An Empirical Study of the Experience of Ecuadorian Smallholder Rose Producers within the Global Value Chain
Abstract

The global value chain for high-value agricultural commodities such as flowers, despite consistent innovation and modern technology, remains opaque.

Producers of these specialty crops are often many steps removed from the final buyer; and buyers rarely gain insight as to where, by whom, and how the products were produced. This thesis looks into one small piece of the floriculture supply chain – the production of Ecuadorian roses, from the perspective of small-scale growers.

Over the past two decades, roses have secured an important position in the Ecuadorian export economy. Simultaneously, the international floriculture industry has undergone rapid change, with the geographic focus of production shifting from the Netherlands towards equatorial countries like Ecuador, Colombia, Kenya and Ethiopia. Consumption, however, remains centered in the ‘global north’; and these countries also determine the direction and nature of the complex value chains which process and transport roses around the world.

This study begins with a review of the prolific literature on Global Value Chains (GVCs), scholarship which provides the framework to understand the organization, movement and power dynamics of global production and trade systems, including the floriculture industry. However, the GVC research does not adequately account for small-scale producers, which have a strong and growing presence in the Ecuadorian export rose sector.

Reaching beyond the boundaries of GVC literature, this study uses Grounded Theory methodology to gain insight to the perspective and experience of smallholder Ecuadorian rose growers. By examining what it is like to be a smallholder rose grower in the GVC, and how they do it, this study reveals a few important themes about smallholders and the floriculture industry in general.

The producers in this study rely heavily on trust and inter-firm alliances to launch and sustain their businesses, preferring informal arrangements and often retaining this preference even as their businesses mature. They also participate in a less tightly-controlled export market than existing literature predicts.

From the producer-level view, this thesis reveals a richer picture of the floriculture value chain and aims to encourage further scholarship into the recognition and role of small-scale producers in GVCs.

Keywords Global Value Chain (GVC), Smallholder, Floriculture, Trust, Informal
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Chapter 1: Introduction

Even on Saturdays, Ana rises with the sun. Not to wake and tend to her children, as she does Monday-Friday; nor to hurry down the hill to the greenhouse to tend to her roses, as she does most other days of the week. Living in the pastoral village of Santo Domingo, outside of Cayambe, Ecuador, she might rise early because of the noise of her chickens, or of her neighbors stirring to pasture the cows. But these Saturdays, Ana is up at dawn to work on another project - to build a ‘poscosecha’, a small cinder block warehouse in which she’ll process and pack roses for export. The roses she processes will be her own, and also those sourced from a few of her neighbors and acquaintances.

She is among the hundreds of small-scale rose growers who have begun production in the Ecuadorian highlands in the past two decades. Numerous small ‘invernaderos’, or greenhouses, like Ana's have cropped up in the pastures and on the hillsides around her home, taking over land which was previously used for grazing cattle, for home garden plots, or for producing vegetables which would be sold in local markets. Unlike all those traditional products, the roses are grown for the export market, destined for far-away places like Russia, the United States and Europe.

As in other rose-producing regions, large farms dominate the Ecuadorian floriculture sector. Roses are a risky crop, not only subject to rigorous quality standards and costly to transport; but also a luxury item vulnerable to dramatic market fluctuations based on shifting fads and trends. Often unable to meet and adapt to volatile markets, smallholder producers - defined broadly as those growing on fewer than two hectares of land (Lowder et al. 2016) - are especially rare in the global floriculture industry. Elsewhere, in flowers and in other high-value agricultural commodities, those smallholders who do participate have a role limited only to production. Their access to international markets depends upon contract growing schemes, where large farms and processing companies source products from small farms to supplement their production (Henson et al. 2013). But in Ecuador, producers like Ana don’t stop there. Instead, they build capabilities and connections to compete directly in the global flower markets.

High-value agricultural commodities (or, as they will also be referred to in this paper, high-value agrifood products) are those which are grown (often in developing countries) not for family or
local consumption, but for export to meet increasing demand in other markets (Bamber & Fernandez-Stark 2012). These non-traditional crops offer rich opportunities for study by academics and policy researchers alike because they hold promise for local economic and social development. They also receive scrutiny for offering uneven gains to producers, as compared to the other players in the production and distribution system (as noted in Kaplinsky 2000, Humphrey 2004).

Commonly known as Global Value Chains (GVCs), these systems have been analyzed since the early 1990s to track changes in the global economy. Whereas the reorganization and fragmentation of production (the conditions which define modern GVCs) allow developing-country producers to specialize and compete on the production of goods - from high-value agrifood products to apparel to auto parts to computers, etc. - at a global level; the consolidation of power in certain segments of the value chain pushes certain producers (like smallholder farmers) out of, or into marginalized roles within, GVCs.

The six dimensions of GVC analysis clearly indicate why smallholder producers have limited roles within GVCs. The first dimension of analysis, Input-Output Structure, describes high-value agrifood chains as a series of production segments, with value added through a series of cumulative activities and by a range of firms. Small producers generally play a role in the production function of the chain, whereas other firms capture (often more) value through R&D, processing and marketing/distribution activities. The second dimension of analysis, Geographic Scope, shows the global nature of high-value agrifood production, with producers often in the 'global south' and buyers (as well as R&D and marketing and distribution functions) often concentrated in more developed countries. This is due to the power relations in the chain, explained by the third dimension, Governance. High-value agrifood chains are governed by 'lead firms' or powerful buyers (generally in Europe and North America) which impose strict standards which producers and processors must work hard to meet. Smallholders, especially, struggle to do so.

These first three dimensions of analysis look at the broad, global aspects of the GVC. The last three dimensions of GVC analysis examine the local factors of global production. Firms which
do remain competitive in highly-regulated agrifood value chains do so by Upgrading (the fourth dimension of GVC analysis), improving efficiency to capture additional value through their existing segment of the value chain; or moving to higher-value activities along the chain. The success, or lack thereof, of a firm's attempts to upgrade depends largely on the Institutional Context and other Stakeholders (the last two dimensions of GVC analysis), each of which influence a firm's ability to increase its knowledge base, technological capabilities and connections with other firms in the high-value agrifood chain.

Global Value Chain research takes two different perspectives on smallholders. Due to the restrictive, buyer-driven governance of these systems, much of the literature on high-value agrifood chains sees the absence of smallholder producers as a foregone conclusion (Dolan & Humphrey 2000, Humphrey 2004, Gereffi et al. 2005). Yet, with smallholders as a darling of development research and international development agencies, numerous development and policy briefs utilize the GVC framework to prescribe institutional and policy interventions which might support the participation of smallholders.

