interview respondents 29
4.3 Discussion of findings 31
4.3.1. DFIs' mechanisms used in engagement with VC activities 32
4.3.2 VCs' experience of DFI engagements 39
4.3.2.1. VCs' negative experiences of engagements with DFIs' (financial) mechanisms 40
4.3.2.2. VCs' positive experiences of engagements with DFIs' (financial and non-financial) mechanisms 44
4.3.3. DFIs' mechanisms influencing VC activities 49
4.3.3.1. DFIs' financial mechanisms influencing VC activities 49
4.3.3.2. DFIs' non-financial mechanisms influencing VC activities 52
4.3.3.3. To what extent can we consider DFIs' mechanisms directed at VC activities catalytic? 57
4.4 Discussion of validity & reliability 60
Chapter 5: Conclusion and recommendations 62
5.1 Introduction 62
5.2 Summary and conclusions of study 62
5.3 Policy recommendations 63
5.4 Avenues for future research 65
References 67
Appendix: Interview discussion guide 73

Abstract

Development finance institutions (DFIs) have various roles to play in capital markets. Specifically, the three theoretical principles according to which DFIs are supposed to operate are 1) Financial sustainability, 2) Additionality and 3) Catalytic influence. The latter principle means that DFIs are expected, through using the financial and non-financial interventions at their disposal, to influence the investment activities and decision-making of other (private) sector investors, to enter into new markets, change their view on investment risks, or focus on achieving particular types of impact with their investment. Among others, this influence is theoretically aimed at venture capital (VC) activities.

This research investigates the extent to which DFIs engage with VC activities in South Africa, and the extent to which these engagements may lead to influencing these VC activities. The data is collected through semi-structured interviews with VC stakeholders with activities in South Africa, and a thematic analysis is employed to uncover common themes and insights.

The findings show that DFIs engage with equity in VC funds' establishment and investment decisions, and with debt in VCs' value creation; and that general market support influences the frameworks adopted, and market approaches used in VC funds' strategies and investment strategies. These engagements are experienced in both negative (due to slow and bureaucratic processes, feelings of dependency and risks of crowding out) and positive ways (due to good collaborative practices, practical benefits of DFIs investing in VC funds, and the skills and experience contributed by DFIs). The themes around influence of DFI mechanisms on VC activities are as follows: DFI investments enable VC funds to come into existence; VC funds' parameters are influenced by DFI requirements; DFIs' interests in direct investments influences VCs' investment decisions; DFI frameworks are adopted by VCs; DFIs' market and impact perspectives inform VCs' perspectives; DFIs' due diligence informs VCs' investment decisions; and VC investees receive DFI technical assistance.

Ultimately, the study concludes that DFIs have catalytic influence on VC activities only in some respects. Specifically, DFIs do have catalytic influence on VC activities through their equity investments, in that these activities inform and direct the focus areas, parameters and exclusions of VC investments. However, DFIs do *not* have catalytic influence on VC

activities through their general market support, since VCs that are likely to engage with DFIs are already sufficiently aligned in terms of market and impact outlook.

Based on the findings, and to ensure that DFIs are as impactful and catalytic as they can be, this research recommends that DFI activities focus on and specialise in those areas where they can have most catalytic influence. This means focusing on funding VC funds, rather than making direct investments into early-stage ventures. Moreover, DFIs would be advised to adapt their structures and processes to be more aligned with the operating realities of VC activities - specifically to be more nimble and less bureaucratic, allowing DFIs to meaningfully and productively contribute to a fast-moving part of the industry.

List of tables

Table 1: DFIs defined: A summary 10

Table 2: DFIs' mechanisms used in engaging VC activities: An investigative framework 21

Table 3: Trustworthiness: Definitions of quality criteria in qualitative research 28

Table 4: Summary of interview respondents 30

Table 5: DFIs' mechanisms used in engaging VC activities: Summarised themes 33

Table 6: VCs' experiences of engagements with DFIs' mechanisms: Themes 47

Table 7: DFIs' mechanisms influencing VC activities: Themes 55

Table 8: Exploring the catalytic influence of DFIs on VC activities: Summary 57

List of acronyms and abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
CDFA	Council for Development Finance Agencies
DBSA	Development Bank of Southern Africa
DFIs	development finance institutions
EBRD	European Bank for Reconstruction and Development
EDFI	Association of the European Development Finance Institutions
ESG	environmental, social & governance (factors)
FDI	foreign direct investment
IC	investment committee
LP	limited partner
MDB	multilateral development bank
MDFI	multilateral development finance institution
MSMEs	micro-, small- and medium-enterprises
NGO	non-governmental organisation
ODA	official development assistance
R&D	research & development
RFP	request for proposals
SAVCA	Southern African Venture Capital and Private Equity Association
SDGs	Sustainable Development Goals
SMEs	small- and medium-enterprises
TA	technical assistance

UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
VC	venture capital

Acknowledgements

I need to give credit where credit is due: My friends, family and extended networks are what made it possible for me to not only complete this thesis, but successfully round off this Master's degree.

Secondly, my parents, Pierre Hunter and Margriet Hunter-Human. Without you, none of this would have been possible. Not only has your belief and support been important on an emotional level, but your very practical financial support is what has enabled me to undertake this journey in the first place. Thank you, and I hope I've made you proud. Thank you also to my younger siblings, Elizabeth and William Hunter. Your graduations being hot on my heels (and overtaking me) definitely added some speed to me finishing things off!

Next comes a slew of friends who have needed to tread a careful balance between support, sympathy, allowing me to stick my head in the sand from time to time, and tough love. Nichola Beyers: Thanks for reminding me I captain my own thesis ship! Eden d'Oliveira and Rinelle Chetty: Thank you for your example, and showing me how it's done. Lerato Shai: You inspire me to be a better person, take on scary things, and to see them through. Thandwe Radebe, Jonathan Ruwanika, Daryn Munnik and Teboho Makhabane: From classmates to friends - thanks for the camaraderie, support, and for sharing your connections in the industry. Rowan Spazzoli: We've come full circle! Thanks for your unwavering belief friendo. And of course, my kick-ass family: Steph, Stefan, Leila, Hanna and Jacomien van der Westhuizen. You are absolute experts at the combination of sympathy and tough love, and while working on this project I have often heard Leila's voice in my head, derisively saying "Ag, Renée, come now, just get it done already", or Hanna cheering me on with a "Get it girl!".

Finally, thanks to the interviewees who generously made available their time for this research: Antonia Bothner, Chloé Bombole, Daniel Block, Dhanyal Davidson, Harry Davies, Jean Paul Ntungicimpaye, Kiendel Burritt, Kuhle Mnisi, Maelis Carraro and Nick Allen. Thanks to my supervisors Xolisa Dhlamini and Associate Professor Abdul Latif Alhassan - you have been most patient.

Chapter 1: Introduction

1.1 Background and context

The global development finance system requires increased collaboration across stakeholders, including the private sector, to close the USD 2.5 trillion funding gap for the Sustainable Development Goals (SDGs) in developing countries (Niculescu, 2017; United Nations, n.d.). Development finance institutions (DFIs) have an important role to play in encouraging, enabling and leveraging private sources of funding.

DFIs have a mandate to support development while operating under market incentives. They function under three principles (Dalberg, 2010): 1) Additionality (providing funding in countries, sectors or to organisations that would not have received funding otherwise) (Mudaliar, Moynihans, Bass, Roberts, & DeMarsh, 2016; te Velde, 2011); 2) Financial sustainability (making funding decisions that are economically viable and promote sustainable growth, thereby reducing countries' dependence on aid) (Massa, 2013); and 3) Their catalytic role. This last principle implies that DFIs, through their activities, are expected to unlock the contribution of more private funds (Massa, 2013; Settel, Chowdhury, & Orr, 2009). This can be done in a variety of ways, from directly co-investing with, or providing technical assistance to, other investors, through to the demonstration effect of successful investments. In this way DFIs are expected to encourage more investment, to influence the direction of that investment (into specific countries or sectors), and to encourage the adherence to certain standards with regards to governance (World Bank, 2015).

Because private sector funds are increasingly important for development (Niculescu, 2017), this catalytic role of DFIs is particularly interesting. As articulated by Savoy, Carter and Lemma (2016), "given their mandate to mobilise private investment, DFIs are at the centre of the emerging consensus around the role of the private sector in meeting development objectives." (p. 9)

However, little research has explored the potentially catalytic role of DFIs beyond measuring their financial leverage (Mirabile, Benn, & Sangaré, 2013) (also generally discussed in DFIs' annual reports (African Development Bank, 2019; Ahluwalia, Summers, Velasco, Birdsall, &

Morris, 2016; de Luna-Martínez & Vicente, 2012; Kingombe, Massa, & Willem, 2011; Savoy et al., 2016)). This makes for a situation in which “DFIs are powerful, but precise development tools, and ones that are not well understood by some policymakers” (Savoy et al., 2016, p. vi).

This thesis will provide an overview of the mechanisms used by DFIs with catalytic potential, both financial and non-financial, aimed at both direct and indirect impact on private investors. It will then investigate the extent to which these mechanisms have catalytic influence on the investment decisions of private sector investors, in particular venture capitalists.

Venture capital (VC) is chosen as a focus because it has a specific role to play in economic development. VC is uniquely suited to providing high-risk capital to small- and medium-sized enterprises (SMEs) (Ahmad, Reed, & Zhang, 2018). Both small businesses and as yet unproven technologies are heavily reliant on VC for their capital requirements (Lahaye, 2016) – and both have important economic development potential. South Africa is chosen as a focus country for practical reasons, as well as the fact that it is the region’s most developed market for private equity. With more VC investment activity (both in terms of value and number of deals) (Mudaliar et al., 2016), the research is expected to benefit from a richer evidence base in South Africa, as compared to other geographies.

Understanding how DFIs can influence venture capitalists will allow policymakers and development finance specialists in Africa to direct their strategic focus. Ultimately this can ensure more appropriate support mechanisms (including but not limited to funding) is directed to the right sectors and businesses (Xu, Ren, & Wu, 2019).

1.2 Research problem statement

An important operational principle for DFIs is to have catalytic influence on other (private sector) investors (including venture capitalists). From the literature, however, it is unclear what different mechanisms they might use for such catalytic influence, and to what extent they succeed in achieving it. This gap in the literature hinders the ability for DFIs to being market actors that can effectively influence VC as a tool to advance development finance objectives (Savoy et al., 2016; te Velde, 2011).

Ample research has been done on the contribution of DFIs' investments to socioeconomic development (Kang'ombe, 2017; Massa, 2011; Odedokun, 1996; Sinha, Bortes, & Grettve, 2010; te Velde, 2011; United Nations Conference on Trade and Development (UNCTAD), 2016). Research also exists on the extent to which DFIs' investments have leveraged additional private capital (Mirabile et al., 2013) (also reported on in DFIs' annual reports (African Development Bank, 2018; Ahluwalia et al., 2016; Kingombe et al., 2011)). However, little research exists that examines in more detail the full spectrum of DFIs' activities (Savoy et al., 2016). There is also little evidence to help determine the ways in which DFIs' mechanisms and activities influence private sector investors (te Velde, 2011).

A DFI's catalytic role can go beyond directly leveraging or catalysing additional funding. It can contribute to improved market perceptions, adjusted risk assessments, higher-quality services offered by other market players, and improved governance (World Bank, 2015). It is important to understand in more detail how investors (specifically VCs) perceive, engage with and act upon the financial and non-financial DFI mechanisms. This would enable DFI executives, policymakers, and the development finance community more broadly to understand the unique advantages and contributions of DFIs, and to better align activities for maximum developmental impact. Ultimately, this will benefit (1) the development finance ecosystem, through a better aligned and more impactful industry; (2) entrepreneurs and organisations in sectors that benefit from better development funding; as well as (3) the ultimate beneficiaries: citizens that benefit from greater socioeconomic development.

The research questions thus read as follows:

1) What are the different mechanisms that DFIs use in engaging with VC in South Africa?
2) How do private sector VCs experience engagements with DFIs?
3) To what extent can the identified DFIs' mechanisms be considered as catalysing VC activities in South Africa?

1.3 Research objectives

As mentioned above, the goal of this thesis is threefold:

1) To understand the mechanisms used by DFIs to catalyse VC activities in South Africa;

2) To understand VC stakeholders in South Africa experience engagement with these mechanisms as either positive or negative; and
3) To explore the extent to which these mechanisms have catalytic influence on the investment decisions of venture capitalists in South Africa.

If they indeed had catalytic influence, DFIs could positively influence venture capitalists to contribute more funding in ways that are more impactful for development. In particular, my expectations are that DFIs' catalytic mechanisms can influence venture capitalists to: (1) Increase their funding in South Africa overall; (2) Increase their funding specifically to sectors that are deemed (by DFIs) to be more impactful for development; and (3) Increase their funding specifically to types of firms that are more impactful for development.

1.4 Significance of research

> *"[T]he world is witnessing a renaissance of DFIs at both the international and national levels. As policymakers are attaching more and more importance to DFIs, it is of paramount importance to ensure that DFIs are well designed and managed so that they can realise their full potential to avoid the pitfalls of past failures" (Xu et al., 2019, p. 4).*

The insights from this thesis will assist in better understanding the functioning and impact of DFIs' mechanisms. DFIs are "powerful, but precise development tools [that are] not well understood by some policymakers" (Savoy et al., 2016, p. vi). A deeper appreciation of how private sector investors respond to DFIs' mechanisms will assist with improving those mechanisms and applying them with the greatest impact. Practically, it will allow DFI executives, policymakers and the development finance community to improve strategies around focus areas of DFIs and to plan their interactions with the private sector in a more impactful manner.

1.5 Constraints

There are a number of inevitable constraints to this research.

Firstly, due to the limited sample size, there are limits to the transferability and confirmability of the findings. Despite the mitigating efforts around thick descriptions and providing descriptions of the analytical process, there remains a risk that the findings are mostly

applicable to the specific interviewees included. This is discussed in Chapters 3 and 4, so that readers can interpret the results in relation to the sector they are applicable to.

Secondly, related again to transferability, the findings of this research risk not being applicable to other countries or regions. This could be due to the specific nature of the financial market in South Africa. Among other factors, South Africa has a more developed and active financial market than its neighbours and similar developing countries; South Africa has more activity from international investors; the country hosts a particularly large number of domestic DFIs that have been active for a number of decades; and South Africa has a large ecosystem providing support for investment and entrepreneurship (Mudaliar et al., 2016). Each of these factors may influence the relationship between DFIs and VCs in ways that are not applicable to other markets. Naturally, the findings of this research will not be applicable to the influence of DFIs on other market actors aside from VCs.

Thirdly, the overview of DFIs' mechanisms is non-exhaustive. The typology (see table 2) is based on DFIs' annual reports and secondary research, and is tested with interviewees. It has not, however, undergone review by representatives from DFIs. There is a risk that certain mechanisms are not discussed in this project, as only those included in the typology are included in the discussion guide. This risk is partially addressed by using a semi-structured interview approach, allowing interviewees to bring up other relevant DFI mechanisms.

Fourthly, there are some practical limitations to ensuring trustworthiness of the data. Due to privacy considerations, transcripts are not made available for perusal by others, and a full data audit will not be undertaken. Finally, only limited data triangulation is possible, given that this research is undertaken alone, and will depend on the inputs from interviewees to test interpretations from the transcripts.

With regards to ethics, limited issues are foreseen in this research. As with any research involving human subjects, there are of course concerns related to the privacy and security of the individuals involved. All reasonable efforts have been made to safeguard the interview transcripts and the data collected from those – notably including saving the recordings in a secure and password-protected manner. Moreover, all participants have been informed in a clear and straightforward manner of the purpose of the research, to ensure they could give informed consent to their participation. Ultimately the research questions investigated here

are not considered to be so sensitive as to give rise to significant ethical concerns, and the research process will be conducted in a way that complies with UCT ethical clearance requirements.