Ana and her cohort are still an anomaly because their entry into the floriculture GVC cannot be traced to any development interventions. These producers have likely tapped into developed and mature markets where there is room for firms for all sizes. It is also possible that the rose GVC for Ecuador is set up differently than those floriculture GVCs which have received intensive study (mostly, those connecting African producers to European buyers). This thesis interacts with both possibilities, but its primary focus is to examine the Ecuadorian rose industry from a different perspective - that of the Ecuadorian smallholders themselves, which is largely absent from existing literature.

Traditional GVC research considers primarily institutional units of analysis - either the region/nation, and the factors which influence a country's ability to enter and compete in GVCs; or the firm, and the capabilities which firms need and the trajectories which firms take in GVCs (gvcc.duke.edu). The human perspective has been brought in with a growing body of GVC research (largely in development literature) into not only the economic, but also the social implications of GVCs, especially the impact of these global systems on laborers and local
community (Barrientos et al. 2010). For example, several studies on high-value agrifood chains and even on floriculture specifically (Melese 2017) draw attention to the optimistic promise but mixed outcomes for those laborers participating in GVCs.

Still, few studies consider the actual experiences of the producers, perhaps because smallholder producers are expected to be excluded from GVCs. One notable exception is Catherine Dolan’s 2002 study on smallholder French bean producers in Kenya, which takes a sociological approach to examine how participation in global production influences gender dynamics among farming families. Another paper, by Ezequiel Zylberberg (2013) does consider export-oriented smallholder flower farmers, but it does so through a case study of a processing and export intermediary company.

Perhaps the producer’s individual experience is rare in the GVC literature because smallholder producers in GVCs are few and far-between, and large producers are studied as through the lens of labor. But by taking the farmer-level view of the global value chain, this study finds human interaction and social ties as essential, but often overlooked, components of the global value chain. I use direct empirical research to understand the lived experiences of smallholders in the floriculture GVC, applying Grounded Theory methodology to explore the backstory of these smallholders, what motivates and drives them, and the means they use to compete within a global industry.

This thesis begins with a thorough review of the Global Value Chain literature - its antecedents, and the six dimensions of GVC analysis as they apply to high-value agrifood chains. It also applies the GVC literature to understand the context for smallholders, what makes them different from other kinds of producers and the role they play in high-value agrifood chains. Finding that Ecuadorian smallholders represent an unusual trend in the floriculture value chain, this thesis conducts an empirical study to gain insight into the experience of these Ecuadorian rose producers.

The research, conducted over two and a half months in Ecuador, digs into the lived experiences of small-scale Ecuadorian rose growers and how they - by action and perception - navigate
global value chains. This qualitative research study uses grounded theory methodology to flesh out the rather impersonal treatment of smallholder producers in GVC literature. Per the data in this study, trust and inter-firm alliances are key factors influencing smallholder participation and upgrading within the floriculture value chain. Precedent for the study of trust and inter-firm alliances can be found outside of GVC literature in scholarship on social capital and IFC/inter-firm cooperation and in the Discussion, I engage the study’s findings with these streams of literature. The discussion chapter also acknowledges the limitations of this study, both its process and scope, and suggests opportunities for additional research and theory development around smallholders and the experiential dimension of Global Value Chains.
Chapter 2: Literature Review

This chapter identifies and analyzes relevant scholarship to understand how and why these smallholder farmers have emerged in Ecuador, the larger global context in which they produce and sell their flowers, and the strategies they use to improve their livelihoods through floriculture. First, acknowledging the extensive, globally-reaching industry in which these smallholder floriculturists participate, it examines literature on Global Value Chains and related fields to develop a framework to understand and contextualize the system of trade for high-value agricultural commodities like flowers. Then this chapter examines the role of smallholders in GVCs and the strategies they use to compete within global systems.

The literature review is organized into three sections. First, a thorough examination of the antecedents of the Global Value Chain theory and how it overlaps and distinguishes itself from other related fields. It then summarizes the six dimensions of GVC analysis and explains why these dimensions of analysis are essential to understand the behavior of actors within the value chain. Then follows a review of literature on each dimension of GVC analysis as it relates to specialty, high-value agricultural products (referred to as high-value agrifood products, which will be defined in that section of the literature review). The final pages of this section introduce the context for smallholder producers in GVCs.

Global Value Chains - Antecedents
Anyone working or living in modern society interacts daily with products and services stemming from far-away places and traveling through numerous 'hands' before they reach us. This has been the case for over a century, and globalized is at best an obvious, at worst a cliché, term to apply to the modern economy. Yet they ways in which producers, intermediaries and buyers participate in this system and interact with each other is ever-evolving, so researchers continue to unravel the transformation of global commodity and service chains. In the late 1990s, the Global Value Chain framework united thought around this research. Much of the subsequent scholarship on "what it means to be involved in global trade and the global economy" (Humphrey 2004, 1) stems from this framework.
In the latter-half of the twentieth century, global production transformed in such ways that the power centers of production shifted, the act of production became much more fragmented, and a plethora of new actors (both at the firm and regional levels) began participating (Dolan & Humphrey 2000, Humphrey 2004, Gereffi et al. 2005). Early research focused specifically on the unit of production to understand these changes, developing a framework called Global Commodity Chain analysis. The term Global Commodity Chain was first defined by Hopkins and Wallerstein as "a network of labor and production processes whose end result is a finished commodity" (1986, 159). Global Commodity Chain (GCC) analysis considered the process through which these commodities traveled, from inception to production to distribution and consumption. It paid particular attention to the fact that this process, and the final product itself, was a compilation of disparate, but increasingly interdependent, component parts and activities from various firms around the world (Gereffi and Korzeniewicz 1994, 2).

This "fragmentation" of global production and distribution systems (term from Arndt & Kierzkowski 2001) means that - both at the firm and the regional level - actors which had not been able to participate before, or had only held limited roles as raw resource providers, were now specializing in the production or creation of component parts and participating more actively (Gereffi 1995, Humphrey 2004). Thus, since the outset, scholars have considered the implications of GCCs on economic development, especially for countries in the 'global south' which could participate more fully in global trade with the dissemination and dispersion of production.

The term Global Value Chain emerged in the late 1990s when the GCC analyses began to overlap with the body of research around value chains. The concept of a value chain originated with Michael Porter's 1985 book Competitive Advantage, which employed the metaphor of a value chain or value system to understand the creation and capture of value within and among firms (Bair 2009). These metaphors took root beyond Porter's discipline of management studies, and became a popular way of conceptualizing firm linkages and relationships in economics, development and policy research, as well (Kaplinsky & Morris 2001). And this concept of value creation and exchange began to catch the attention of GCC researchers as they became more curious to understand how value was made and captured at each stage of the value chain. For this
reason, and because the "commodity" terminology was limiting - implying "the production of undifferentiated products in processes with low barriers to entry" (Kaplinsky & Morris, 2001, 25) - many researchers had adopted the Global Value Chain by the early 2000s (Sturgeon 2008).

The evolution of the concept has not been simple. The Value Chains, Global Commodity Chains and Global Value Chains described here mix and overlap with other schools of thought which frameworks and metaphors which describe production processes in the modern world, creating "a considerable degree of confusion in the use and meaning of the terminologies employed" (Henderson et al. 2002: 438; see also: Bair, 2009; Kaplinsky & Morris, 2001; Jackson et al. 2006). In some cases, these related disciplines arise to give a distinct alternative to the chain theories because of its shortcomings. Criticized for being too "linear", the chain metaphor may be eschewed for a network metaphor, as in the Global Production Network tradition. This term was coined by Henderson et al. 2002 and seeks to understand international production as a compilation of relationships between firms and the possibilities which those relationships create for economic and social development (p. 440).

In this article, Henderson and colleagues are also careful to call out that the GPN perspective uses the firm as the unit of analysis. Although the Global Value Chain theory (and GCC before it), purports to apply to the firm, many of the firm-level studies have been case-studies only (for example, those in Gereffi 1995, Dolan & Humphrey 2000) or have only examined large transnational corporations and their control of value chains, leaving out an analysis of the other firms involved. And most GVC research, especially in the development realm, has taken the state-and-policy-level view of production. Proponents of the GPN believe that the birds-eye level of analysis favored by the GVC fails to account for the multifaceted interactions among firms, and for the fact that policy analysis falls short to accurately interpret the behavior of firms conducting business across borders (Henderson et al. 2002).

Researchers today use a variety of these analytical tools to understand global production - some studies go back to 'older' frameworks, like Global Commodity Chains (see Bair 2009, Patel-Campillo 2011); others use multiple frameworks depending on the area of analysis (Barrientos et al. using both GPN frameworks in 2010 and GVC analysis in 2016 to examine social
consequences of global production). By-and-large, though, for the past fifteen years, Global Value Chain research seems to be the dominant choice (both in volume of research articles and in breadth of topics covered), in part because it responds to its critics and has incorporated some of their methods of analysis. For example, the Global Value Chain research received criticism for being very one-dimensional, concerned primarily with the governance structures of value chains, and whether they were producer-or-buyer-driven (Henderson 2002). GVC analysts today, however, utilize six dimensions of analysis, many of which came directly from other frameworks such as the GPN (see the next section for a detailed explanation of each dimension of GVC analysis).

For the purposes of this paper, the Global Value Chain perspective is most useful because of the overall quantity of research, and for its flexibility across domains. Early production chain research, perhaps because of its focus on the commodity, was constricted to realm of manufacturing and hard industry; but it has branched out to include extensive research of agricultural value chains, and even to examine the role of smallholder firms in agriculture. The next section introduces the literature on agricultural value chains and discusses the dimensions of Global Value Chain analysis in this context.

**GVC Analysis for High-Value Agricultural Goods**

A seminal article on modern agricultural production by Catherine Dolan and John Humphrey (2000) describes the shift in value chain dynamics between African vegetable producers and supermarket buyers in the UK. Previously characterized by 'arms-length' relationships, where producers and buyers operated very independently, connecting through 3rd-party intermediaries such as auction markets and wholesalers; at the beginning of the 21st-century, the value chain became more coordinated. Dolan and Humphrey observe that leading supermarket chains in Europe, captured majority market share and began exercising much greater control over their supply chains (Dolan & Humphrey 2000, 148). Market dominance allowed these firms to assume control; and increasing concerns over food safety and production standards (for example, sustainability standards) further encouraged the tightening of the supply chain. In keeping with the trends observed by early GCC research, these retailers were assuming vertical control of their supply chain not through firm ownership, but through supplier governance (Gereffi 1995).
This article spurred conversation about global patterns in agricultural trade, especially around non-traditional or high-value agricultural crops. Other articles reinforce the findings of Dolan & Humphrey (for example Gereffi et al. 2005, Bamber et al. 2014), and expand upon them to analyze other facets of the GVCs for high-value agricultural products. There are six dimensions of GVC analysis currently in use, three which consider the macro-level factors influencing global value chains, and three which look at local and firm-level aspects.

The first three, considering the global aspects of value chains, are: Input-Output Structure, or the process of transforming primary materials into finished products; Geographic Scope, or the full extent and reach of the global value chain; and Governance, or the oversight and power influencing the value chain (from within and without). The local dimensions of GVC analysis are: Upgrading, or the ways in which producer firms move along the chain to capture more value; Institutional Context, or the local economic and social dynamics which influence the value chain; and Industry Stakeholders, or the various local actors who participate and interact along the value chain (Gereffi & Fernandez 2016, 7).

The following section summarizes the current thinking on high-value agrifood value chains, according to these six dimensions of GVC analysis. The summary covers the overall trends, but also highlights whether and how researchers observe that specific value chains behave differently, and might warrant more scrutiny. Whenever such research exists, the summary includes mention of the research on each dimension of GVC analysis as it pertains to floriculture specifically and/or to smallholder producers; with the final piece of the GVC discussion examining the role of small-scale producers in the high-value agricultural sector.

**What are high-value agrifood chains?**
The term "high-value agrifood chain" refers to non-traditional (non-subsistence) horticultural products which are export-oriented and which require special handling (fruits, vegetables and flowers, etc.) and/or go through one or more processing stages after harvest (coffee, honey, chocolate, etc.) (Bamber & Fernandez-Stark 2012; Fernandez-Stark et al. 2012). Touted as having "important consequences for poverty alleviation in rural areas … due to their potential to
increase incomes and create employment" (Fernandez-Stark et al. 2012, 6; citing Weinberger & Lumpkin 2007), these crops receive a lot of attention in the GVC literature as it relates to international development.

**Input-Output Structure: The elements of the high-value agrifood chain**
Most high-value agrifood crops go through similar stages of production - from the research and development of varieties, to on-farm production, to post-harvest processing, to marketing and distribution and then on to the final customer (for example, Fernandez-Stark et al. 2014 provide an overview; Evers et al. 2014 on fresh flowers and cuttings; Gilbert 2008 on cocoa and coffee). Gereffi & Fernandez-Stark (2016: 8) present a very generic value chain for high-value agrifood products:

**Fruit and Vegetables Global Value Chain Segments**

Variance occurs, of course, for each type of product; especially for those products which require substantial processing before final consumption. One-or-more companies may contribute to each segment of the value chain; and when there are multiple companies participating in each segment, some of those may come from outside of the specific value chain. For example, in the case of chocolate, cocoa butter derived directly from cacao beans gets mixed with milk and sugar, which come from separate value chains (Gilbert 2008). In cut flowers, although the post-harvest processing is more straightforward, materials necessary to the process (such as plastic wrapping, cardboard boxes and minerals) are sourced from outside of the value chain itself (Evers et al. 2014).