1.6 Organisation of the research

This thesis utilises the following structure: Chapter 1 has provided necessary background to the study, providing context around the origination and relevance of the topic, as well as positioning it within the field of development finance more broadly, and has described the problem statement and articulate the research question and sub-questions. Chapter 2 will provide a description of key terms and concepts, as well as a literature review to provide the background of existing research on which this thesis builds. Chapter 3 will describe the methodology in detail, providing all relevant details on the sample, the interview approach, and the iterations undergone throughout the research process. This chapter will highlight measures to ensure credibility, transferability, dependability and confirmability of the research. Chapter 4 will discuss the findings, providing an overview of the main themes that emerged from the interviews. Chapter 5 will finally link these themes to the overarching research questions and existing research, to finally provide a conclusion. Flowing from this will be practical recommendations for the field, as well as highlighted questions for future study that came up through this process.

Chapter 2: Literature review

2.1 Introduction

This literature review provides an overview of the relevant existing research, theories and gaps in knowledge. First, it first provides an overview of key terms and concepts. Second, it discusses the existing theories on DFIs' developmental impact through private sector growth. Third, it provides a framework for the different activities typically undertaken by VCs, which DFIs' interventions aim to target. Fourth, these theories are drawn together into the conceptual framework for the thesis.

2.2 Definition of terms and concepts

2.2.1 Private equity and venture capital

Private equity is described by Ahmad et al (2018) as "ownership interest or risk capital" (p. 12). The Southern African Venture Capital and Private Equity Association (SAVCA, 2019) defines venture capital as "financing that investors provide to businesses, in the start-up and early growth phases, that they believe have long term, high growth potential. These are deals predominantly funded by equity. For start-ups without access to capital markets, venture capital is an essential source of funding. Risk is typically high for investors" (p. 9). Venture capital is thus a specific type of financial tool which may be utilised by different types of market actors – including (public sector) DFIs, and private sector firms. It is the latter that this thesis focuses on, and refers to as VCs.

2.2.2 VC activities

The various DFI mechanisms and interventions (described in section 2.2.3 - 2.2.5) are intended to influence the various activities undertaken by VCs in the course of their work. It is therefore important to understand what these activities consist of.

A useful framework is provided by Isaksson (2006), who draws upon the work of various others (Bygrave & Timmons, 1992; Gorman & Sahlman, 1989; Tyebjee & Bruno, 1984). According to this framework, the activities undertaken by VCs can be clustered under five headings.

Firstly, a VC must establish the fund. Under this component of work falls determining the investment objectives, or strategy, for the VC fund, as well as raising the required capital. This strategy can be informed by many things, not least the ownership structure of the fund and the desired sources of capital.

Secondly, a VC must establish deal flow. This can be done either proactively (actively seeking out investable opportunities) or reactively (waiting for entrepreneurs to apply for funding). Sources for investment opportunities are varied, and can include informal networks, formal networks, formal events and intermediaries, among others.

Thirdly, a VC needs to determine and follow their process to arrive at an investment decision. This includes the processes of screening and valuation, as well as the negotiations involved in contracting. Fourthly, from the point of investing to the time of exit, the VC can be involved in various business development or value adding activities. This component of work covers the various activities that VCs undertake to ensure their investees are successful, over and above the financial capital that has been provided. Most of these activities are in fact non-financial – such as support to strategy development, active board membership, contacts to other stakeholders, and mentorship or advice on various aspects of the business (ranging from financial management to marketing). It is often said that it is these active contributions to their investees that sets VCs apart from other investors (Luukkonen & Maunula, 2007).

Fifthly, a VC needs to decide on an exit strategy. This is particularly important, as it is often the main source of profit – given that dividends are often not possible for the kind of early-stage ventures that VC firms invest in. This makes the value-added activities so important, as they serve to maximise the potential value to be gotten out of the eventual exit.

This framework will be used throughout this thesis to investigate the interaction between DFI mechanisms and VC activities. Other frameworks investigated (such as Bygrave & Timmons (1992), Tyebjee & Bruno (1984), and Gerken & Whittaker (2014)) focus mostly on the financial decisions that happen from deal flow through to exit (skimming over value creation). This framework, in contrast, explicitly includes consideration for wider strategy formation, as well as the varied ways in which value is added in non-financial ways. This wider lens will allow for a broader view through which to explore the catalytic potential of DFI interventions on VC activities.

2.2.3 DFIs and development banks

'Development finance institutions' (DFIs) are described by Dalberg (2010) as "government-controlled institutions that invest in sustainable private sector projects with the twofold objective of spurring development in developing countries while themselves remaining financially viable" (p. iv), which is echoed by Massa (2013), Mudaliar et al. (2016b) and Kang'ombe (2017). This definition incorporates four common characteristics of DFIs, namely: 1) an element of government control; 2) investments in private sector projects; 3) a mandate for development; and 4) the requirement to operate in a financially sustainable manner.

Some of these four characteristics are absent from the definition used by, among others, Savoy et al (2016), who describe DFIs as "government-backed institutions that invest in private-sector projects in low-income and middle-income countries" (p. v). Here, the explicit mention of the mandate for development and financial sustainability are absent - similarly so in Romero (2014). The fact that they invest in private-sector projects implies financial sustainability, to an extent, and the focus on low- and middle-income countries may imply a development mandate, but also reflects the understanding that private sector growth contributes to development in and of itself (see section 2.3).

Kingombe et al. (2011) similarly hold that DFIs are publicly owned, but include in their description that DFIs might invest in the public sector as well as the private sector. They don't specify that the focus needs to be on developing markets per se (although this is implied by the focus on 'donor countries').

Some descriptions of DFIs focus specifically on their intermediating role between the public and private sector, such as Ngozo (2017) - DFIs "operate in the intermediary space between public aid and private investment. They provide finance to the private sector for investments that promote development" (p. 118) - and Lee (2017) - who describes DFIs as "the original impact investors, expected to occupy the space and help bridge the gap between clearly public and clearly private projects with development impact" (p. 2).

Approaching DFIs from a different angle are Xu et al (2019), who define DFIs as "legally independent and government-supported financial institutions with explicit official missions to promote public policy objectives" (p. x). Neither the aim for development nor the need to be financially sustainable are explicitly mentioned. The development mandate is implied in the focus on 'public policy objectives', and the focus on financial sustainability is implied by talking about 'financial institutions'.

Table 1 provides a summary of the definitions of DFIs as described here.

Table 1: DFIs defined - a summary

	(Predominantly) government-controlled/government-owned	Investments in private sector projects or firms	Investment in public sector projects	In developing / low- or middle-income countries	Development mandate	Financial sustainability	Other
Dalberg (2010)	x	x		x	x	x	
Massa (2013)	x	x		x	x	x	
Mudaliar et al. (2016b)	x	x			x	x	
Kang'ombe (2017)	x	x		x	x	x	
EDFI (2016)	x	x		x	(x)		Aim for job creation and sustainable economic growth
Savoy et al. (2016)	x	x		x			
Romero (2014)	x	x		x			
Kingombe et al. (2011)	x	x	x				
Ngozo (2017)		x			x		Intermediaries between public and private investment
Lee (2017)		x	x		x		Bridge the gap between public and private

Source: Author's own, based on various sources listed

2.2.4 DFI operational principles

DFIs have three theoretical operational principles: The need to be additional, (financially) sustainable, and catalytic (see, among others, Dalberg Global Development Advisor, 2010; Sanford, 1975; Settel et al., 2009).

Additionality means, in Lemma's (2015) words: "DFI investments need to support the private sector in target country economies, hence they should not crowd out private sector investment. To this end DFI investments should only be undertaken where they are additional to what the local market would already offer" (p. 2). This simply means providing finance to countries, regions, sectors or firms that would *not* have received capital otherwise (te Velde, 2011) – in other words, to "go where other investors don't" (EDFI, 2016, p. 21). This is to ensure maximum impact and to avoid crowding out of private investors. This concept is straightforward, but challenging to prove. This is why Savoy et al (2016) call additionality "a term of art used by development financiers (not just DFIs)", given that "in practice, additionality can be hard to firmly demonstrate and measure" (pp. 9-10).

Sustainability (financial or otherwise) is in many ways the most straightforward of the three. It can apply to DFIs in two different ways: The DFI and its projects should have suitable levels of financial return, to clearly distinguish from aid, *or* the aim of DFIs should be sustainable development in the recipient countries or industries. Diamond (1996) defines the financial sustainability of the DFI itself as "the capacity to attract, on the basis of their own performance, the capital they require to pay their creditors, sustain their shareholders' interest, and support their own growth" (Diamond 1996, as quoted on Thorne, 2011, p. 24). This is echoed by Settel et al (2009) and Dalberg (2010). The focus on sustainable development reflects a desire for DFIs to fund industries or countries that can develop independently, without continued assistance by outside institutions (such as DFIs, but also other donor support). Massa (2013), for example, states that "DFIs promote sustainable growth by reducing dependence on aid and improving governance and environmental standards as well as good business practises" (p. 1). Overall, 'financial sustainability' is more commonly understood to refer to the projects of the DFI itself, rather than 'sustainable development'. 'Financial sustainability' in this thesis thus refers to DFIs' projects and finances.

The third operating principle will be examined by this thesis: the expectation that DFIs have catalytic influence. Similar to additionality, this concept relates to increasing the levels of funding available. There is a difference between DFIs being additional and being catalytic. Additionality refers to the DFI's own funding, whereas the catalytic influence targets other investors to increase their contributions. The difference lies in the influence on others. The African Development Bank (AfDB, 2018) define their catalytic role as "the 'multiplier effect' of lending, investment or technical assistance by the Bank in support of a public-sector or private-sector operator in a country or countries, in terms of attracting additional private investment into the sector or the economy at large beyond the specific operations supported by the Bank" (p. 56). The EDFI (2016), for their part, describe this catalytic effect as 'paving the way for others': "Mobilising other investors by sharing risk, being first-movers demonstrating to other investors how to invest in high-risk projects, and by sharing expertise" (p. 21). These definitions reflect that the range of interventions and mechanisms used can be very broad. This range of mechanisms will be further described in the following subsection.

2.2.5 The mechanisms of DFIs

As briefly touched upon in previous sections, DFIs have a variety of mechanisms at their disposal with which to achieve their objectives. Given this research's focus on DFIs' intended catalytic influence on private investors, this section will not describe those mechanisms that are *only* applicable to the public sector (although there is some overlap). At a high level, the mechanisms that DFIs have at their disposal can be categorised as either financial or non-financial.

2.2.5.1 Financial mechanisms

Just like other large financial institutions, DFIs have at their disposal debt, equity and guarantee products, with debt representing the overwhelming majority of DFI funding (Kenny et al., 2018). There is also a large category of alternative financial instruments that DFIs make use of, such as blended finance instruments, insurance products and other innovative financial solutions, such as The Currency Exchange (TCX) Fund (Dalberg, 2010; Garikayi, 2019; George & Prabhu, 2000; Mudaliar et al., 2015; Romero & Van de Poel, 2014; Runde & Milner, 2019; TCX, n.d.). These tools are designed to be financially sustainable, and their contribution is considered additional when provided to companies, sectors or countries that would otherwise not have had access to (sufficient or appropriate) funding.

They may also be catalytic, or serve to attract more private sector funding, through their first-mover demonstration effect and the comfort that this can provide other investors in unproven or risky sectors/markets, or through sharing some of their risk (Massa, 2013, p. 1). It is through leading by example (Loos, 2010, p. 54) and correcting risk perceptions (te Velde, 2011, p. 5) that this is achieved. In fact, "[a]rguably the most important impact DFIs can have is to demonstrate convincingly to private investors that their patient approach to investing in developing countries is financially viable, sustainable, and involves an acceptable level of risk" (Dalberg, 2010, p. 46).

2.2.5.2 Non-financial mechanisms

Whereas the different financial mechanisms of DFIs can be classified in a relatively straightforward way, their non-financial mechanisms are less clear-cut. They can be divided roughly into three buckets: General market support; project pipeline support; and specific project assistance. A common term for such support is 'technical assistance' (TA) (Kingombe et al., 2011; Massa, 2013; Romero & Van de Poel, 2014; te Velde, 2011). Such TA can be linked to specific financial contributions made by DFIs (such as an impact assessment). Sometimes, they are funded by other donor organisations and executed by DFIs (such as research). They might also be a form of non-financial TA provided by the DFI. In this case, the DFI might pay for the assistance to be executed by another organisation, or they might provide the service themselves at zero- or discounted rates.

The following sections provide a description of the different types of non-financial mechanisms that DFIs may use, but they do not aim to provide a comprehensive list. Rather, this overview should be seen as an illustration of the typology of different mechanisms, and as a guideline for the analysis undertaken in this thesis.

2.2.5.2.1 General market support

DFIs can ensure that market stakeholders are sufficiently comfortable to enter a market or sector, and they can ensure the general health of that market. They can achieve this by collaborating with policymakers and regulators to contribute to general market growth. Through a meta-evaluation of DFIs' mechanisms Massa (2013) points out that "To promote technology development, DFIs should aim to foster greater managerial and innovation

capabilities, remove regulatory, information and financing obstacles, and promote technological entrepreneurship" (p. 10).

DFIs can achieve this through directly engaging with policymakers and regulators – for example, through designing market reforms or providing policy guidance (te Velde, 2011; World Bank, 2015). By making information and data publicly available, they can contribute to benchmarking and reducing information asymmetries, which ultimately increases efficiencies and market performance (Loos, 2010; World Bank, 2015). This filling of gaps in knowledge and resources might even be considered "the most valuable role for development banks", according to Griffith-Jones and Cozzi (2016, p. 6). DFIs can support the private sector with support to first-time fund managers (Loos, 2010) or by setting up dialogue between the private and public sectors, acting as a broker to achieve a joint vision for sectors that are important for development (Griffith-Jones & Cozzi, 2016).

2.2.5.2.2 Project pipeline support

DFIs may also provide specific support for project preparation. This is more specific than the general market support described above. The support described above is in support of a specific market or sector as a whole, without specific projects, investees or financiers being involved. Project preparation support described in this subsection focuses on the activities that aim at enabling specific deals to be made. This includes getting certain SMEs to an investment-ready state, where DFIs "provide technical and entrepreneurial services, including nurturing of enterprises from infant to adolescent stages and, then, to maturity." (Odedokun, 1996, p. 451). This can occur through TA to the firm, but also the simple fact that a DFI would align themselves with a firm helps "develop firm legitimacy that attracts alliance partners" (George & Prabhu, 2000, p. 626), thus assisting investees in raising more funding. DFIs may also provide project pipeline preparation support and provide information, or generate awareness, about opportunities in specific sectors (World Bank, 2015). This is intended to direct private sector investors' attention to sectors that have potential developmental impact, but do not enjoy sufficient awareness, or are not sufficiently understood. In a similar vein, DFIs may also serve as 'honest brokers' between financiers from the private and public sectors. Given their experience, legitimacy, and stance of being relatively neutral, they can act as connectors between interested parties, which assists in

directly brokering specific deals (George & Prabhu, 2000; Gumede et al., 2011; World Bank, 2015).

2.2.5.2.3 Project assistance

DFIs have an important role to ensure that their investments are managed efficiently, and that economic developmental impact is achieved (Odedokun, 1996). They may do this through due diligence (Loos, 2010), feasibility studies, project preparation and, later on, impact assessments (te Velde, 2011). DFIs can also step in as arbitrators of disputes, again using their position as honest brokers (George & Prabhu, 2000). Finally, DFIs contribute to the efficient running of their investees by providing governance standards (Bracking, 2012; Kingombe et al., 2011) and more general input into strategic decisions (especially in the case of equity investments) (Kenny et al., 2018).