High-value agrifood value chains are generally organized so that the lowest-value, least technologically advanced activities are at the beginning of the chain, with each successive segment along the chain requiring more advanced capabilities. The creation of value within each segment of these chains comes from the accumulation of additional elements - both substantial (processing and packaging, turning cocoa into chocolate, etc.) and symbolic (tacit knowledge and technological capabilities required to add the physical inputs) (Staritz et al. 2017).
The next figure depicts the high-value agrifood chain in a bit more detail, showing the inputs, activities and firms involved along the way. This figure is also borrowed from Gereffi & Fernandez-Stark 2016.

Each firm which participates in the value chain may participate in one or more segments. As discussed earlier, it is characteristic of Global Value Chains that the segments along the chain are owned not by one company but by multiple; still, firms may absorb multiple functions or segments along the value chain, which they do to capture more value. See the section on Upgrading which discusses how actors attempt to earn more money and claim more power within high-value agrifood GVCs by moving away from single-segment operations and by absorbing additional functions further on in the chain.

The activities and firms involved in each segment of the GVC occur in multiple places in often disparate locations, so it warrants examining the geographic scope of the value chain.

**Geographic Scope: Shifting**
Not all products produced for and traded within high-value agrifood sectors are automatically classified as global products - domestic and regional consumption of fruits, vegetables, flowers
and other high-value agrifood products is still a valid production consideration, and in some places, producers (especially small-scale producers) only have access to local markets. But many high-value agrifood products come from developing and emerging markets, which means they can fetch a higher price on export markets. The developing-country-as-producer and developed-country-as-consumer dynamic has existed for many of these products for a very long time, with only the coordination by buyers (elaborated-upon in the next section on GVC governance) tightening and changing in recent years. Flowers, however, are one high-value agrifood product for which overall trade flows have dramatically turned in the past two decades.

The majority of export-oriented floriculture production used to be concentrated in a single country, the Netherlands, which held as much as 65% of the world's market share as recently as 2007 (Patel-Campillo 2010, 87). Since the late 1990s, however, Holland's share of the export flower market has decreased, accounting today for only 50% of the world's rose production and 43% of cut flowers (van Rijswick 2016). The nexus of production for cut flowers is shifting southward, and flowers are beginning to mirror the trade patterns of cut fruits and vegetables.

Behind the Netherlands, flower-producing countries in Latin America and in Africa are gaining momentum, with Colombia now producing 15% of the world's cut flowers, Kenya 11%, and Ecuador and Ethiopia each accounting for 9% (van Rijswick 2016). The world-famous flower auctions in Aalsmeer, the Netherlands, are also losing dominance as. Although it occurred later, flowers have also begun to mirror other high-value agrifood products in this respect, with buyers opting out of spot markets (which were facilitated by auctions and wholesalers) and instead choose direct purchasing (Evers et al. 2014). The next section on Governance further elaborates upon the impetus for this change.

Developing countries have high rates of participation in high-value agrifood chains, and although it was not always the case, the same now also holds true for the cut flower value chain. Yet, for producing countries, the overall benefit of participating in GVCs remains tenuous (Humphrey 2004), not only because of uncertain market trends as discussed above; but also because of uneven power dynamics and narrow opportunities for participation. These two limitations are
further discussed in the following sections about governance and upgrading in global value chains.

**Governance: Control and Power in the GVC**

As discussed earlier, researchers observe a general trend that the governance of high-value agrifood GVCs has shifted in recent decades, with lead buyers (supermarkets and large retailers) seizing control over, and coordinating more carefully, their supply chains. Researchers initially described chain governance as being either "producer-driven", with suppliers dictating the standards of production and influencing the behavior of actors further along in the chain; or "buyer-driven", with purchasing firms (which are usually not the final customers, but generally the direct intermediary to the final customer) exercising this control, instead (Gereffi 1995). These concepts are still in use - and high-value agrifood GVCs are generally described as being buyer-driven (Dolan & Humphrey 2000) - but the dynamics of governance have been further developed to consider the various ways in which producers and buyers might interact with each other.

Per the typology presented by Gereffi et al. 2005, the nature of GVC governance is a function of the complexity of exchange; the relative ease of codification of information, or how efficiently it can be specified and transmitted efficiently without direct connection between producers and buyers; and the capabilities of suppliers in relation to the requirements of the transaction (Gereffi et al. 2005, 85). This categorization suggests five types of value chain governance, moving from least-to-most complex: market, modular, relational, captive and hierarchical. Examining high-value agrifood chains, researchers find examples of the first three of these types of governance structures.

The traditional governance structure of agrifood sectors exhibited market characteristics. Exchange occurred between producers and buyers of all sizes who participated in "spot markets" (in the case of flowers, these spot markets took physical form in the Dutch auction houses) governed by the basic market concepts of supply and demand and where price is the most important influencing factor of production and purchase (Fernandez-Stark et al. 2014). Today's highly-controlled agrifood value chains, however, are more modular in nature. It is no longer
availability and price, but instead the terms of the lead purchasing firms, which dictate the terms of exchange. Modular chains emerge where complexity is low and/or codification is possible; and where the capabilities of producers are not highly differentiated. Because of the level of codification, there may be informal (or non-existent) relationships and little need for communication between sellers and buyers (Gereffi et al. 2005). Switching costs are predicted to be low in modular systems, although it is generally the case with high-value agrifood systems that switching costs are higher for the producers than for the buyers (Fernandez-Stark et al. 2014).

Multiple case examples describe the transition to modular governance structures in the high-value agrifood industry (fresh fruits and vegetables in Dolan & Humphrey 2000 and Gereffi et al. 2005; cut flowers in Gebreeyesus & Sonobe 2009 and Evers et al. 2014). Studies attribute this change to greater standardization within the agrifood sector, driven by increased scrutiny on product quality. Public attention to safety (reducing food-borne illnesses for consumables, and pest/disease control for all horticultural products) and sustainability (critiquing the social and environmental impacts of production) pressures purchasers to have more transparency into, and control over, their supply chains - a condition which was impossible in the market paradigm, where wholesalers acted as the connector between anonymous producers and buyers (Humphrey & Schmitz 2002). Now, retailers have leveraged their market share and power to take control over and carefully coordinate their supply chains (Gereffi et al. 2005).

A 2013 case study by Ezequiel Zylberberg, examining small-scale flower producers in Kenya, suggests that the level of coordination by buyers is now such that a relational governance structure is in effect. In relational governance GVCs buyers and sellers must work closely together to exchange complex production information which cannot be easily codified; thus creating mutual dependence between the firms (Gereffi & Fernandez-Stark 2016: 11). In Zylberberg's study, small-scale producers access and participate in the floriculture GVC via intermediary firms, upon which they rely for information and with which they hold strong relationships. This is the only study to find that the floriculture GVC is relationally-governed, so it may be an anomaly. Yet it is also the only study to examine the role of small-scale flower growers within GVCs, so it may suggest that global value chains work differently for small-scale
producers, for whom buyer-imposed production standards are more complex and less easy to codify.

Whatever the size of the producing firm, and whether the high-value agrifood chain fits the modular or the relational governance typology, scholars agree overall that buyer coordination of these GVCs puts much greater pressure on producers. Stricter compliance standards (for example, socio-ecological sustainability certifications); and into taking on more risk for the products in the GVC. Whereas previously, in the 'market' governance structure, high-value agrifood producers enjoyed the ability to specialize in production and to more easily reach economies of scale; in the new 'modular' paradigm, selling more directly to buyers requires producers to provide greater variety and to provide consistent, quality volume delivered per the timing schedule specified by their buyers (Gebreeyesus & Sonobe 2009). This sort of 'just-in-time' delivery shifts the burden and risk of storage (especially risky for cut flowers, which rely on very specific temperature conditions during transit) to the producers (Gebreeyesus & Sonobe 2009; World Bank 2005).

These governance dynamics have strong implications for how (and, in the case of smallholders, whether) developing-country producers participate in high-value agrifood chains. The next section discusses whether such requirements hold producers captive to constrained roles within these GVCs; or whether they have opportunities to improve, or upgrade, their position.

**Upgrading: Capturing More Value within GVCs**

The concept of *upgrading* within GVCs first appears as *industrial upgrading* in a 1995 paper by Gary Gereffi entitled "State Policies and Industrial Upgrading in East Asia". In this paper Gereffi argues that the incredible growth of the Eastern-Asian economies in the late twentieth century was due not only macro-level policy (as was often suggested), but also to other "microinstitutional foundations" such as the innovative behavior of firms (p. 83). Gereffi attributes much of the "East Asian Miracle" to the fact that manufacturing firms in this region began "to move to higher value-added niches on global commodity chains, and to shift from labor-intensive to more technology -- and skill-intensive export roles", a process which he described as industrial upgrading (p. 78). Later research shortens the term to simply upgrading,
continuing to study the role of firm behavior and dynamism on economic development but broadening to include studies not only of hard industry, but also within the agricultural sector.

Gereffi’s research identifies upgrading as a key dimension of the Asian Tigers' development success in GVCs; subsequent scholarship recognizes upgrading as a necessary ingredient for success in GVCs because not all participation in GVCs is created equal. For decades, scholars have noted that some countries and regions see diminishing returns despite increased participation levels in global economic systems. This is known as "immiserizing growth" and was first described by Jagdish Bhagwati in 1958. Research into this paradox began to appear in GVC literature in 2000 with the work of Raphael Kaplinsky, who uses value chain analysis (referring to the old, but related, framework from Michael Porter) to explain the unequal gains of participation. Kaplinsky's research suggests that developing countries often enter and participate in the lowest level of global systems (basic assembly tasks in manufacturing, or crop production in high-value agrifood chains), due to arms-length, market governance structures which allow them to specialize in the production of basic commodities (Kaplinsky 2000). As value chain governance and power dynamics become more complex, producers are trapped in low-value activities (Kaplinsky 2000). This low value "lock-in" remains unless, or until, they can upgrade and seize more power within and value from the GVC (Humphrey 2004: 12).

There are a variety of upgrading trajectories available to firms in GVCs, described first by Humphrey & Schmitz 2002; and expanded-upon by researchers at the Duke Global Value Chains Center. The initial typology introduces four types of upgrading: process upgrading, or improving the efficiency, organization and/or technology of the production system; product upgrading, or producing "more sophisticated product lines"; functional upgrading, or taking on new activities within the value chain; and inter-sectoral upgrading, or moving into new, but related, value chains (Humphrey & Schmitz 2002, 19). Building on over a decade of complementary research after this first classification was presented, Fernandez-Stark et al. add three additional types of upgrading: entry into the value chain; backward linkages upgrading, or providing tradable services and/or inputs to companies in other GVCs; and end-market upgrading, or moving into more complex markets which require more rigorous standards (Fernandez-Stark et al. 2011).
Entry into GVCs is an important point of analysis in the high-value agrifood sector, where producers must from the outset possess more sophisticated production abilities - capacity to produce higher-quality, more consistent products and at a higher volume - to comply with increasingly demanding buyers. This severely limits opportunities especially for small and informal producers (Humphrey 2004). Once in the value chain, producers naturally take steps to increase the efficiency of their operations (process upgrading) and the quality and variety of their product (product upgrading) to remain competitive (Bamber & Fernandez-Stark 2013, Staritz et al. 2017). Some research suggests that upgrading is linear and sequential, so these steps are also necessary to conceive of further upgrading steps, such as functional upgrading (Bamber & Fernandez-Stark 2013).

For high-value agrifood producers, functional upgrading usually means taking over processing and packaging activities, and is considered the most effective way to harness more value from the GVC (Bamber & Fernandez-Stark 2013). Referring to the discussion in the Input-Output Structure section, about the creation of value in a high-value agrifood chain, the entire value chain can be seen as a series of increasingly difficult technological capabilities; and the act of functional upgrading as development of technological capacity, which firms use to propel themselves along the chain (Staritz et al. 2017).

Functional upgrading presents not only the challenge of learning and incorporating new value-added activities like processing, but also an added layer of competition from other firms operating in these segments of the value chain. These firms previously would have purchased from the producer, and may have even invested in the producer's earlier upgrading steps to improve their own supply (Staritz et al. 2017). But when a producing firm attempts to absorb processing and packaging functions, the processing and packaging firms may actively block their attempts to do so (Kaplinsky & Morris 2000, Kaplinsky 2005).

**Institutional Context & Stakeholders: Local factors influencing GVCs**
To understand opportunities for producer firms engaged in high-value agrifood chains, it is essential to understand the local reality in which they operate - both the institutional context, or the sector's local operating conditions and policies; and the other stakeholders, or the key actors
engaged with and influencing the value chain. It bears mention that global value chain research uses both the firm and the wider context - locales, regions and nations - as units of analysis. From the wider point-of-view, discussion of institutional context and stakeholder analysis identifies how local conditions and actors influence a particular area's performance (or out-performance or under-performance) in GVCs, relative to other producing regions or countries (Gereffi & Fernandez-Stark 2016). At the firm-level perspective, understanding institutional context and the other stakeholders helps to identify the resources available to firms; as well as the important suppliers, collaborators, buyers and competitors with which firms interact.

In Ecuador, as in other dominant rose-producing regions, producers entering the industry today build upon decades of institutional experience in the floriculture GVC. Although it is challenging to compete with already-established firms in the sector, new or "latecomer firms" (Humphrey 2004: 7) can benefit from the level of infrastructure and resource availability suggested by established firms. In the high-value agrifood sector these resources include transportation infrastructure (roads, airports, cold-storage facilities, etc.), production know-how and technology, availability of quality inputs (skilled labor, production supplies like fertilizers, etc.), access to credit and to mature sales channels. New firms can tap into resources and can "imitate" the practices of established firms to gain traction in the industry (Staritz et al. 2017, 7).