2.3 Private equity and development finance: The role of DFIs in private sector growth

Having described VC and DFIs, their operational principles as well as the various mechanisms at their disposal, this subsection provides a brief overview of the various theories describing the role of DFIs in private sector growth. These theories form the backdrop for the conceptual framework that is articulated in the subsequent subsection.

2.3.1 Fostering private sector growth

This most common theory holds that DFIs' role in fostering development is through promoting the private sector (including promoting foreign direct investment (FDI)) (Abrahams, 2015; Barnard, 2016; Bracking, 2012; Dalberg, 2010; EDFI, 2016; Garikayi, 2019; Gumede et al., 2011; Kang'ombe, 2017; Kenny, Kalow, Leo, & Ramachandran, 2018; Lemma, 2015; Ngoasong, Korda, & Paton, 2015; Ngozo, 2017; Romero & Van de Poel, 2014; Savoy et al., 2016; te Velde, 2011). In fact, as Savoy et al (2016) explain, "DFIs have a clear theory of change: Through the provision of financing to private-sector entities and responsible investment practises, they can produce direct contributions (jobs, economic growth, and increased taxes) that have wider development impacts" (p. v). Kang'ombe (2017) states even more strongly that "[t]he core *raison d'être* of DFIs has been to have a positive impact by harnessing the private sector to promote employment and subsequent growth that can hopefully translate to permanent sustainable structural changes in nations" (p.

10). In recent years DFIs are increasingly adding an explicit reference to private sector development to their mandates, according to Romero and Van der Poel (2014) and Ahluwalia et al (2016).

This theory follows a general trend in development thinking which sees private sector engagements as a more appropriate channel than public sector policies. In recent years, private sector-led development has dominated development theory and influences the strategies of non-governmental organisations (NGOs), government departments, multilateral institutions, private foundations, and, indeed, DFIs (Garikayi, 2019; Loos, 2010). "[T]here is a policy consensus (…) that the private sector has a role to play in achieving development outcomes and DFIs play a central role in facilitating this development", according to Savoy et al (2016, p. 9), whereas originally DFIs would contribute to development by providing funding to public sector projects. In some instances this intent focus on the private sector (Settel et al., 2009) has been considered 'game-changing', since this "dramatically scaled up the growth paths of [certain] economies" (Gumede et al., 2011, p. 5).

2.3.2 Bridging financial gaps

A second theory focuses on bridging financial gaps. This might be providing financing where it would not otherwise be forthcoming on a micro-level, or contributing to the bridging of total economic inputs required for development at a macro-level. (Barnard, 2016; de Luna-Martínez & Vicente, 2012; Gumede et al., 2011; Lee, 2017; Loos, 2010; Sanford, 1975; United Nations Conference on Trade and Development (UNCTAD), 2016)

The gap theory in economic development holds one can determine, quantitatively, the difference between economic inputs required and supplied. It is this gap that requires filling for development to be achieved. As Sanford (1975) explains, "economic growth in developing countries can be significantly accelerated through the application of substantial amounts of foreign assistance, and (…) the conditions which frustrate and hinder growth can be overcome in great part through provision of foreign resources" (p. 179). DFIs are one of the sources of funding to close this gap. On a macroeconomic level they provide an economy with the resources required to naturally grow (Barnard, 2016; de Luna-Martínez & Vicente, 2012; Griffith-Jones & Cozzi, 2016; Lee, 2017; Loos, 2010). On a micro- or meso-economic level DFIs can contribute to development through financial assistance in areas that would

otherwise not receive any. Because of their mandate, risk appetite, and resources at their disposal DFIs are better able to fund various sectors or entities that private funders are unable or unwilling to serve. (de Luna-Martínez & Vicente, 2012; Lee, 2017; United Nations Conference on Trade and Development (UNCTAD), 2016) As explained by the UNCTAD (2016), “These financing gaps exist due to the limited financing capacity of national (and subnational) governments to undertake large projects, and the private sector’s inability and/or unwillingness to undertake long-term, large-scale projects perceived as too risky” (p. 33).

2.3.3 Addressing market failures

A third school of thought sees the role of DFIs as addressing market failures – in the economy broadly, but in particular in the financial system. This aligns with the development finance view that sees market failures in the financial sector as the cause of differences in economic development. This theory is articulated principally by Stiglitz (1994), who explains that “financial markets essentially involve the allocation of resources. They can be thought of as the ‘brain’ of the entire economic system” (p. 23). Traditional economic thinking around efficient and effective markets assumes perfect information, which will allow demand and supply to naturally converge to the most optimal price point. Perfect information, in practice, almost never holds, and it is this state of imperfect information that gives rise to various market failures (Rao, 2003) .

Financial intermediaries need to solve these market failures to encourage development, and DFIs are seen as one of these intermediaries. (Abrahams, 2015; Kingombe et al., 2011; te Velde, 2011; Thorne, 2011; United Nations Conference on Trade and Development (UNCTAD), 2016; Xu et al., 2019) Such failures are present in various markets, including the financial market. For example, Xu et al. (2019) point out the potential of DFIs to solve “defects in capital markets” (p. x), and Thorne (2011) describes them addressing “market failures in the provision of finance” (p. 5). On the other hand, more broadly, Lavelle (1999) draws a parallel between DFIs and other international organisations, in that both address market failures in the ‘market’ of politics. Market failures are characterised by transaction costs, and in this way DFIs (as other institutions) can lower the transaction cost of reaching political and collaborative agreements by putting in place rules, procedures and norms for engagement. Te Velde (2011) and Griffith-Jones and Cozzi (2016) explain that DFIs also

have the capacity to solve market failures more broadly, ranging from capital market and coordination failures to matters associated with the environment or technology adoption.

DFIs can address these market failures at different levels. For example, on a micro-level, DFIs can step in to reduce the transaction costs of providing financing to traditionally underserved businesses or individuals (Thorne, 2011). On a meso-level this translates to a focus on underserved industries or sectors. Such failures may also be addressed on a macro-level. This can be done by providing large-scale low-cost finance and correcting risk perceptions. Another way of doing this is through influence on institutions and norms which can lead to the internalising of environmental externalities, and thus contribute to the tackling of global challenges such as set out by the SDGs (te Velde, 2011).

DFIs address such market failures in various ways. Examples include the brokering of deals and sharing of information to decrease transaction costs (Lavelle, 1999; Lee, 2017; Loos, 2010), lowering informational asymmetries by providing various monitoring and screening services and tools (United Nations Conference on Trade and Development (UNCTAD), 2016), providing first-loss capital to reduce the actual risk involved in investments (te Velde, 2011), or countercyclical lending in periods of economic downturn (Xu et al., 2019) (Barnard, 2016; de Luna-Martínez & Vicente, 2012; Griffith-Jones & Cozzi, 2016; Gumede et al., 2011; Rudolph, 2010).

2.3.4 Market incubation

A smaller body of work sees the role of DFIs as market incubation, where the role of DFIs is to be 'market makers' (United Nations Conference on Trade and Development (UNCTAD), 2016). This builds on the importance of addressing market failures but goes deeper. This theory suggests that certain markets don't exhibit failures, but rather need to be built and nurtured to a point of sufficient maturity. This market incubation perspective "emphasises that markets are not an abstract concept but an array of institutions that develop from a nascent phase to a full-fledged phase." (Xu et al., 2019, p. 8). It thus refers to a process of "shaping and creating new technological opportunities and market landscapes" (Mazzucato, 2015, p. 0). DFIs can assist with nurturing specific market ingredients that are necessary for private sector growth, but which are missing at present. These ingredients might range from

capital and foreign exchange, to encouraging an entrepreneurial culture, and fostering technological and managerial capabilities (Odedokun, 1996).

2.4 Empirical literature

Moving beyond theoretical background, this section provides a brief overview of empirical investigations. Most research can be classified according to three main areas of investigation:

1) Description and comparison of different DFIs, their mandates and mechanisms;
2) Measurement of DFIs' developmental impact (both direct and indirect); and
3) Investigation and comparison of the various impact measurement methodologies used by DFIs.

2.4.1 Description and comparison of DFIs

A number of authors have worked on classifying and understanding the landscape of DFIs. This type of research is commonly undertaken through case studies and investigations of DFIs' annual reports.

Settel et al (2009) focus specifically on DFIs' involvement in private equity funds in their research and Te Velde (2011) investigates the geographical dispersal of all DFI funding. Romero and Van de Poel (2014) plot out numerous DFIs and their differing mandates – noting that not all explicitly mention either development or the private sector in their mission statements, despite this being implicit. UNCTAD (2016) similarly provides an overview of the various DFI mandates, and summarises information on the dispersal of funds. Many similar organisations have reported on this throughout the years (EDFI, 2016; Moretto & Scola, 2017; Mudaliar, Moynihan, & Bass, 2015; World Bank, 2015), yet no single authoritative report exists on all DFI activity globally.

2.4.2 DFI's developmental impact

A common research angle is to measure DFIs' developmental impact, both directly and indirectly, on various development indicators (Barnard, 2016; Buiter & Fries, 2002; Dalberg, 2010; Massa, 2011; Mirabile et al., 2013; Odedokun, 1996; Sinha et al., 2010; te Velde, 2011; United Nations Conference on Trade and Development (UNCTAD), 2016).

Massa (2011) assesses the impact of DFIs on economic growth in general (measured through GDP) and finds strong positive correlations between DFI investments and growth. This correlation is stronger in low-income than high-income countries. In a comparable study, Te Velde (2011) also identifies a positive correlation between DFI investment and GDP, and in another study from a slightly different angle, Massa (2013) finds positive correlations between DFI investments and jobs created.

2.4.3 DFIs' impact measurement and reporting

Related to the previous type of research is that of comparing the different impact measurement methods that DFIs use (Bracking, 2012; Bracking & Ganho, 2011; Lemma, 2015; Romero & Van de Poel, 2014; Thorne, 2011). There is little consensus on standards of reporting or methodologies for this, which makes it difficult to understand the contribution of DFIs to development – either on their own or in comparison to others.

This type of research commonly uncovers shortcomings. Romero and Van de Poel (2014), for example, find that "DFIs face important challenges demonstrating causal effects on poverty reduction in developing countries, including impacts on reducing inequality, on women's rights and on marginalised groups" (p. 6). Similarly Lemma (2015) investigates the different impact measurement approaches used by DFIs, and compares those with the limited number of impact assessments that have been conducted of DFIs by academics. He finds that DFIs each use different mechanisms, which are similar but not completely comparable and that limited large-scale studies have been conducted on the developmental impact of DFIs.

2.5 Conceptual framework

Pulling the previous sections together, the conceptual framework for this thesis can be summarised as follows:

The expectation is that DFIs achieve development through private sector growth – particularly through addressing market failures (such as capital market failures, transaction costs, and knowledge market failures). In doing so, they are expected to follow three operational principles: Those of additionality, sustainability, and an aim at catalytic influence.

There are various mechanisms and interventions that DFIs have at their disposal to achieve their objectives – both financial and non-financial. These interventions may be targeted at a wide variety of private sector investors – among others VCs: the focus of this thesis. Theoretically, then, the various interventions that DFIs have at their disposal aim at catalytically influencing the various activities undertaken by VCs. The success of this catalytic influence (whether successful, unsuccessful, or neutral) of each DFI intervention on each VC activity will be investigated, following a matrix as set out in Table 2.

Table 2: DFIs' mechanisms used in engaging VC activities: An investigative framework

			VC activities				
			Establish a fund	Deal flow	Investment decision	Value creation	Exit
DFI mechanisms	Financial	Debt					
		Equity					
		Risk management					
		Alternative finance					
	Non-financial	General market support					
		Project pipeline support					
		Project assistance					

Source: Author's own

2.6 Chapter summary

The expectation is that DFIs achieve development through private sector growth – particularly through addressing market failures (such as capital market failures, transaction costs, and knowledge market failures). In doing so, they are expected to follow three operational principles: Those of additionality, sustainability, and an aim at catalytic influence.

There are various mechanisms and interventions that DFIs have at their disposal to achieve their objectives – both financial and non-financial. These interventions may be targeted at a

wide variety of private sector investors – among others VCs: the focus of this thesis. Theoretically, then, the various interventions that DFIs have at their disposal aim at catalytically influencing the various activities undertaken by VCs. The success of this catalytic influence (whether successful, unsuccessful, or neutral) of each DFI intervention on each VC activity will be investigated, following a matrix as set out in Table 2.

Chapter 3: Methodology

3.1 Introduction

This chapter provides a detailed overview of the methodology used in this research project. Subsequent to outlining the general research approach, the subsections describe the nature of the data, sampling, collection and analysis procedures. The chapter ends with a discussion on the steps taken to ensure research quality and credibility.

3.2 Research approach

This research is exploratory in nature and follows an abductive design, which is "a way of relating an observation or case to a theory (or vice versa) that results in a plausible interpretation" (Schwandt, 2007, p. 1) The research was conducted through an iterative, qualitative approach, using semi-structured fact-finding interviews (Schwandt, 2007) with stakeholders involved in venture capital activities in South Africa. The data gathered through these interviews was analysed through thematic analysis (Gibson & Brown, 2009).

The use of semi-structured interviews is the most appropriate tool for the epistemological positioning of this research within interpretive finance research (Bettner, Robinson & McGoun, 1994), as well as the specific research question being addressed, and the explorative nature of the research. In the absence of a clear theory on the influence of DFIs on VCs, theory verification is not possible (Gibson & Brown, 2009). By using a semi-structured interview guide, scope is left for interviewees to bring in topics, themes or angles that had not been considered, and by using an iterative approach, scope is left for these new topics to be discussed with subsequent interviewees. This iterative and reflexive nature of semi-structured interviewing and the thematic analysis (see discussion below) are well-suited to the exploratory research in this thesis (Bettner et al., 1994). Moreover, a significant part of the research questions deals with subjective evaluation by VCs of DFIs' various activities, and their reasons for valuing them as such. To unpack these subjective evaluations, one needs to be able to probe and ask 'why', not only 'what' – something that interviews allow one to do. Please refer to the appendix for a copy of the semi-structured interview guide.

3.3 Research design

3.3.1 Population and unit of analysis

The population of interest for this thesis is VC activities in South Africa – both those that have and those that haven't engaged or collaborated with DFIs. There were 69 VC fund managers with active deals in South Africa in 2019, according to SAVCA (2020). The reason for research interest in VCs that haven't engaged with DFIs is that there are presumably reasons for this not being the case, which is informative in answering the research question. Moreover, these VCs were questioned about their possible future plans or intentions to engage with DFIs.

The unit of analysis in this project is the individual venture capital firm, at a company-level. This is appropriate as the purpose of this research is to understand whether, and how, DFIs' activities affect the strategic decisions of VC activities. The unit of observation, however, is the individual stakeholder or employee. This represents the importance of understanding the role of the individual's behaviour and beliefs, as is appropriate in interpretive finance (Bettner et al., 1994).

3.3.2 Sampling and data collection

The primary data for this research consists of cross-sectional, semi-structured interview transcripts of recorded interviews. For the purposes of gathering rich insights on the research questions, a sample was drawn consisting of VCs that have engaged with DFIs. A purposive sampling approach (Schwandt, 2007) is considered appropriate in exploratory research, where there aren't any clear-cut variables that can be representatively selected for (Bettner et al., 1994). Through purposive sampling, units are selected because they are believed to provide rich insights into the dynamics of interest – in this instance, VC engagements with DFIs. The most accessible type of DFI-engagement that can be verified in this way is co-investment. From industry overviews provided by SAVCA (Southern African Venture Capital and Private Equity Association (SAVCA), 2019) and the 12J directory (Invest 12J, n.d.), VCs that have co-invested or received funding from DFIs were identified. From there a convenience sampling approach was used, achieving a sample through the author's professional networks and relying on referrals from initial interviewees (Schwandt, 2007).