The labor force, its availability and composition, represents one input to the GVC which also acts as an important actor or stakeholder. With production and processing operations in high-value agrifood chains often occurring in rural areas, much of the workforce comes from nearby towns and villages, which benefit from the employment opportunities created by the sector (Bamber & Fernandez-Stark 2013). Low wages help production and processing firms remain competitive, yet low pay limits the benefits for the workforce, especially for women. The gendered dynamic of the labor force has been a common subject of study within the literature on the high-value agrifood sector (see, for example, Barrientos et al. 2003, Lastarria-Cornhiel 2006, Bamber & Fernandez-Stark 2013).

In agriculture, as in manufacturing, production roles and tasks are often very gender-specific, with men holding roles which are seen as more dangerous and might require more physical
strength (operating machinery, spraying pesticides) and women in roles which require attention to detail and dexterity (harvest, post-harvest and quality control) (Bamber & Fernandez-Stark 2013). Women's participation in the labor force in many horticultural sectors is constrained by the gender bias faced at work (in terms of tasks, compensation and dignified treatment) and by the fact that women retain extensive responsibilities in the home (Bamber & Fernandez-Stark 2013). Yet despite these constraints women represent a dominant (at least half, in many horticultural sectors, per Bamber & Fernandez-Stark 2013) and growing percentage of the labor force. Increasing numbers of women also enter the horticultural sector as entrepreneurs each year, as smallholder producers (Lastarria-Cornhiel 2006).

The labor force is one of many important stakeholders in high-value agrifood GVCs. These stakeholders may come from within or outside of the GVC - meaning that their core function lies not within the value chain itself but that they contribute a good or service; or play an oversight role which is crucial to the GVC. For producers in high-value agrifood chains, in addition to labor the other critical stakeholders are: R&D firms, which are responsible for developing the seeds and rootstock of the varieties grown; other producing firms (of all sizes); processing companies (handling post-harvest and/or value-added processing such as roasting, grinding, packaging, etc.); transportation and logistics companies; sales intermediaries; cargo agencies; end buyers, such as wholesalers and large retailers; and final consumers, such as florists and private individuals (Evers et al. 2014).

Some of the stakeholders external to the GVC - for example, government institutions, NGOs, regulatory bodies, etc. - exert considerable force on the activities and dynamics of the GVC through political influence and public opinion. According to Bamber et al. 2014, the strict set of public and private standards are the most influential factor determining whether firms (and regions) can or cannot compete in GVCs. Examples of public quality standards include local and national regulations on pest and disease control, as well as basic quality standards. Private standards include quality and sustainability standards imposed by retailers; as well as third-party sustainability standards, which monitor the socio-environmental impacts of production and of the high-value agrifood supply chain (Dolan & Humphrey 2000).
In all, the global value chain literature on high-value agrifood products paints a picture of a trade system where buyers – largely in the global north – control production and other value chain processes through increased coordination, complying with rigorous quality and sustainability standards. Those producers – largely developing countries and developing country firms – which access GVCs may find themselves “locked-in” to low-value activities unless they can claim additional value by upgrading in the chain. For producers, the ability to upgrade depends largely upon local institutional context (existing infrastructure and resources) and on their connections with other stakeholders in the value chain. The next section describes the GVC literature’s perspective specifically on smallholder producers, and the special challenges they face.

**Smallholder producers in GVCs**

Of the estimated 525 million farms worldwide, the majority (500 million) of these are small (<2 hectares) (Lowder et al. 2016). It is impossible to characterize these millions of farms through a single profile, but of interest to this study are the characteristics which set smallholder producers apart from other types of producers, especially those which confine their participation in high-value agrifood systems.

The inherently rural nature of horticultural production poses two important challenges to smallholders. The first of these is a lack of productive infrastructure, especially in developing countries; the second is distance from input resources and from markets. Large farms are more likely to have sufficient investment to overcome (solve, or at least work around) these challenges, which points to another reality for most smallholders: the real and figurative distances separating smallholders from markets are often compounded by poverty (Anderson & Lent 2017). Although “poor” and “small” are not synonymous, smallholders are often living in or transitioning from subsistence lifestyles, which has implications for their resources and their access to and ability to navigate international markets, which are often much more sophisticated than the local markets in which smallholders have previously participated (Barrett 2008, Bamber & Fernandez-Stark 2013).

Of the six dimensions of the Global Value Chain framework, Governance, Upgrading and Stakeholders hold the most relevance for smallholder participation. The buyer-driven governance
structure of high-value agrifood chains sets the rules of the game by which producers must play; and for the producers who do enter, upgrading becomes essential so that they don’t get stuck in the low-value production trap at the bottom of the value chain. The other local actors involved in rose production – both peer producing companies, as well as upstream actors and downstream buyers and intermediaries also influence the entry and upgrading abilities of smallholder producers.

**Governance**

The discussion of the dimensions of high-value agrifood Global Value Chains suggests that the complexity, intensely competitive and strictly-regulated nature of these chains makes competition especially difficult for small-scale producers. According to numerous accounts - e.g. Dolan & Humphrey 2000, Humphrey 2004, Gereffi et al. 2005, Zylberberg 2013, Melese 2017 - small-scale producers have all-but disappeared in these high-value agrifood chains. Large producers dominate because they adapt better to the dynamic nature of production standards, and to accommodate the volume and variety requested by direct purchasers (Melese 2017, Evers et al. 2014, Dolan & Humphrey 2000, Gereffi et al. 2005).

Dolan and Humphrey first observed these phenomena in 2000 in the GVC for horticultural products, especially fruits and vegetables, flowing from African producers to European consumers. Most other high-value agrifood products, from coffee to cocoa to flowers, now mimic these trends. But recent scholarship finds that the floriculture GVC specifically exhibits a variety of governance structures, not only the sustainability standard-driven and tightly-coordinated lead buyer form. The emerging markets of Russia and the Middle East, which have considerable appetites for flowers, display characteristics of market governance, with arms-length relationships and ad-hoc transactions (Melese forthcoming). Smallholders can enter these “limited” GVCs, accessing not all global markets but a few international markets with less stringent quality standards (Bamber & Fernandez-Stark 2013, Bamber et al. 2014).

In other instances, smallholders are cushioned from the realities of GVC governance thanks to development interventions which seek to improve smallholder access to markets, access to training, access to finance and collaboration and coordination with other actors in the value chain
(Fernandez-Stark et al. 2012: 13). Such interventions also seek to make smallholders more competitive within GVCs by helping them build the capabilities to upgrade along the value chain.