A semi-structured interview guide (see appendix) was used for the interviews. The topics under discussion are loosely organised according to DFIs' interventions and mechanisms, and the VC decisions framework (see matrix in Table 2). For each cell in the matrix, the interviews probed the following:

A) The extent of exposure and experience of the interviewee with these;
B) The strategic importance that the interviewee believes these to have;
C) The quality that the interviewee believes these to have; and
D) The extent to which the interviewee has in the past, and/or plans in the future, to adjust strategic decision-making due to these activities.

Ethical clearance for this approach was received on 18 January 2021, and interviews took place between 17 September and 30 November 2021. Each interview lasted roughly an hour, taking place virtually. Recordings were made, with permission, using the readily available voice recording software on the author's cell phone. The first iteration of all verbatim transcripts were generated automatically using the Otter AI transcription app. These initial transcripts were then manually checked for accuracy. Finally, all voice recordings were stored on a secure (password-protected) external hard-drive, with a back-up on the cloud in Google Drive (likewise password-protected).

3.3.3 Data analysis

The interview transcripts were coded and analysed for core emerging themes using a thematic analysis approach (Gibson & Brown, 2009). Thematic analysis consists of investigating the data "according to commonalities, relationships and differences across a data set" (Gibson & Brown, 2009, p. 128) – in short, the aim is to identify a holistic set of themes within the data.

The interview transcripts were coded to identify themes. It is important to remember that such coding is more art than science, with guidelines rather than hard rules: "This is because the thematic organisation of data is not simply a technical matter, but a theoretical and conceptual issue that cannot be codified or abstracted into concrete rules of practice" (Gibson & Brown, 2009, p. 128). Themes were investigated for commonalities and differences across the different instances, as well as the relationship between observed themes (Gibson & Brown, 2009). The commonalities in the data were analysed through a process of constant comparison and coding (Corbin & Strauss, 2008). In the words of Gibson & Brown (2009):

> *"To code is to create a category that is used to describe a general feature of data; a category that pertains to a range of data examples. In this respect, a code draws attention to a commonality within a data set. We can distinguish two types of code: apriori codes and empirical codes. Apiori codes are defined prior to the examination of data, while empirical codes are generated through the examination of the data itself."* (p 130)

Both apriori and empirical codes were used, and the dynamic coding process was recorded through code mapping (Anfara, Brown & Mangione, 2002) and a code log (Gibson & Brown, 2009). The code log was used to keep track of all codes (and their definitions) that have been created, split, merged, changed or discontinued. Code mapping was used to lay out the relationships between the different codes, groups of codes, and observed patterns. The difference between code logging and code mapping is that code logging presents changes in the codes themselves, whereas code mapping represents the iterations between the different (final) codes, the themes they translate into, and the final insights. Memos were used by the researcher to track the analytical and thought process overall. This iterative approach to thematic analysis, and tracking of developments in analytical understanding, is considered appropriate in such exploratory research as this thesis (Bettner et al., 1994).

The matrix underlying the conceptual framework of this thesis (see Table 2) was used as the main framework of data analysis. This means that the 'instances' that were compared thematically are each cell in the matrix – comparing insights for the potential influence that DFIs' different interventions (the Y-axis) may have on different VC decisions (the X-axis).

TAMS Analyzer software was used for the coding of the transcripts, and code logs, mapping and research memos were generated in Google Docs and the author's physical notebooks. Throughout the research process, all documents were saved on a password-protected folder on an external hard drive as well as a password-protected Google Drive account.

3.3.4 Research quality assurance

To ensure the overall robustness of this research project, the following measures were put in place to ensure credibility, transferability, dependability and confirmability.

3.3.4.1 Credibility

To ensure the findings of this thesis are “credible from the perspective of the research participants” (Social Research Methods, n.d.), the research makes use of data triangulation through interviewing representatives of a variety of institutions, focusing on different sectors, and using documentary secondary data (where available).

3.3.4.2 Transferability

To ensure transferability the characteristics of different interviewees and their respective VC activities are clearly and transparently recorded (see Table 4). This should contribute to transferability of the results to other VCs in other (developing) countries. However, given the specific nature of financial markets in South Africa, it should be accepted that the results may likely be specific to investing in this market.

3.3.4.3 Dependability

Different from reliability, the idea of dependability “emphasises the need for the researcher to account for the ever-changing context within which the research occurs. The [researcher] is responsible for describing the changes that occur in the setting and how these changes affected the way the [researcher] approached the study.” (Social Research Methods, n.d.) This is touched upon through the same measures as described in section 3.3.4.2 above.

3.3.4.4 Confirmability

Confirmability is assured by describing the steps taken in the data collection process. This includes a description of sample selection and provision of the discussion guide (see appendix).

3.3.4.5 Reflexivity

Throughout the research process, the author considered their own position in relation to the research, and how this may affect the findings. These reflexive notes (captured in research memos) will be included in relevant sections of the research – including methodological discussion (as done here), sample selection, analytical process and final findings.

Table 3: Trustworthiness: Definitions of quality criteria in qualitative research

Quantitative term	Qualitative term	Description	Strategies employed
Internal validity	Credibility	The confidence that can be placed in the truth of the research findings. Credibility establishes whether the research findings represent plausible information drawn from participants' original data and is a correct interpretation of the participants' original views.	● Prolonged engagement in field ● Use of peer debriefing ● Triangulation ● Member checks ● Time sampling
External validity	Transferability	The degree to which the results of qualitative research can be transferred to other contexts or settings with other respondents. The researcher facilitates the transferability judgement by a potential user through thick description.	● Provide thick description ● Purposive sampling
Reliability	Dependability	The stability of findings over time. Dependability involves participants' evaluation of the findings, interpretation and recommendations of the study such that all are supported by the data as received from participants of the study.	● Create an audit trail ● Code-recode strategy ● Triangulation ● Peer examination
Objectivity	Confirmability	The degree to which the findings of the research study could be confirmed by other researchers. Confirmability is concerned with establishing that data and interpretation of the findings are not figments of the inquirer's imagination, but clearly derived from the data.	● Triangulation ● Practice reflexivity
n/a	Reflexivity	The process of critical self-reflection about oneself as researcher (own biases, preferences, preconceptions) and the research relationship (relationship to the respondent), and how the relationships affects [participants'] answers to questions.	● Practice reflexivity

Source: Korstjens & Moser (2018) & Anfara et al (2002)

Chapter 4: Discussion of findings

4.1 Introduction

This section provides an overview of the themes as identified through the interviews. The first subsection provides a description of the respondents. Then, following the three research questions, subsequent subsections discuss the themes identified in DFIs' mechanisms used in engaging with VC activities in South Africa; the way in which VCs experience these engagements and are influenced as a result; and the extent to which we may consider any of these DFI mechanisms catalytic on the VC activities. The chapter finally provides a brief discussion on the credibility of the data gathered, following the methods outlined in Chapter 3.

4.2 Profile of interview respondents

Semi-structured interviews were conducted with 10 respondents (refer to Appendix for the discussion guide). These respondents were all sufficiently meaningful decision-makers in firms involved in VC activities, with a geographical focus that included South Africa - even if for 6 respondents, their geographical focus was not limited to South Africa.

Table 4 provides a high-level summary of the main demographic characteristics of the interviewees to assist the reader in assessing transferability, dependability and confirmability of the insights. Ultimately this can assist the reader in assessing whether the insights from this research are relevant to the reader's own context and/or purposes.

Table 4: Summary of interview respondents

	Title	Activities	Impact focus	Impact first?	Geographic focus	Sectoral focus	Founded
Respondent 1	Investment Officer	VC, PE, debt	Sustainable development	No	Pan-African	Agnostic	1994
Respondent 2	Managing Director	Debt, grants - currently planning a VC fund	Serving the underserved	Yes	Kenya, Nigeria, South Africa, Mexico, India	(Fin)tech	2015
Respondent 3	Manager, PRI Investments	VC, PE, mezzanine, debt	Agnostic	Yes	Emerging markets	Agnostic	2013
Respondent 4	Founder	VC, incubator, accelerator	Serving the underserved	Yes	Pan-African	Tech	2018
Respondent 5	Capital Markets Lead	VC, accelerator	Serving the underserved, job creation	Yes	South Africa	Tech	2004
Respondent 6	Associate Partner	VC	Serving the underserved, financial inclusion	Yes	Pan-African	Tech	2005
Respondent 7	Technology Investment Analyst	VC, PE, mezzanine, debt, accelerator	Sustainable development, job creation	No	South Africa	Tech	2008
Respondent 8	Investment Principal	VC	Climate resilience, financial inclusion	Yes	Pan-African	Agnostic	2015
Respondent 9	Founder	VC, accelerator	Sustainable development, job creation	No	South Africa	Tech	2004
Respondent 10	Principal	VC, PE, accelerator	Sustainable development, job creation	Yes	South Africa	FMCG, manufac-turing, agnostic	2016

Source: Author's design from research data

The respondents represent a wide range of investors, including pure VCs, impact-first VCs, investors that include VC among their PE activities, investors that include VC among their various capital allocation activities - including debt, and one respondent who does not yet currently have a VC fund in place, but is actively making plans to do so in the immediate future.

Variety is also demonstrated in the geographical focus of the respondents - with four focusing solely on South Africa, and the rest having either a Pan-African or emerging markets-focus, which includes activities in South Africa. There is less variety in the sectoral focus of the respondents, with the majority focusing on (inclusive) technologies.

The majority of respondents (seven) are impact-first, while the remaining three also have impact objectives. The type of impact that respondents strive for varies - from investors generally striving to contribute to 'responsible businesses that do no harm', to actively creating jobs, to ultimately focusing on specific impact theses around, for example, climate resilience or financial inclusion.

The majority of respondents were contacted through existing relationships of the researcher, or through direct introductions made through existing relationships of the researcher. All interviews took place virtually for one hour, the majority of which on camera, with one interview being cut shorter due to technological challenges.

4.3 Discussion of findings

This section will provide an overview of the findings and themes as they emerged from the interviews, following the structure set out in the research questions. Section 4.3.1. discusses themes in the different DFI mechanisms used to engage with VC activities. Section 4.3.2. discusses themes in how VCs experience these DFI mechanisms. Section 4.3.3. discusses themes in the ways in which DFI mechanisms influenced VC activities, and the extent to which this might be considered catalytic influence.

4.3.1. DFIs' mechanisms used in engagement with VC activities

This subsection addresses the first research question: "What are the different mechanisms that DFIs undertake in engaging with VC activities in South Africa?"

With regards to DFIs' financial mechanisms used to engage with VC activities, the following themes emerged:

A) **DFIs' equity invested into VC funds;**
B) **DFIs' equity into VC investment decisions; and**
C) **DFIs providing loans under VCs' value creation.**

With regards to DFIs' non-financial mechanisms used to engage with VC activities, the following themes emerged:

A) **DFIs' general market support producing frameworks that are adopted by VC funds;**
B) **DFIs' general market support influencing VCs' understanding and approaches (to fund establishment, deal flow, investment decisions and value creation; and**
C) **DFIs direct project assistance to VCs' investment decisions and value creation.**

These themes are further unpacked and articulated in the subsequent subsections.

The first step of the analysis maps the VCs' engagements with DFIs according to the DFI mechanisms used, and the VC activities that were involved. The interplay between each identified DFI mechanism with a specific VC activity is referred to as a DFI-VC engagement. Table 5 summarises the themes identified for the engagement between different DFI mechanisms and VC activities.

Table 5: DFIs' mechanisms engaging with VC activities: Summarised themes

Financial mechanisms	
DFI mechanism	**DFI-VC engagement**
Equity	● DFIs invest equity in **VC funds** (both current and future) ● DFIs' equity informs possible **deal flow** for VCs ● DFIs feature in VCs' investment decisions, as ○ Direct co-investors ○ Possible follow-up investors ● DFIs invested in VC funds conduct additional monitoring and check-ups on VC investees under **value creation**
Debt	DFIs can be called upon to provide loans to VC investees under **value creation**

Non-financial mechanisms	
DFI mechanism	**DFI-VC engagement**
General market support	● **VC funds are established** with official frameworks where DFIs are invested ● **VC funds are established** using frameworks developed by DFIs (regardless of DFI involvement)
Expert conversations, Market insights, Project pipeline support	VCs build on DFI insights for various activities: ● **Fund establishment** ● **Deal flow** ● **Investment decision** ● **Value creation**
Project assistance	● In co-investment deals, DFIs guide VCs' **investment decision** through doing due diligence ● DFIs provide TA to VC investees as part of **value creation**

Source: Author's design from research data

4.3.1.1. DFIs' financial mechanisms used to engage with VC activities: Themes

A) DFIs invest equity in VC funds

Respondents reflected relatively equally on DFIs having invested in their current, existing funds, and DFIs being actively targeted for investments in their future funds. The one respondent without a current VC fund, who is actively working on plans to establish one in the near future, explicitly mentioned prioritising DFIs for fundraising. Respondents raised various reasons for this, the most prevalent being that VCs seek out DFI investments as they can commit the largest ticket sizes and because VCs feel as if there aren't really other feasible option for meaningful fundraising. Moreover, DFIs' involvement in a fund tends to benefit through a signalling effect, especially towards other DFIs, which increases VCs' likelihood of subsequently raising more from other large ticket players. A smaller number of respondents shared that DFIs had in fact reached out to VCs with the explicit proposal for a fund, as they saw the VCs filling a gap or fulfilling a particular need that they experienced (for example, through expertise in a particular sector, or in providing a particular type of value creation niche).

From DFIs' equity investment in VCs' fund establishment flow two additional types of DFI-VC engagement. Firstly, through this route DFIs' equity informs VCs' deal flow, following established fund parameters. These are the requirements, focus areas and exclusions that are applied to a fund's strategy, which DFIs (as LPs) can demand or require. Secondly, having invested in a VC fund, DFIs may conduct additional monitoring and check-ups on VC investees under value creation - basically taking over some of the VCs' tasks in engaging with fund investees, should the DFI be considered particularly skilful or more resourceful in that area.

This theme aligns with the key role for DFIs as described by Savoy et al (2016) and Kang'ombe (2017), namely that of providing financing to private-sector entities (including VC funds) and thus contributing to private sector development, as well as the more explicit focus that Romero and Van der Poel (2014) and Ahluwalia et al (2016) indicated DFIs have placed on this approach in recent years.

"So yeah, some of our previous funds we have raised funding from DFIs, so that where they are sitting as LPs and providing us with capital to then disperse in the investees. These include the likes of FMO, IFC, and also now looking at the African Development Bank, they also provide us with some capital. So that's one of the contexts [in] which we work with DFIs." - Respondent 6

"The roles of DFIs are (...) quite critical, because all these private sector investors, like, you look at their LP base, especially in Africa, maybe less so in Latin America and Asia now, but it's like, especially in Africa, their LPs are DFIs. So it's the DFI front and centre." - Respondent 8

B) DFIs' equity features in VC investment decisions

Beyond directly investing in VC funds, respondents also described how DFIs' equity engaged in their investment decision-making activities. On the one hand, DFIs may come on board as direct co-investors on certain deals. Respondents noted that not all DFIs are able to come in for direct investments into early-stage companies, but that certain DFIs have specific VC windows that enable them to do so. When coming on board as direct co-investors, VCs benefit from the signalling effect that a DFI can cause (attracting other investors - especially other DFIs - to the deal); the larger ticket sizes that DFIs can commit; as well as the support that DFIs can provide on practical matters such as due diligence (which they may have more dedicated resources to commit to). This use of DFIs' equity mechanism contributes to DFIs' financial leverage: The additional funding that is unlocked due to DFIs coming into deals and attracting more financiers (Ahluwalia et al., 2016; Mirabile et al., 2013; Kingombe et al., 2011).