**Upgrading**
The helpful model from Fernandez-Stark et al. 2016, presented in the Upgrading section of this chapter describes the typical upgrading trajectory of the high-value agrifood chain, but does not suggest how producers actually engage in GVC upgrading. The literature alludes to the importance, especially for smallholders, of moving along GVCs to capture additional value, but with only nebulous insight as to how (Staritz et al. 2017).

One area of research on Technological Capabilities (TC) explores this question identifying the connection between upgrading and specific firm-level capabilities. Staritz et al. 2017 define technological capabilities as “a firm-specific form of institutional knowledge composed of the combined skills of its staff members accumulated over time” (2017: 6; borrowing from Lall 1996). They also acknowledge another definition which uses the term “knowledge-based assets”, or a “set of skills that allows its owner to produce and distribute a product at or below prevailing market costs” (2017: 5, borrowing from Amsden 2001).

Staritz and colleagues describe three sets of technological capabilities which a firm possesses or can learn as it moves through the GVC: investment capabilities, or the ability to attract and manage investment at launch or during expansion; production and process capabilities, or those skills necessary to efficiently operate production by using existing productive equipment and by acquiring new ones; and linkage capabilities, or connections to other firms, both within the same value chain (suppliers, buyers, sub-contractors, etc.) and to logistical partners outside of the value chain (financiers, transport, etc.) which allow a firm to transmit or receive information and move product (2017: 9).

The Technological Capabilities perspective also suggests that each firm’s ability to expand and evolve its technological capabilities depends upon its existing resources and experiences (Staritz et al. 2017). Although TC literature does not specifically address smallholder producers, this
insight may explain why under-resourced smallholders may struggle to expand their own technological capabilities and therefore to upgrade. TC research also makes the important distinction between the existence of, and even access to, resources; and the ability to leverage or capitalize on them (Melese 2018).

**Stakeholders**
In the new modular (as opposed to market-based) governance paradigm for high-value agrifood chains, buyers – rather than suppliers – call the shots, which puts smallholders especially in a precarious position. To address this, producers may collaborate with other value chain stakeholders to aggregate their seller-side power to “extract better terms of trade from downstream purchasers” (Barrett 2008: 312). These stakeholders may be third-party intermediaries, other producers or processing firms in the value chain which contract with smallholders as “outgrowers” (Bamber & Fernandez-Stark 2013: 13) also known as “contract farming schemes” (Barrett 2008: 312, see also Glover 1984 for coverage of both terms). Producers cooperatives or associations are also key allies for smallholders. Usually initiated and owned by the producers themselves, these types of intermediaries give producers more control over the next stage of the value chain and may allow smallholders to earn better prices for their produce. Producers also seek other benefits, such as cheaper access to production inputs, through cooperative arrangements (Bamber & Fernandez Stark 2013). Cooperatives and other intermediaries do not represent a ‘magic bullet’ solution for smallholders, and indeed researchers find mixed outcomes for cooperatives (Mayoux 1995). Still, they are often cited as potential vehicles for smallholders to harness collective power and increase positive outcomes.

**Research Question**
As reviewed in this chapter, the GVC literature provides a helpful framework for understanding the context and some of the mechanics for the floriculture global value chain in which the Ecuadorian smallholder rose growers operate. But available literature suffers from two primary limitations for understanding smallholder rose growers. First, it provides insufficient coverage of smallholder producers competing in GVCs and the conditions which impede or facilitate their upgrading. Second, it offers few on-the-ground views of smallholders as individual entities, rather than as a collective policy target. These gaps prompt the guiding question for the empirical
research for this study: "what is it like to be a smallholder rose grower competing in a global value chain, and how do they do it?"
Chapter Three: Methodology

In the following chapter I describe the research design and methodology for this study, which takes a qualitative approach to explore the anomaly of smallholder participation in the global value chain for Ecuadorian roses. Qualitative research lends itself well to the examination of lived experiences (Morris et al. 2012), and to understand those experiences I employ the grounded theory approach, reaching beyond existing theory regarding smallholders in GVCs, to identify and describe new concepts which emerge from the empirical data (Eriksson & Kovalainen 2008). I apply multiple data collection and analysis tools, including unstructured and semi-structured interviews and observation to collect empirical information; and secondary material review to provide background context.

This chapter begins with a description of the overall methodological approach and an overview to Grounded Theory and its applicability to this study. It then introduces the background context on floriculture and smallholder rose growers in Ecuador. Next it covers the study design, describing the way I conduct fieldwork and gather data. Following the discussion of the empirical data collection, I outline my strategy for interacting with and analyzing the data, which follows the circular, iterative approach of Grounded Theory.

Methodological Approach
The unlikely Ecuadorian smallholder rose grower inspires interesting avenues for an entrepreneurship researcher - from the unique economic conditions which might facilitate their entry in the floriculture global value chain; to an assessment of the actual level of success experienced by these producers; and anything in between. My research seeks to understand story of the Ecuadorian smallholder rose growers first-hand, as told by them. The qualitative research tradition in business provides "an opportunity to focus on the complexity of business-related phenomena in their contexts" (Eriksson & Kovalainen 2008: 2), appropriate for the purposes of this thesis.

To examine the global value chain from the producer’s point of view this thesis borrows concepts from a growing body of research which looks at entrepreneurship as a lived experience,
a “process involving multiple stages over time” (Morris et al. 2012: 15). This view of entrepreneurship seeks to escape from a rigid, firm-level and positivist view of the entrepreneurial journey; and instead to embrace entrepreneurship as a dynamic, subjectivist and lively concept (Berglund 2007: 75). Because of this, ‘lived experience’ scholars suggest using a wide range of qualitative methodologies to explore the stories and lives of entrepreneurs (Berglund 2007). I use Grounded Theory methodology because it allows for specific themes and questions to emerge in the field through ongoing interaction between empirical data and existing literature (Gioia et al. 2013).

**Grounded Theory**

Grounded Theory evolved from the field of sociology in the 1960s, pioneered by Barney Glaser and Anselm Strauss. They believed that sociologists of their day were overly preoccupied with the verification of existing theories, rather than with building new ones, because they did not have a systematic and thorough way to go about theory-building (Glaser & Strauss 1967). With grounded theory, they hoped to revive the process of theory generation. Grounded theory has evolved to become both a methodology and an analytic tool, and today it is popular in qualitative business research to develop theory around emergent business topics (Eriksson & Kovalainen 2008). Emergence is a key word, as grounded theory uses an iterative process to develop theory "through continuous interplay between analysis and data collection" (Strauss & Corbin, 1988: 158).