One respondent, however, did describe an instance where a DFI joining a deal contributed to the VC being crowded out. This directly contradicts DFIs' first operational principle of additionality, which specifies that DFI investments should *not* crowd out private sector investments (Dalberg, 2010; Lemma, 2015; Mudaliar et al., 2016; EDFI, 2016). While a single example doesn't in itself dispute the entire operating principle of this set of stakeholders, it does show that reality is messier than theory, and that DFIs do not always function exactly as designed.

"On the other side we also have DFIs as co-investors, (...) with our direct investments into companies. Yeah, with sort or your typical co-investor relationship way, we engage along the lines of strategy for companies, fundraising, sometimes they sit in board meetings alongside us, also as board members, if they have a seat at the table." - Respondent 6

"As you get into later rounds DFIs can really write much bigger checks, it's actually quite beneficial to have them already involved in the company, because then when you get your larger rounds they can do sort of $10 million plus tickets, which is really beneficial when you get to sort of series B, C, depending on the company. The other reason why is because often DFIs can provide exit opportunities for you as well. And so they don't only participate in primary fundraisers, but also in secondaries, and might buy up your stake. If and when the opportunity arises. So I think those are the big reasons why we really like DFIs. Big ticket sizes and opportunities for exits." - Respondent 6

"Now, in terms of [the firm], we raise limited life funds, and most of our investors are DFIs. So we work extremely closely with DFIs, [and] we co-invest with DFIs, a lot of our deals, certainly our large deals, we'll bring in DFIs to invest alongside [us]." - Respondent 1

On the other hand, DFIs may not come on board as direct co-investors with VCs at the early stage, but respondents did describe keeping DFIs' investment preferences in mind as possible future investors. Knowing that a DFI may be interested in the venture on the table can be favoured positively in this decision-making process, as it might enable the venture to raise (large sums of) capital in future rounds. Respondents also described considering whether DFIs might be interested in follow-on investments as a means for scoping potential exit opportunities. This example of a more indirect way of DFIs' equity mechanism interacting with VCs' investment decisions aligns with DFIs' role as market incubators, as described by Xu et al (2019) and Mazzucato (2015). They posit that DFIs need to nurture markets to sufficient (commercial) maturity, which can happen through nurturing specific 'market ingredients' that the market may require. In this instance, one might understand such a 'market ingredient' to be the presence of sufficient numbers of large investors for follow-on investment rounds - a gap that DFIs are filling.

"We do invest into some things where we think DFIs are investing so there's an exit opportunity for us in future. So an example is in aquaculture. We recently made an investment in aquaculture (...) and it was only because we knew some DFIs were investing into aquaculture and so there would be an exit opportunity for us." - Respondent 6

C) DFIs can be called upon to provide loans to VC investees under value creation

Finally, DFIs' financial mechanisms are used to engage with VCs' value creation; namely, through the possible provision of loans. Should current VC investees require additional credit to facilitate their growth, respondents articulated that they could call upon DFIs that have invested in their funds to do so. This use of DFIs' financial mechanism of debt aligns with DFIs' role as addressing market failures - particularly in the provision of accessible debt, in this instance (Xu et al., 2019; Thorne, 2011). The particular market failure that is addressed here is a subset of ventures not being able to access (suitable) debt solutions for their growth, which DFIs can step in and provide.

"And then obviously, when we see gaps or opportunities for technical assistance, we can call on them to help us. Or if we feel the need that this business could use a friendly debt facility we can also call them up and say 'would you guys consider investing here?'" - Respondent 1

4.3.1.2. DFIs' non-financial mechanisms used to engage with VC activities: Themes

A) DFIs' formal frameworks adopted by VC funds

One way in which DFIs provide general market support is through the development and publishing of formal frameworks - notably on ESG reporting, but also on topics such as specific types of impact measurement and criteria (such as the 2X Challenge) and responsible investor practices. Respondents described adopting such DFI frameworks into the operations of their own funds. This might happen in three instances. Firstly, following a demand or requirement from DFIs that have invested in VC funds. Secondly, as a pre-emptive measure to make the fund aligned with and attractive for DFIs with an eye to future fundraising. And thirdly, in instances where the DFI frameworks are simply considered to be industry best

practices, and VC funds deem it important to stay abreast of such. All of these examples align with DFIs' important role that Te Velde (2011) and the World Bank (2015) describe: Influencing and encouraging the adherence to specific standards on various fronts - such as on governance, or on particular types of impact reporting. In a way this is also an example of market incubation, as DFIs' promotion and adherence to certain standards (such as the 2X Challenge) can create a new market for products, programmes and funds that do the same (Mazzucato, 2015).

> *"So, with the IFC we did something around responsible lending, and came up with a standard around Responsible Lending on the continent. Also, then, on the side that you mentioned, on the research: we often use research put out by DFIs to support some of our own investment activities, and so a lot of the research papers support some of the work that we do." - Respondent 6*

B) VCs build understanding and approaches upon DFIs' general market support

Almost all respondents provided examples of engaging with DFIs' general market support, and all had their own examples of engaging with this support at different points of their work. For example, expert conversations (both formal and informal) come into play at the outset of the development of a fund; at the point of identifying areas for pipeline and deal flow origination; at the moment to decide on investing in a particular venture; in supporting the growth of investees during value creation; and in general ecosystem-building and peer learning endeavours by VCs. These examples align with literature describing as DFIs' 'most important role' the sharing of information, reducing of information asymmetries, and informing risk perspectives of various markets (Dalberg, 2010; Griffith-Jones and Cozzi, 2016; Loos, 2010; World Bank, 2015).

> *"We do have relationships with people in, let's say, the IDC, and [if] we are looking to invest in a manufacturing company, and we are now building what is the kind of company we're looking for - we will have an expert call with them. They are the ones that will help us build our investment thesis. And that's very helpful." - Respondent 10*

> *"Also, as I started to explore how to turn [the Fund] into a blended finance vehicle, I've looked a lot at the blended finance publications and in guidance of how to*

structure them from the IFC, CDC, and others. And so that's been very helpful, you know, some of these principles on how to make a facility the most impactful, basically. Like, what kind of principles can you think of including?" - Respondent 2

C) DFIs provide direct project assistance to VCs' investment decisions (through due diligence) and value creation (through TA)

Finally, respondents shared experiences of DFIs providing direct project assistance, in two instances. Firstly, DFIs can be called upon to make available technical assistance for VC investees, when they deem this to be necessary as part of their value creation endeavours. In such an instance, the VC will identify the development needs of their investees, and subsequently reach out to DFIs for funding for the required TA. This might come from DFIs that have invested in the relevant VC fund, or external DFIs that the VC has (personal) relationships with. Secondly, VCs may opt to rely heavily on DFIs' due diligence in their investment decisions - especially DFI teams may have more resources to dedicate to this activity. These can be seen as two examples of DFIs fixing market failures (Xu et al., 2019; Thorne, 2011).

"And then, obviously, when we see gaps or opportunities for technical assistance, we can call on them to help us." - Respondent 1

"[So] one area where the smaller private investors are not well set up, [is], you know, (...) the sort of non-financial bits of diligence. So I would say that we actually rely on [the DFIs'] (...) signalling effect. Someone else is doing all this really boring, operational due diligence, and we're not going to do that, right, let's be honest. We don't have the internal capacity. I guess we might engage external [consultants], but if we can sort of [rely on the DFIs], we know there's a full team in these organisations; like, that's their job. So that's where we benefit." - Respondent 3

4.3.2 VCs' experience of DFI engagements

This subsection addresses the second research question: "How do private sector VCs experience engagements with DFIs?"

The discussion of themes in this subsection is structured into discussing the experiences (negative and positive) of VC engagements with DFIs' financial mechanisms, followed by a discussion of the experiences of VC engagements with DFIs' non-financial mechanisms.

With regards to VCs' negative experiences of engagements with DFIs' (financial) mechanisms, the following themes were identified (see Table 6 for a summary):

A) **DFIs operate slowly and are cumbersome to engage with**
B) **Misalignment between how DFIs and VCs operate**
C) **VCs feel dependent on DFIs**
D) **DFIs can crowd out VCs**

With regards to VCs' positive experiences of engagements with DFIs' financial and non-financial mechanisms, the same themes were described, and are thus discussed together (see Table 6 for a summary):

A) **Good collaborative practices**
B) **Practical benefits of DFIs investing in VC funds**
C) **Skills and experience contributed by DFIs**

When asked about their experience of their engagements with DFIs, the interviews show more instances of negative than positive descriptions. All respondents described various engagements in a negative way, and many various engagements in a positive way. These are summarised in Table 6.

4.3.2.1. VCs' negative experiences of engagements with DFIs' (financial) mechanisms

In discussing their experiences of engaging with DFIs' financial mechanisms, VC respondents touched for the most part on their experience with DFIs investing in their funds, or VCs influencing investment decisions as direct co-investors.

A) **DFIs operate slowly**

By far the most common complaint was that DFIs operate very slowly. Most commonly, there is a general sense that one shouldn't engage with DFIs if one doesn't have ample time, patience and resources to see the initial conversations through. Reasons for the slow processes are large organisations, lengthy decision-making processes, but also changes in approach or a

perceived lack of understanding from DFIs what their approach should be in certain VC strategies. Respondents described delays taking place, which in some instances derailed ongoing deals or caused cashflow problems for the VCs' value creation activities.

> *"I mean, I think our general view is (...) we didn't really want to engage with them because it's a nightmare. It takes forever. It's obviously great if they're already most of the way through a process, but you know, we've had quite negative experiences where we've done a lot of work and diligence on particular funds, right? And then because the DFI takes so long to do anything, by the time it gets to closure, we did all this work months ago." - Respondent 3*

> *"The DFIs [operate at].... A different, different pace, and there's a lot more potential ways that deals can get derailed that way." - Respondent 8*

Another common bucket of complaints relate to the way that DFIs operate - with ample bureaucracy and opaque processes - as well as with frequently changing priorities and specific frameworks (which differ per DFI) that need to be implemented with regards to reporting. While not much research focuses explicitly on the experiences of VCs in engaging with DFIs, this theme aligns with findings from Atteridge & Gouett (2021) and Lee (2017) as to why DFIs' mechanisms aren't used more frequently by private sector investors: Namely, that they are too slow and bureaucratic. More research exists on the different reporting mechanisms used by DFIs (Atteridge & Gouett, 2021; Bracking, 2012; Bracking & Ganho, 2011; Lemma, 2015; Romero & Van de Poel, 2014; Thorne, 2011) - which confirms as a challenge that there is little consensus among DFIs' impact reporting and measurement frameworks.

> *"So we have an ESG department, and that one is very much guided by the principles that the DFIs put in place, which can be a bit of a headache at times, because (...) they don't all have the same frameworks that they use." - Respondent 1*

> *"It's been harder to understand the internal processes of DFIs - there seems to be more bureaucracy that you have to know, internally. Like who you're talking to, I mean, to get things moving, their response time can be a lot slower and you know, there's just more hoops to jump through to get to the end, so I'm not even sure if we're going to go anywhere." - Respondent 2*

B) Misalignment between how DFIs and VCs operate

A second category of negative experiences emerges from a misalignment between the way that VCs and DFIs work. For example, a number of respondents felt that DFIs' frameworks and requirements may cause for misaligned incentives - where the VCs are more focused on ensuring maximum value from their investees, as opposed to DFIs focusing more on achieving impact within strict parameters. A number of respondents also felt there was little trust from DFIs' staff, which made for a less productive working relationship, and one respondent reflected that DFIs may lack the skills or experience in certain areas. This theme has no clear alignment with findings in literature. In fact, Ashworth (2018) describes various strengths and perspectives that DFIs can bring into a productive and beneficial relationship for VCs, whereas Lemma et al. (2021) make a set of strong recommendations, including DFIs needing to move faster to improve their ability to act in modern markets. It must be noted that this experience depends on the particular VCs and DFIs involved, and that certain DFIs (particularly those with dedicated VC teams) were described as more aligned than others.

> *"I think there are times where we feel constraints, given the reality on the ground. So at times there might be a disconnect with what policies [DFIs] come up with in Europe, and the reality on the ground." - Respondent 1*

> *"Painful, very painful." - Respondent 9*

> *"I always sense this general lack of trust - they don't fundamentally trust us. That's my view: They don't fundamentally trust us, and therefore, they kind of want to catch us out. They're like 'oh, you're gonna steal my money' and I'm like 'No, I'm not going to steal your money'... *laughs* And I may be wrong, but I get this impression that ultimately, there's this lack of trust and this view that we're going to buy Ferraris or something. And maybe they've been burned before. (...) You know, there's this, this adversarial relationship, where I, you know, I go them and I say 'I'm going to do the following'. [They respond with] 'Why are you doing that?' And I'm like 'Because it makes sense'. And they're like, they're trying to work out what my ulterior motive is. *throws hands in the air* - Respondent 9*

C) VCs feel dependent on DFIs

A handful of respondents reflected that they felt their work was at times (overly) dependent on DFIs. Particularly those that receive support from DFIs to run their value creation activities, such as accelerator programmes, described frustration at having to continuously engage in proposal writing and pitching to DFIs. This experience in a sense contradicts DFIs' second operational principle; that of financial sustainability (Dalberg, 2010). According to this principle, DFIs should undertake their activities in such a way that industries or market players are able to grow and develop, and are ultimately able to continue their activities independently of DFIs (Settel et al., 2009; Massa, 2013). This experience might also be interpreted as meaning that these particular VC activities (in value creation and acceleration, in particular sectors) are in a relatively early market stage, and are thus still being supported by DFIs as market incubators (Xu et al., 2019). Following this line of thinking, this dependence may be expected to decrease. At this point, however, this is speculation.

> *"Yeah, I mean, we've had… we haven't had an enormous amount of formal engagement with DFIs. We have had some, for example, with the African Development Bank and again *laughs*, very frustrating. They ask for a proposal, 'please please, we'd really like you to put in a proposal…' and it's just like a black hole. And then [...] nobody answers emails or phone calls or anything like that." - Respondent 9*

> *"Again it is exhausting in the sense that, you know, you're continuing [to] having to pitch for the work, which then means you're not doing the work. You know, you're always pitching." - Respondent 5*

D) DFIs can crowd out VCs

One respondent described an instance where a DFI's involvement in a potential deal led to their ultimate exclusion from the round. As mentioned above in section 4.3.1.1., this directly contradicts DFIs' first operational principle of additionality (Dalberg, 2010; Lemma, 2015; Mudaliar et al., 2016; EDFI, 2016).

> *"I mean, my personal experience, the one that's, like, most poignant for me, is there is an investment that we were looking at making in Nigeria, (...). And we were actually*

one of the first institutional investors that committed on the round. We weren't leading the round, and, and then other investors became interested, including a few DFIs, and we got kicked out of the round. Because… I wouldn't say we got kicked out of the round because the DFI wanted to kick us out. But we didn't have as much capital to deploy as some of the other investors and it started to become a very competitive investment round." - Respondent 8

4.3.2.2. VCs' positive experiences of engagements with DFIs' (financial and non-financial) mechanisms

On the other side of the coin, respondents also described positive experiences of engaging with DFIs' financial mechanisms. The themes describing VCs' experiences with DFIs' non-financial mechanisms were the same, and are therefore also discussed in this subsection.

A) Good collaborative practices

A number of respondents described a handful of specific DFI relationships that work very well. This is generally due to the attitude that the DFIs in question take to their engagements with VCs: More flexible, with more trust in the processes of the VC, and with an attitude of aiming to support the VCs to do what they are good at. While no literature was found that directly investigates the nature of VCs' (positive) experiences of DFIs, this positive and productive collaborative relationships between DFIs and VCS can be seen as falling under DFIs' role of supporting and promoting private sector entities (Lemma, 2015; Romero & Van de Poel, 2014; Savoy et al., 2016; te Velde, 2011). It is also important to keep in mind that this experience is dependent on the particular VC and particular DFI involved.

"For example, they give the files and it's almost like they remove themselves from the transactions in the sense that you only see them at IC, it's been approved, cool, cool" - Respondent 7

"[They have an approach of] 'How do we make you successful?' They do some curveballs every now and then, and the relationship is such that we'd go back and they'll go 'you know, we realise, we're sorry about that' (...) Yeah, 'how do we make it easier for you?' So they've got that attitude of 'our success is based on your success'." - Respondent 9

B) Practical benefits of DFIs investing in VC funds

DFIs' investment engagements were mostly experienced positively due to the track record and connections of the DFIs, which had positive impacts on the VCs' ability to raise subsequent funding. Two respondents directly referred to this as the DFIs' positive signalling effect on other stakeholders in the market, which opened doors and indicated to other stakeholders that the VCs' endeavours were serious and trustworthy. These positive experiences of DFIs' leading to more connections and funding opportunities align DFIs' classic role of financial leverage (Mirabile et al., 2013; Ahluwalia et al., 2016; Kingombe et al., 2011; Savoy et al, 2016).

> *"So there I think that it's useful because often if you have a DFI it's a signal to other DFIs to also participate, and they often follow each other so that's really beneficial." - Respondent 6*

C) Skills and experience contributed by DFIs

Most commonly, this theme comes down to DFIs' extensive track record, skills, industry experience and networks - all of which the VCs benefit from in their engagements. Recognising these strengths of DFIs, respondents explained actively seeking out DFIs' expertise on a variety of topics and engagements - ranging from thesis development or insights on new industries, to practical guidelines and principles as well as more informal connections of value to their investees. This theme touches on DFIs' strengths as highlighted by Attridge (2018) and their role in increasing knowledge, reducing information asymmetries, and actively supporting the growth of private fund managers as a mechanisms for development impact (Griffith-Jones & Cozzi, 2016; World Bank, 2015).

> *"On the positive side, they also bring [for] us to light certain reporting standards that we currently don't use a lot, and that the ESG [team] can also adopt. And they also offer to train us, the investment officers, as well as the ESG team, which is useful for us. They have exposure to other markets, such as Southeast Asia, or Latin America, and they can always share lessons that we can then apply." - Respondent 6*

"I find that they're often well-researched, and succinct. There's not too much information [of which] I know that it's a reputable source, a reliable source. So if I quote that, to say, you know, this comes from a DFI, it comes with a sort of weight and credibility." - Respondent 2

"The people are incredibly smart, right? You know, I think the institutions are not that smart sometimes, but the people are great. And so I do think that, like, we're smart enough to realise that there are, you know, really good relationships…" - Respondent 3

Table 6: VCs' experiences of engagements with DFIs' mechanisms: Themes

	Reason for experience	DFI-VC Engagement		
		DFIs invest equity in **VC funds** (both current and future)	DFIs feature in VCs' **investment decisions** as direct co-investors	VCs build on DFIs' insights for various activities (**fund establishment, deal flow, investment decisions, value creation**)
Negative	DFIs are slow: ● DFIs operate slowly. ● DFI's processes are often delayed.	**x**	**x**	
	DFIs are cumbersome to engage with: ● DFIs are bureaucratid and opaque. ● High reporting burden. ● Frequent changes to DFI (reporting) requirements. ● All DFIs use different frameworks.	**x**		
	Misalignment between how DFIs and VCs operate: ● DFIs have very specific impact requirements. ● DFIs and VCs have misaligned incentives.	**x**	**x**	
	VCs feel dependent on DFIs: ● VCs need to regularly pitch for new work. ● There is large VC dependency on DFIs.	**x**		
	Lack of trust.	**x**		

	DFIs can crowd VCs out of deals.		**x**	
Positive	Good collaborative practices: ● DFIs have shown flexibility in working with VC funds. ● DFIs have taken a collaborative approach to working with VCs. ● DFIs have taken a hands-off approach to working with VCs.	**x**		**x**
	Alignment between DFIs' and VCs' approach.	**x**	**x**	
	Practical benefits of DFIs investing in or alongside VC funds: ● DFIs' involvement has a signalling effect. ● DFIs can commit large ticket sizes.	**x**	**x**	
	Skills and experience that DFIs can contribute: ● DFIs have a strong track record. ● DFIs have strong skills.		**x**	**x**

Source: Author's design from research data

4.3.3. DFIs' mechanisms influencing VC activities

Having established what the common areas of DFI-VC engagements are, and the experiences thereof, the next step is to consider in which areas the DFIs' mechanisms influenced the VC activities in any way. Table 7 provides a summary of the ways in which DFI (financial and non-financial) mechanisms were described as influencing certain VC activities, as well as the underlying reasons why.

The discussion of themes in this subsection is structured into discussing the influence on VC activities by DFIs' financial mechanisms, followed by discussing the influence on VC activities by DFIs' non-financial mechanisms.

With regards to DFIs' financial mechanisms influencing VC activities, the following themes were identified (see Table 7 for a summary):

A) **DFIs' investments enable VC funds to come into existence**
B) **VC funds' parameters are influenced by DFI requirements**
C) **DFIs' interests in direct investments influences VCs' investment decisions**

With regards to DFIs' non-financial mechanisms influencing VC activities, the following themes were identified (see Table 7 for a summary):

A) **DFI frameworks are adopted by VCs**
B) **DFIs' market and impact perspectives inform VCs' perspectives**
C) **DFIs' due diligence informs VCs' investment decisions**
D) **VC investees receive DFI TA**

4.3.3.1. DFIs' financial mechanisms influencing VC activities

The financial DFI mechanisms that were generally discussed as having influenced VCs' approaches, perspectives or action were mostly DFIs' equity investments.

A) **DFIs' investments enable VC funds to come into existence**

The clearest way in which respondents saw DFIs influencing their activities was in enabling their funds to come into being. Each respondent confirmed that they see this as the major influence of DFIs on the sector, and many asked the question 'If not DFIs, then who?'. Not only are DFIs a major investor, contributing more sizeable investments than other players

could, they also contribute positively through a signalling effect, and thus attract additional investors to the VC funds in question. This influence theme directly and excellently exhibits DFIs' core and traditional role of promoting the private sector (Savoy et al., 2016; Kang'ombe, 2017), as well as being an example of market incubation - where the equity investments from DFIs enabling a whole sector of VC actors to come into existence (Mazzucato, 2015; Xu et al., 2019).

> *"You know, what funding options are there in the South African space, particularly as a first-time fund manager?" - Respondent 9*

> *"You know, that one player believing in you does trigger everybody else. (...) [Such as] those who are interested in giving money when they know that FMO is involved." - Respondent 10*

> *"And the main reason is that they are - if you looked at the collective money, capital, venture, and a wide definition of early-stage capital for enterprises, right - like (...) I don't know the number, but I would guess it's (...) like 90% of the LPs or other structured capital in any kind of intermediary on the continent is from DFIs." - Respondent 3*

> *"So there's a (...) view that they, personally, they do an amazing job. For being able to avail so much capital to our continent. I think that's a huge plus, which, we'd be in a worse place if they didn't do that." - Respondent 1*

> *"So DFIs have a huge impact on us being able to raise any money" - Respondent 10*

> *"There's a hierarchy in the market. (...) If a multilateral DFI sees another multilateral DFI investing then that piques the interest, yeah, so it's a matter of where you are in terms o the hierarchy of funding capabilities. (...) So if you want to be having multilateral DFI conversations you kind of need to be having conversations with other big DFIs." - Respondent 10*

B) VC funds' parameters are influenced by DFI requirements

Through DFIs investing in VC funds, requirements are placed on the structures and focus of said funds. Respondents described, for example, that funds' geographical focus (or exclusions) were determined by their DFI funders, similarly for sectoral or impact-related focus or exclusions. This type of influence was not only experienced by respondents whose current funds were funded by DFIs, but also those aiming to attract DFI funding for planned future funds. VCs are aware of the parameters within which DFIs operate, and in many cases preemptively adjust their focus areas to align to be able to attract DFI funding. This is a direct example of DFIs contributing to the effective running of their investees by providing governance standards (Bracking, 2012; Kenny et al., 2018; Kingombe et al, 2011).

> *"And given that the makeup of most of our funds are DFIs, their DNA comes through in terms of sectors that we invest in, they're very much guided. So we [are] agnostic, the same, but obviously, there are exclusion zones that several DFIs have in place, which we have to respect." - Respondent 1*

> *"I've heard feedback from investee companies that they feel like working with us is like working with a DFI. Which I guess then some of the blueprint of the DFIs has rome into place. Only because when we were founded, it was very much in cooperation with FMO. So, the way of working, the setup of the middle office, back office, it's rather similar to how the DFIs work." - Respondent 1*

> *"Engaging with international DFIs we have found that the South AFrican focus of Fund 1 has been problematic. You know, they've said, we like what you do, we like the benefits that we see, but with the impact that we're doing - we see South Africa as a middle income country, we can't... (...) If we start looking at Fund 2 we certainly believe that we (...) will look to achieve those [Pan-African] outcomes [to be able to attract international DFIs as funders]." - Respondent 9*

C) DFIs' interests in direct investments influence VCs' investment decisions

With regards to investment decisions, moreover, two respondents described keeping in mind whether DFIs would likely be interested in the venture in question or not, as this would

provide opportunities for follow-on investments. This was seen as making a particular investment more attractive, not so much due to the signalling effect of the DFIs' interest, but rather practically due to the ticket sizes of DFI investments, which tend to be larger than might be expected from other similar stakeholders. This is an excellent example of DFIs' financial leverage: Through DFIs coming into deals (at present and potentially in future), they cause additional investors to make the same investment decisions (Ahluwalia et al., 2016; Mirabile et al., 2013; Kingombe et al., 2011).

> *"[T]he place where we do look at what they are doing and take their guidance is more on the investment side, to understand, you know, does it offer an exit opportunity, or in future rounds, would they be interested in larger tickets." - Respondent 6*

4.3.3.2. DFIs' non-financial mechanisms influencing VC activities

All three non-financial DFI mechanisms were described as influencing VC activities in one way or another, either in formal or informal ways.

A) DFI frameworks are adopted by VCs

Respondents described adopting specific frameworks and standards as developed by DFIs, either as a result of their investments or their general market support. The argument for the latter being that these frameworks and standards are considered best practice in the industry, and that their use benefits the overall functioning of the fund. VCs also keep in mind possible future fundraising from DFIs, based on similar considerations a described above around the idea that there aren't (many) other funders available that could commit such substantial amounts of capital to early-stage funds in Africa. This is an example of DFIs influencing other investors' standards (Bracking, 2012; Kenny et al., 2018; Kingombe et al, 2011; World Bank, 2015).

> *"The short answer is yes, definitely, [we look to DFIs to inform our processes]. I think the most concrete way that we do that is with respect to sort of professionalising some elements of our investment process. (...) It's worth thinking about, you know, best practices… Impact measurement, best practices, ESG, governance." - Respondent 8*

B) DFIs' market and impact perspectives inform VCs' perspectives

In addition to the clear and direct influence that DFIs' fund investments have on funds' focus and decision-making, influence is also exercised through DFIs' general market support. In particular, respondents described how engaging with this general market support influences the way they think about markets, sectors and business types. For example, a number of respondent VCs actively seek out expert conversations with DFIs to assist with developing their thesis; to obtain insights on investable markets or business types; or to access best practises on project support. All of these engagements influence the *perception and understanding* that VCs have of different markets, and can therefore be considered catalytic influence. Similarly to the previous theme, this is an example of DFIs' influencing market practices - but whereas the previous theme deals with *formal* frameworks and standards, this theme speaks to general market understanding and perspectives (World Bank, 2015).

> *"So the way we engage with DFIs is basically like informal catch-ups on a regular basis, with, like, venture teams within those DFIs or teams that are looking at making investments in markets that we're focus on - sharing pipeline, sharing things that we're seeing from time to time." - Respondent 8*

> *"And so I've taken a proactive role in asking to dive deeper, [for example, through] quarterly calls with those DFIs and to talk about trends and which of the companies in our portfolio align with what they're looking for. It's more, I guess, more of a, you know, mutual learning process." - Respondent 2*

C) DFIs' due diligence informs VCs' investment decisions

In another practical example of DFIs' non-financial mechanisms exerting influence on VC activities, respondents described in some instances basing their investment decisions on DFIs' due diligence of ventures. This was not described as a common practice, but rather an option in instances where DFI teams have more resources available to undertake the activity than the small VC team. Respondents described feeling confident relying on DFIs' insights and guidance in this way, given their strong track record and experience in the field. This theme aligns with literature that describes one of DFIs' roles as supporting the effective and efficient

running of their investees - among others, through providing due diligence support (Odedokun, 1996; Loos, 2010; te Velde, 2011).

> *"And they do bring a degree of, like, institutional stamp of approval on transactions because of the rigour of their own due diligence processes. You know, as good as our due diligence is, it's not, you know, we're not doing the IFC level of due diligence and so if you passed their standard, that's like a stamp of approval." - Respondent 8*

D) VC investees receive DFI TA

A final way in which DFIs' non-financial mechanisms influences VC activities is through the provision of technical assistance to VC investees.

This, however, is not a common practice, and in fact, many respondents articulated they would *not* adapt their approaches to value creation following DFI influence. The reasons for this lack of influence in this regard centre around the respondents' strong in-house capabilities and viewpoints around value creation for their investees - meaning that respondents would simply not be happy to change their approach, as it's a core part of how they see industries, and of how they understand their role in building and supporting ventures. Related to this are the sense that DFIs are too removed from reality to meaningfully support most investee ventures. While there is an agreement that introductions between founders and DFI staff might be valuable from a networking point of view, respondents maintained that this was no different or no more valuable from introducing their ventures to any other (non-DFI) stakeholder in industry. Therefore, by and large, respondents did not believe their approach to value creation was being influenced by their engagement with DFIs. This aligns with literature establishing that the active engagement with, and contributions to, their ventures' value creation is a key strength of VCs, setting them apart from other investors (Luukkonen & Maunula, 2007).

> *"We've set it up in a way that we remain absolutely objective, and in some ways we will… we will help them get the best [support] for them effectively, (...) for us the relationship and [our] entrepreneurs is actually the most important." - Respondent*

Table 7: DFIs' mechanisms influencing VC activities: Themes

<table>
<tr><th></th><th>DFI-VC engagement</th><th>Influence</th><th>Reason for influence</th></tr>
<tr><td rowspan="3">Financial</td><td rowspan="2">DFIs invest equity in VC funds (both current and future)

DFIs' equity informs possible deal flow for VCs</td><td>DFIs enable VC funds to come into existence</td><td>● DFIs have the appropriate risk appetite.
● "Who else?"
● DFIs can commit large ticket sizes.</td></tr>
<tr><td>DFIs' equity investments into VC funds determine fund parameters

In establishing VC funds, fund parameters are designed to align with existing DFI parameters to be able to fundraise from DFIs in future:
● Geographic focus or exclusions
● Sector focus or exclusions
● Impact focus
● Adoption of ESG frameworks</td><td>● DFI requirements / demands
● Potential to fundraise from DFIs
● DFIs can commit large ticket sizes
● "Who else?"
● Signalling effect</td></tr>
<tr><td>DFIs feature in VCs' investment decisions, as:
● Direct co-investors
● Possible follow-up investors

DFIs feature in VCs' exit decisions</td><td>VCs favourably consider whether a DFI may be interested in a particular deal when making their investment decision</td><td>● DFIs can commit large ticket sizes
● Potential for follow-on investment
● Potential for exit</td></tr>
<tr><td>Non-financial</td><td>VC funds are established with official frameworks where DFIs are invested

VC funds are established using</td><td>DFI (ESG) frameworks are adopted</td><td>● DFI requirements/demands
● Potential to fundraise from DFIs
○ DFIs can commit large ticket sizes</td></tr>
</table>

	frameworks developed by DFIs (regardless of DFI involvement)		○ "Who else?" ○ Signalling effect ○ DFI approaches are considered best practices
	VC build on DFI insights for various activities (**fund establishment, deal flow, investment decision, value creation)**	DFIs' market perspectives are incorporated. DFIs' impact perspectives are incorporated. Introductions to potential investees are pursued.	● DFIs have access to wide networks ● DFIs have ample experience and track record ● DFIs have more capacity and resources
	In co-investment deals, DFIs guide VCs' **investment decisions** through doing due diligence	Investment decisions are based on DFI due diligence.	● DFI approaches are considered best practices ● DFIs have ample experience and track record ● DFIs have more capacity and resources
	DFIs provide TA to VC investees as part of **value creation**	VC investees are developed following DFI TA.	DFIs have more capacity and resources.

Source: Author's design from research data

4.3.3.3. To what extent can we consider DFIs' mechanisms directed at VC activities catalytic?

Having identified the ways in which DFI mechanisms influence VC activities, the final question of this research is "To what extent can the identified DFIs mechanisms be considered as catalysing VC activities?" The following subsections describe the themes identified from respondents in the following categories:

A) DFIs' mechanisms directly catalyse VC funds

B) DFIs' mechanisms don't catalyse VC perspectives

Table 8 provides a summary of the main building blocks of this research, namely: An overview of the identified DFI-VC engagements (instances where DFI mechanisms are used to engage with VC activities); an overview of the ways in which such DFI mechanisms influence VC activities; and an overview of the extent to which this influence can be considered catalytic.

Table 8: Exploring the catalytic influence of DFIs on VC activities: Summary

<table>
<tr><th>DFI-VC engagements</th><th>Influence</th><th>Catalytic?</th></tr>
<tr>
<td>DFIs' equity:
● DFIs invest equity in VC funds (both current and future)
● DFIs' equity inform VC dealflow
● DFIs feature in VC's investment decisions, as
○ Direct co-investors
○ Possible follow-on investors
● DFIs with equity in VC funds conduct additional monitoring and check-ups on VC investees under value creation
● DFIs feature in VCs' exit decisions

DFIs' debt:
● DFIs can be called upon to provide loans to VC investees under value creation

DFIs' risk management:
● DFIs feature in VCs' investment decisions as direct co-investors</td>
<td>DFIs' equity:
● DFIs enable VC funds to come into existence
● DFIs' equity investments into VC funds (current and potential future) determine fund parameters
○ Geographic focus
○ Sector focus
○ Impact focus
○ Adoption of ESG frameworks
● VCs favourably consider whether a DFI may be interested in a particular deal when making investment decisions

DFIs' general market support:
● DFIs' perspectives on markets and impact are incorporated into VC activities (across the board)
● DFIs' facilitate valuable introductions for VC investees
● VCs' investment decisions based on DFI due diligence
● VCs investees grow and develop based on DFI-provided TA</td>
<td>DFIs catalysing VC activities:
● Without DFIs' equity, many VC funds would not have existed
● DFIs' market insights & perspectives inform how VCs think about and approach markets and sectors

VC activities not much changed: Were already aligned to DFI approaches to begin with:
● General market perspectives
● Sector focus
● Impact thesis
● Approach to value creation of investees</td>
</tr>
</table>

Source: Author's design from research data

Before doing so, however, it is valuable to return to the definition of catalytic influence that is being examined. As outlined in Chapter 2, DFIs' catalytic role can be described as a multiplier effect (as by the African Development Bank (AfDB, 2018): "the 'multiplier effect' of lending, investment or technical assistance by the Bank in support of a public-sector or private-sector operator in a country or countries, in terms of attracting additional private investment into the sector or the economy at large beyond the specific operations supported by the Bank" (p 56.)) or 'paving the way for others' (as by the EDFI (2016): "Mobilising other investors by sharing risk, being first-movers demonstrating to other investors how to invest in high-risk projects, and by sharing expertise" (p. 21)). In essence, this means that DFIs' influence would be considered catalytic if they enable other private investors to make investments *they would otherwise not have made*.

A) DFIs' equity investments directly catalyse VC activities

The straightforward conclusion that emerges from the interview data is that DFIs' equity investments have catalytic influence on VC activities, as such activities would simply not be possible without those investments. Each respondent confirmed that they see this as the major influence of DFIs on the sector, and many asked the question 'If not DFIs, then who?'. Not only are DFIs a major investor, contributing more sizeable investments than other players could, they also contribute positively through a signalling effect, and thus attract additional investors to the VC funds in question.

> *"You know, what funding options are there in the South African space, particularly as a first-time fund manager?" - Respondent 9*

> *"So DFIs have a huge impact on us being able to raise any money" - Respondent 10*

> *"You know, that one player believing in you does trigger everybody else. (...) [Such as] those who are interested in giving money when they know that FMO is involved." - Respondent 10*

> *"The roles of DFIs are (...) quite critical, because all these private sector investors, like, you look at their LP base, especially in Africa, maybe less so in Latin America*

and Asia now, but it's like, especially in Africa, their LPs are DFIs. So it's the DFI front and centre." - Respondent 8

"And the main reason is that they are - if you looked at the collective money, capital, venture, and a wide definition of early-stage capital for enterprises, right - like (...) I don't know the number, but I would guess it's (...) like 90% of the LPs or other structured capital in any kind of intermediary on the continent is from DFIs." - Respondent 3

"So there's a (...) view that they, personally, they do an amazing job. For being able to avail so much capital to our continent. I think that's a huge plus, which, we'd be in a worse place if they didn't do that." - Respondent 1

In addition to the mere existence of VC funds and the subsequent investments, catalytic influence is also evident from DFIs' investments in the subsequent parameters, exclusions and focus areas that are put in place on such funds. In this manner, DFIs have a direct influence on, for example, countries from which ventures are considered, sectors that have preference, or even directly on ventures that get selected for investment (through the use of gender-related criteria under the 2X Challenge, or climate resilience criteria - for example). Respondents articulated having changed their approach, exclusions, and focus areas in their deal flow activities as a result of this DFI influence, making this a very direct way in which DFIs are catalysing additional private funding to the markets, sectors and impact areas of their preference.

It is particularly notable that this influence not only takes place on existing VC funds, but that stakeholders are also actively adapting their plans and approaches for *future* funds for which they may want to fundraise from DFIs - even when no conversation with DFIs has happened as of yet. This shows the wider application of this catalytic influence, beyond the direct influence of LPs in a fund, which may be expected from any stakeholder. In short: Respondents recognise the benefits of engaging with DFIs on their funds (despite the negative experiences as described in the previous section), and will adapt their activities accordingly.

This theme aligns with literature describing DFIs as directly supporting and leveraging private players (Mirabile et al., 2013; Ahluwalia et al., 2016; Savoy et al., 2016) as well as DFI as

market makers - directly contributing to the coming into being of a generation of VC funds in Africa (Mazzucato, 2015; Xu et al., 2019).

B) DFIs' general market support don't catalyse VC activities

Despite the clear and direct influence that DFIs' equity investments have on VC fund parameters, exclusions and focus areas, there is an argument to be made that this influence is not catalytic in the true spirit of the word. While it is true that these investment activities would not have been possible without the funds committed by DFIs, and while it is true that the exact parameters in place would likely have differed with other LPs, it is unlikely that the investments would have taken place in a *fundamentally different* manner, had another (non-DFI) stakeholder provided the funding. While respondents overwhelmingly cited the large amounts of funding available from DFIs as a major reason for engaging with them, they also articulated that a key prerequisite for DFI-VC engagement is sufficient alignment in terms of focus, (impact) investment thesis, and exclusions. In fact, one of the most common reasons mentioned for *no* DFI-VC engagement taking place is the absence of such alignment. This begs the question whether the nature and focus of VC activities would have been significantly different in the absence of DFI involvement.

Nevertheless, it's clear from the respondents that most VC activities would not have been able to take place without DFIs' commitments to their funds - which, following the definition as set out above, is considered catalytic.

4.4 Discussion of validity & reliability

In interpreting the findings from this research, the following considerations should be kept in mind. Firstly, data from a sample this small will naturally lead to indicative findings only, which may be further explored and validated through future research (see also Chapter 5). Moreover, by design, this research only involved interviewees from VCs, and no other actors in the wider DFI/VC ecosystem such as DFI representatives or external experts. This means that the findings naturally represent the views of one group of stakeholders only, and future research would do well to validate these with other perspectives. Secondly, the purposive and convenience sampling technique used means that there are strong commonalities among the respondents engaged. The most important commonality is that seven out of ten respondents

do have a strong focus on impact investing, and that the three respondents that are not impact-first still do actively strive to contribute positively to society through, for example, job creation. This means that the respondents do have a more natural alignment with DFIs' objectives, perspectives and ways of working than other VCs without any impact focus would have. Additionally, it should be borne in mind that the sample was identified and selected by composing a list of VCs with activities in South Africa that had in the past collaborated in a financial manner with DFIs. These two purposive skews in the data do mean that the findings are unlikely to be reliable for a wider set of VC activities in South Africa. That being said, this is not too substantial a concern, given that the findings can be considered as reliable for *VC activities in South Africa that are sufficiently aligned with DFIs to be likely to engage with them*. After all, it is not too relevant to consider whether DFIs have catalytic influence on VC activities that are unlikely to ever engage with DFIs.

Chapter 5: Conclusion and recommendations

5.1 Introduction

This chapter provides a final summary of the research findings. This summary is accompanied by recommendations for DFIs to consider, in order to improve DFIs' catalytic potential. Finally, avenues for further research are identified.

5.2 Summary and conclusions of study

In summary, the findings from the 10 semi-structured interviews with VC stakeholders in South Africa identified that the most common areas of DFI-VC engagement are through DFIs' equity into fund establishment and investment decisions, and through general market support across the range of VC activities.

Overwhelmingly, these equity-based engagements are experienced in a negative light by VCs, who describe engaging with DFIs as investors as painful, slow, bureaucratic, and subject to frequent (administrative) changes. The handful of positive experiences of DFIs' equity mechanism are related to DFIs' signalling capacity, as well as the substantial ticket sizes they provide. The engagements based on DFIs' general market support, however, are solely described in positive terms, mostly due to the perceived track record, skills, and connections in industry.

When it comes to areas of influence, the most common areas of engagement are also the most common areas of influence (DFIs' equity investments influencing VCs' fund establishment, deal flow and investment decisions). The most common reason for this is DFIs' practical requirements, parameters and exclusions when investing in funds.

Whereas value creation is a VC activity that shows relatively numerous instances of DFI-VC engagement (mostly through general market support), this is not an area that is commonly influenced by the engagement with DFIs. The most common reason for this is that the VCs in question tend to have strong organisational capacity and focus on value creation, as part of the core way in which they see their role in venture building. This core component of their strategy is therefore not considered 'up for influence', *or* is simply not an area where

influence is required, given that they feel strongly about the established way of doing value creation.

Ultimately, the study concludes that DFIs do have some catalytic influence on VC activities through their equity investments, in that these activities inform and direct the focus areas, parameters and exclusions of VC investments. These investments would not have been possible, or would have been directed at different sectors or geographies, were it not for the DFI investments and the related demands. However, the study also concludes that DFIs' general market support does not have catalytic influence on VC activities. Outside the realm of direct equity investments, VCs will seek out DFIs' general market support and guidance when general alignment between the VC and DFI is already in place - in other words, VCs will not align with DFIs' general market support if they aren't already inclined to see sectors or geographies in a roughly similar manner anyway.

5.3 Policy recommendations

This subsection provides a number of policy recommendations that emerge from the research findings. Notably, these recommendations flow from the understanding that DFIs wield most of their catalytic influence on VCs through funding VC funds, and that VCs seek out these engagements, *despite* frequent complaints about the practical challenges of engaging with DFIs. Keeping this in mind, and in order to maximise the efficient use of DFIs' catalytic influence on VC activities for sustainable, inclusive economic development, it is recommended that DFIs focus on streamlining their fund investments vis-à-vis VCs. In fact, the interview data shows that DFIs have limited potential for catalytic influence on VC through their direct investments in ventures, given that their operations are considered too slow for the speed required by ventures, or the ventures in question are too early-stage for most DFIs.

Two interviewees voiced quite strong opinions that DFIs should *not* get involved in direct venture investments. The reason given for this is that their role in capital markets can be much more influential and, in fact, catalytic, when they focus on *enabling* VCs to operate, rather than getting directly involved. Among others, this is because DFIs' operations are too slow and cumbersome to facilitate efficient direct investments, but also because this is something that other actors - VCs - are excellently placed to do. Rather than duplicating efforts, the

argument goes that DFIs should focus their attention on the role that they are uniquely placed to play: That of intermediation and catalysing large parts of the industry through their capital allocations to funds.

The findings of this research support this argument by respondents, and the main recommendation is thus for DFIs to focus on facilitating the most effective fund investments. Moreover, there are a few practical changes that DFIs are recommended to apply to their way of work, to ensure that unnecessary hurdles are removed from the DFI-VC engagement.

Ultimately, the interviews revealed ample frictions between DFIs and VCs, even in the face of sought-after engagements and direct influence on the direction and structure of VC activities. Such frictions include delays in fund disbursement or deal agreements, frequent changes to reporting frameworks and thus increases to administrative burdens, and relationships that are less productive than they might be due to lack of trust and mutual support. Such frictions are a form of market failures, and the removal or reduction of such frictions would enable more efficient capital allocation from DFIs to VCs to ultimately ventures directly. Fewer resources would be diverted to the management of the relationship, resulting in more resources being available for meaningful capital allocation and value creation in relevant sectors. At the bottom line such increased efficiencies would increase the potential for DFIs' catalytic influence on VC activities.

The specific improvements that DFIs are recommended to explore are informed by direct recommendations from respondents, and also follow from a holistic analysis of the findings in Chapter 4:

- DFIs should focus and specialise in allocating large amounts of funding to appropriate VC funds. This means avoiding direct investments, and might require some upskilling.
- DFIs might consider establishing more dedicated teams to focus on VC engagements, which might allow for more nimble operations and processes.
- Local teams can lead to greater efficiencies, and also tend to ensure that DFIs' expectations and frameworks are more closely aligned with the reality of industry on the ground.
- Some respondents articulated that DFis would do well to adopt a service attitude towards their investee funds, which would entail a shift in relational dynamics. As opposed to a top-down relationship where the DFI is considered to hold the power, a

more collaborative approach to joint venture support and value creation would entail asking "What can we do to help?" and the DFI working to remove barriers for the VC, as opposed to adding layers of monitoring and reporting as a measure to track the fund's work.

5.4 Avenues for future research

To expand applicability of the findings, it would be valuable to conduct further research on this topic in a way that scales the research. For example, one might consider an industry-wide survey on the presence of DFI-VC engagements and influence, as well as a replication of the research with VCs that do not have a strong impact focus.

In addition to applicability at scale, a question remains as to the true transformational impact of DFI-VC influence. In other words: To what extent is the observed DFI-VC influence a try departure from the direction the VC activities in question would have taken otherwise? To investigate this, a series of pre- and post-engagement assessments could be done with VCs engaged with the different DFI mechanisms, touching on different VC activities. Such an assessment would measure, for example, the perceptions of a market before engaging the DFI mechanism, and any changes to this perception at a specified period of time after such an engagement. This would provide greater clarity on whether the catalytic DFI-VC influence is essentially a strengthening of a direction that was already in place, or a true change in VC behaviour.

Furthermore, it would be meaningful to conduct research on the same questions from the DFI perspective. As this research, by design, only involved interviewees from VCs, these findings only represent views and experiences from that particular stakeholder group. By engaging DFIs, future research would be able to verify the catalytic ambitions of DFIs and unpack the dynamics of implementing their various mechanisms from their perspective. This might shed more nuanced light on the recommendations as provided in this research project.

A final avenue of future research lies in the recommendations as set out in the previous subsection. Such research could examine the implementation of each recommendation, and measure the changes in DFI-VC efficiencies and impact, ultimately measuring the potential

change to DFIs' catalytic potential. Such research would help to better understand what might practically be done to manage market failures.

References

Abrahams, C. (2015). *The economic contribution of a development finance institution in South Africa*. University of Pretoria. Retrieved from https://repository.up.ac.za/bitstream/handle/2263/52357/Abrahams_Economic_2016.pdf?sequence=1

African Development Bank. (2018). *Policy on non-sovereign operations*. Abidjan: African Development Bank.

African Development Bank. (2019). *Annual report 2018*. Abidjan: African Development Bank.

Ahluwalia, M. S., Summers, L., Velasco, A., Birdsall, N., & Morris, S. (2016). *Multilateral development banking for this century's development challenges: Five recommendations to shareholders of the old and new multilateral development banks*. London: The Center for Global Development. Retrieved from https://www.cgdev.org/publication/multilateral-development-banking-for-this-centurys-development-challenges

Ahmad, R. A., Reed, L., & Zhang, R. (2018). *Private equity and venture capital's role in catalysing sustainable investment*. *Private Equity and Venture Capital's Role in Catalyzing Sustainable Investment*. Input paper for the G20 Sustainable Finance Study Group. Washington DC: International Finance Corporation (IFC).

Anfara, V. A., Brown, K. M., & Mangione, T. L. (2002). Qualitative analysis on stage: Making the research process more public. *Educational Researcher*, *31*, 29–38.

Ashworth, M. (2018). What role can DFIs play in promoting the development of the African venture capital ecosystem? *Private Sector & Development*, 29, 22-25.

Attridge, S., & Gouett, M. (2021). *Development finance institutions: The need for bold action to invest better.* London: ODI.

Barnard, A. (2016). *The impact of development finance institutions on socio-economic transformation: The case of South Africa*. University of the Witwatersrand.

Bettner, M. S., Robinson, C., & McGoun, E. (1994). The case for qualitative research in finance. *International Review of Financial Analysis*, *3*(1), 1–18.

Bracking, S. (2012). How do investors value environmental harm/care? Private equity funds, development finance institutions and the partial financialisation of nature-based

industries. *Development and Change*, *43*(1), 271–293.

Bracking, S., & Ganho, A. S. (2011). *Investing in private sector development: What are the returns?* Manchester: The University of Manchester.

Buiter, W., & Fries, S. (2002). *What should the multilateral development banks do?* Working paper no. 74. London: European Bank for Reconstruction and Development (EBRD).

Bygrave, W., & Timmons, J. (1992). *Venture capital at a crossroads*. Boston: Harvard Business School Press.Corbin, J., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (Third). London: SAGE Publications.

Dalberg. (2010). *The growing role of the development finance institutions in international development policy*. Denmark: Dalberg Global Development Advisors.

de Luna-Martínez, J., & Vicente, C. L. (2012). *Global survey of development banks*. Policy research working paper 5969. Washington DC: World Bank.

EDFI. (2016). *Investing to create jobs, boost growth and fight poverty*. Brussels: European Development Finance Institutions (EDFI).

Garikayi, F. V. (2019). *Financing development or developing finance? A review of development impact evaluation systems used by development finance institutions in South Africa*. Graduate School of Business University of Cape Town.

George, G., & Prabhu, G. N. (2000). Developmental financial institutions as catalysts of entrepreneurship in emerging economies. *Academy of Management Review*, *25*(3), 620–629. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=3363529&site=ehost-live

Gerken, L. C., & Whittaker, W. A. (2014). *The little book of venture capital investing*. Hoboken: John Wiley & Sons.

Gibson, W., & Brown, A. (2009). *Working with qualitative data*. London: SAGE Publications.

Gorman, M., & Sahlman, W. A. (1989). What do venture capitalists do? *Journal of Business Venturing*, *4*(4), 231–248.

Griffith-Jones, S., & Cozzi, G. (2016). The roles of development banks; how they can promote investment, in Europe and globally. *Efficiency, Finance, and Varieties of Industrial Policy*.

Gumede, W., Govender, M., & Motshidi, K. (2011). *The role of South Africa's state-owned development finance institutions in building a democratic develop*. *Development Bank of Southern Africa (DBSA)*. Development Planning Division. Working paper series no. 29.

Johannesburg: Development Bank of Southern Africa (DBSA).

Invest 12J. (n.d.). Directory of SARS approved Section 12J companies. Retrieved March 8, 2020, from http://www.invest12j.co.za/directory.php

Isaksson, A. (2006). *Studies on the venture capital process*. Umeå University. Retrieved from https://www.diva-portal.org/smash/get/diva2:144734/FULLTEXT01.pdf

Kang'ombe, M. M. (2017). *The role of Development Finance Institutions (DFIs) in economic growth in Zambia*. University of Cape Town Graduate School of Business.

Kenny, C., Kalow, J., Leo, B., & Ramachandran, V. (2018). *Comparing five bilateral development finance institutions and the IFC*. CGD Policy Paper 116. Washington DC: Center for Global Development.

Kingombe, C., Massa, I., & Willem, D. (2011). *Comparing development finance institutions: Literature review*. London: Overseas Development Institute. Retrieved from http://www.dfid.gov.uk/Documents/comparing-DFIs.pdf

Lahaye, E. (2016). *Leveraging equity investments to build inclusive financial markets*. Focus note no. 104. Washington DC: CGAP.

Lavelle, K. C. (1999). International financial institutions and emerging capital markets in Africa. *Review of International Political Economy*, *6*(2), 200–224.

Lee, N. (2017). Billions to trillions? Issues on the role of development banks in mobilising private finance. Retrieved July 15, 2018, from http://cidpnsi.ca/wp-content/uploads/2018/03/Billions-to-Trillions-Issues-on-the-Role-of-Development-Banks-in-Mobilizing-Private.pdf

Lemma, A. (2015). *Development impact of DFIs: What are their impacts and how are they measured?* London: Overseas Development Institute.

Lemma, A., Te Velde, D. W., Tyson, J., Attridge, S. (2021) "Four views on how development finance institutions must invest better". ODI. Retrieved from https://odi.org/en/insights/four-views-on-how-development-finance-institutions-must-invest-better/

Loos, U. (2010). *Development finance institutions and private equity investment in Africa*. University of Cape Town. Retrieved from http://gsblibrary.uct.ac.za/researchreports/2010/loos.pdf

Luukkonen, T., & Maunula, M. (2007). *Non-financial value-added of venture capital: A comparative study of different venture capital investors*. Discussion papers. No. 1067. Helsinki: The Research Institute of the Finnish Economy.

Massa, I. (2011). *Impact of multilateral development finance institutions on economic growth*.

London: Overseas Development Institute.

Massa, I. (2013). *A brief review of the role of development finance institutions in promoting jobs and productivity change*. London: Overseas Development Institute.

Mazzucato, M. (2015). *From market fixing to market-creating: A new framework for innovation policy*. *Science Policy Research Unit (SPRU)* (Vol. 25). SPRU Working Paper Series. SWPS 2015-25. Sussex: University of Sussex.

Mirabile, M., Benn, J., & Sangaré, C. (2013). *Guarantees for development*. Working paper 11/2013. Paris: OECD Publishing.

Moretto, L., & Scola, B. (2017). *Development finance institutions and financial inclusion: From institution-building to market development*. Focus note no. 105. Washington DC: CGAP.

Mudaliar, A., Moynihan, K., & Bass, R. (2015). *The landscape for impact investing in Southern Africa - Development finance institutions (DFIs)*. *Global Impact Investing Network* (Vol. August). Global Impact investing Network (GIIN). Retrieved from https://thegiin.org/assets/documents/pub/Southern Africa/DFIs_GIIN_southernafrica.pdf

Mudaliar, A., Moynihans, K., Bass, R., Roberts, A., & DeMarsh, N. (2016). *The landscape for impact investing in Southern Africa*. New York: Global Impact investing Network. Retrieved from https://thegiin.org/knowledge/publication/southern-africa-report

Ngoasong, M., Korda, A., & Paton, R. (2015). *Impact investing and inclusive business development in Africa: A research agenda*. Innovation Knowledge Development (IDK) Working Paper No 76. Milton Keynes: Open University Business School.

Ngozo, T. (2017). The role of national and provincial DFIs in rural development. In *Submission for the division of revenue 2017/18* (pp. 117–126). Retrieved from http://www.ffc.co.za/docman-menu-item/commission-submissions/1142-2017-2018-tr-chapter-5-the-role-of-national-and-provincial-dfis-in-rural-development

Niculescu, M. (2017). Impact investment to close the SDG funding gap. Retrieved July 15, 2018, from http://www.undp.org/content/undp/en/home/blog/2017/7/13/What-kind-of-blender-do-we-need-to-finance-the-SDGs-.html

Odedokun, M. O. (1996). International evidence on the effects of directed credit programmes on efficiency of resource allocation in developing countries: The case of development bank lendings. *Journal of Development Economics*, *48*(2), 449–460.

Rao, P. K. (2003). *Development finance*. Berlin: Springer.

Romero, M. J. (2014). *A private affair: Shining a light on the shadowy institutions giving*

public support to private companies and taking over the development agenda. *European Network on Debt and Development*. Brussels: European Network on Debt and Development.

Romero, M. J., & Van de Poel, J. (2014). *Private finance for development unravelled: Assessing how development finance institutions work*. Brussels: European Network on Debt and Development.

Rudolph, H. P. (2010). *State financial institutions: Can they be relied on to kick-start lending?* Crisis response 53770. Washington DC: World Bank.

Runde, D. F., & Milner, A. (2019). *Development finance institutions: Plateaued growth, increasing need*. Washington DC: Center for Strategic & International Studies (CSIS).

Sanford, J. (1975). Development theory and the multilateral development banks: An assessment of the effectiveness of strategies used in international development finance. *The American Journal of Economics and Sociology*, *34*(2), 175–195.

Savoy, C. M., Carter, P., & Lemma, A. (2016). *Development finance institutions come of age - Policy engagement, impact, and new directions*. *Center for Strategic & International Studies (CSIS)*. Washington DC: Center for Strategic & International Studies (CSIS).

Schwandt, T. A. (2007). *The SAGE dictionary of qualitative inquiry* (Third). London: SAGE Publications.

Settel, D., Chowdhury, A., & Orr, R. J. (2009). The rise of MDFI investments in private equity funds. *The Journal of Private Equity*, *12*(2), 60–76.

Sinha, S., Bortes, C., & Grettve, A. (2010). *Literature review on development returns to DFI investments in private sector enterprises*. Draft report. London: Nathan Associates Inc. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/67641/development-returns-dfi-investment.pdf

Social Research Methods. (n.d.). Qualitative validity. Retrieved September 4, 2019, from https://socialresearchmethods.net/kb/qualval.php

Southern African Venture Capital and Private Equity Association (SAVCA). (2019). *SAVCA 2019 venture capital industry survey*. Johannesburg: SAVCA. Retrieved from https://savca.co.za/wp-content/uploads/2019/09/SAVCA-VC-Industry-Survey-2019_Electronic.pdf

Southern African Venture Capital and Private Equity Association (SAVCA). (2020). *SAVCA 2020 Venture Capital Industry Survey*. Johannesburg: SAVCA. Retrieved from https://savca.co.za/wp-content/uploads/2020/09/SAVCA-VC-Industry-Survey-2020.pdf

Stiglitz, J. E. (1994). The role of the state in financial markets. In *The World Bank Annual Conference on Development Economics* (pp. 19–52). Washington DC.

TCX. (n.d.). About the fund. Retrieved January 26, 2020, from https://www.tcxfund.com/about-the-fund/

te Velde, D. W. (2011). *The role of development finance institutions in tackling global challenges*. London: Overseas Development Institute.

Thorne, J. (2011). *A framework for successful development banks*. *Development Bank of Southern Africa (DBSA)*. Development Planning Division. Working paper series no. 5. Johannesburg: Development Bank of Southern Africa (DBSA).

Tyebjee, T. T., & Bruno, A. V. (1984). A model of venture capitalist investment activity. *Management Science*, *30*(9), 1051–1066. https://doi.org/10.1287/mnsc.30.9.1051

United Nations. (n.d.). The sustainable development agenda. Retrieved September 9, 2019, from https://www.un.org/sustainabledevelopment/

United Nations Conference on Trade and Development (UNCTAD). (2016). *The role of development banks in promoting growth and sustainable development in the South*. Washington DC: United Nations Conference on Trade and Development (UNCTAD).

World Bank. (2015). *From billions to trillions: Transforming development finance*. Development Committee. DC2015-0002. Washington DC: World Bank.

Xu, J., Ren, X., & Wu, X. (2019). *Mapping development finance institutions worldwide: Definitions, rationales, and varieties*. NSE Development Financing Research Report No. 1. Beijing: Peking University Institute of New Structural Economics.

Appendix: Interview discussion guide

Given that a semi-structured approach will be taken with the interviews, this discussion guide should be seen as a guideline rather than a strict survey. Discussions may be dropped if deemed irrelevant for a specific interview, and room will be left for delving into certain topics more deeply, or addressing new topics that may not be listed here, but which may come up during the conversation. The broad outline of questioning in this discussion guide should ensure that, for the most part, the data collected in the interviews can to some extent be compared with one another.

The conceptual framework's matrix (see section 4.6) will be shared with the interviewees and will be used as a practical tool during the interview, as guide for investigation, ensuring completeness. This matrix notwithstanding, interviewees will be encouraged to bring up additional themes that they believe are of importance.

Information required to ensure quality of research:

- *Briefly introduce the firm and position of the individual in the firm*
    - *Time that the individual has spent at the firm*
    - *Roles and responsibilities of individual at the firm*
    - *Deals that individual has been involved in*

Setting the scene:

- *What are the recent deals that the firm has undertaken?*

Exposure to DFIs' financial activities

- *To what extent were DFIs financially involved in these recent deals?*
    - *Which DFIs specifically?*
    - *What was the nature of their involvement?*
    - *Describe which types of DFI interventions were applied, and in respect to which VC activities*
- *How did you experience (the quality of) this involvement?*
- *To what extent did this involvement influence your investment decision-making?*
    - *With regards to the deal specifically? Specify which types of DFI intervention influenced which VC activities.*

- *On a longer-term outlook? Specify which types of DFI intervention influences which VC activities.*

Exposure to DFIs' non-financial activities

- *Which other non-financial investment-related activities have you been involved in recently?*
  - *Specify in which VC activities such non-financial activities fall.*
- *In which of these were DFIs involved in any way?*
  - *Which DFIs specifically?*
  - *What was the nature of their involvement? Describe which DFI activities were related to which VC activities (following the framework in Table 2).*
- *How did you experience (the quality of) this involvement?*
- *To what extent did this involvement influence your investment decision-making?*
  - *With regards to the deal specifically? Specify which types of DFI intervention influenced which VC activities (following the framework in Table 2).*
  - *On a longer-term outlook? Specify which types of DFI intervention influences which VC activities (following the framework in Table 2).*

DFIs' catalytic potential overall

- *In your experience, do DFIs have catalytic influence on VCs in South Africa through activities (both financial and non-financial)?*
  - *Which DFIs specifically?*
  - *With which types of financial activities specifically? Specify which types of DFI activities on which types of VC activities.*

Any other comments

- *Any other comments that would be of value in answering the research question.*