Philosophically, Grounded Theory follows the constructivist ontological school of thought which asserts that reality is constructed by individual (and collective) experiences and perceptions. Grounded Theory methodology illuminates the process by which these realities are constructed, and gives voice to individuals as "knowledgeable agents" who can explain and reflect upon their decisions and actions (Gioia et al. 2013: 17). This concern about both process and persons makes Grounded Theory appropriate for this study - the process interest fits with the extremely process-oriented Global Value Chain framework; yet the focus on individual perception and experience balances the GVC's 'depersonalization' of firm activity.
Grounded Theory methodology allows me to investigate the gaps in the existing scholarship around GVC when it comes to individual entrepreneurial experience. It also allows me to identify emergent themes from the data and propose opportunities for future theory development which links the subjective, experiential view of entrepreneurship with the largely positivist literature around GVCs. I describe the investigation in detail after first presenting providing an overview of the context of the Ecuadorian smallholder rose growers.

**Context: Ecuadorian Floriculture**

Over the past three decades, floriculture has emerged as a key component of the Ecuadorian economy. The first commercial flower farms appeared in the 1980s, and since then cut flowers have grown to represent Ecuador’s third-largest agricultural export, with Ecuador as among the top five flower-exporting countries globally (Florexpo 2016). The nation is known especially for its robust, long-stemmed and large-budded roses which reflect the unique high-altitude growing zone. Today, flower farms employ some 60,000 workers, around 50% of whom are women (National Geographic 2014).

Floriculture appeared in Ecuador in the 1960s as foreign investors began purchasing land and experimenting with flower crops (Knapp 2015). Rose production began first in Colombia in the late 1960s after a paper was published lauding Bogotá's high plans for their rose-production potential (Smithsonian 2011). With similar high-altitude and fertile soil conditions, production soon spilled over into Ecuador. Rose farms can be found all along Ecuador's Andean chain, with the majority (60%) concentrated in the Pichincha and Cotopaxi provinces within a two-hour drive (north and south, respectively) of Ecuador's capital of Quito (USDA 2009).

Production increased dramatically in the early 1990s when the United States passed a series of free-trade reforms, such as the Andean Trade Preferences Act, aimed at reducing the Andean-region's dependence on drug production and trade. The export value of cut flowers increased from 13.6 million US Dollars in 1990 to $194.6 million in 2000 (Knapp 2015, 232). The flower industry in Ecuador has its antecedents in hundreds of years of colonial and postcolonial

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1 Estimates go as high as 100,000 for the number of people employed by the flower industry in Ecuador (Knapp 2015)
agricultural production, so while flower industry did not boom until the 1990s, the macro and micro-level factors influencing the country's modern flower production are rooted in much older policies and institutions.

**Overall Agricultural Context and implications for smallholders**

Until the 1960s Ecuador’s agricultural policies dramatically favored large-scale production, with a small group of landed elite holding most of the productive ground in Ecuador. Peasant farmers held small, generally also rocky and steep, plots of land (Mena-Vásconez et al. 2016) which they used for subsistence farming. In 1964 the Law of Agrarian Reform and Colonization initiated large-scale reforms, including some measures favorable to small-scale farmers, such as requirements to redistribute land ownership (Qamar, 2013). Further measures in the late 1990s and early 2000s sought to support smallholder farmers by ensuring access to extension services (such as access to credit and technical training through the Ministry of Agriculture’s ‘Programa de Desarollo Tecnológico Agropecuario’ division) for more farmers in Ecuador, not just those who could afford them. These reforms opened opportunities for smallholders, but they also professionalized the agricultural industry in Ecuador to the point that it diminished opportunities and competitive advantage for smallholder farmers (Qamar, 2013). As a result, large waves of urbanization ensued since the poor had difficulty sustaining livelihoods in rural areas (Lyall 2014).

With the rise of the commercial flower industry which created new jobs in the countryside, some of these urbanization trends reversed (Soper, 2013). Most people returning to rural areas for floral industry jobs returned as labor, rather than as flower growers themselves, and most Ecuador's flower producers are large corporations (Lyall 2014). Though this largely remains the case, a few hundred - 300-600² - smallholder rose farms have cropped up as laborers put their know-how to work through flower cultivation on land of their own (Mena-Vásconez 2016, 2017).

² It's difficult to achieve a precise count for the number of smallholder flower farms, since many of them aren't officially registered with AgroCalidad, the Ecuadorian governmental agency responsible for certifying farm ownership and production standards. Rose farms are the least difficult to estimate because the roses must be grown in greenhouses, which can be counted from the air. Gypsophila and carnations represent Ecuador's top flower exports after roses (USDA 2009), and it is unknown whether small-scale farmers are converting their cash crops to these other types of flowers.
**Study Setting**

I conducted the research for this study in the Pichincha province in north-central Ecuador. In the two most productive cantons of this region - Cayambe and Pedro Moncayo - the new smallholder farmers largely share a similar background. The majority are from indigenous, peasant families which received small plots of land after Ecuador's agricultural reforms in the 1960s-70s. These families dedicated themselves to subsistence farming, as well as to raising dairy cattle and the production of cash crops like tomatoes (Mena-Vásconez et al. 2016) - pursuits they continued even after many family members also began work on the large flower farms. It was in the late 1990s/early 2000s that some of these families turned their attention to new investment opportunities on their own land.

The reasoning behind launching their own rose farms is relatively straightforward - leave behind the harsh working conditions and low wages on the large farms, and convert the existing cash crops on their own land to something potentially more profitable. The process of doing so, however, involves great financial and social risk. To finance the venture the smallholders generally sell any valuable assets they already have (a cow, a truck, etc.) and then obtain much of the financing from banks, local cooperatives and/or from larger farms (which are interested in expanding their own productive capacity and so will invest in the smallholders as outgrowers). The startup costs for production on ⅓ hectare of land are approximately $45,000, a sizable amount considering that the basic monthly income in the area is $375/month. This amount includes the 'invernadero', or greenhouse, the root stock and rose plant grafts, a basic drip irrigation system and fertilizers and pesticides (Mena-Vásconez 2016).

The $45,000 estimated amount does not include the 'regalía', or royalty payments which producers owe to the breeders of the rose varieties, which vary from $1.20-$1.50 per rose plant. On one third of a hectare of land, a producer likely raises 40-50,000 rose plants, so the real costs

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3 Rose farming has drawn international scrutiny for its negative labor practices - long hours, dangerous working conditions, low wages, etc. - and harmful environmental impacts - the use and mismanagement of harsh chemicals, intensive water use, etc. (Harari 2005, Lyall 2014, Mena-Vásconez et al. 2016).

4 This thesis lists financial figures in United States Dollars ($), which Ecuador adopted as its national currency in the year 2000.
of launching a business come out to be over $100,000 - though many of the small producers "hide" from the breeders, buying their root stock not through formal channels, but rather from friends and neighbors to avoid paying the regalía. However, the breeders are known to come in and pull out every rose plant in the greenhouse if they discover that a farm has been growing its varieties without payment.

This looming threat suggests the overall risk level of new rose growing ventures, which face not only the myriad challenges present in all types of agricultural production; but also, fickle demand as a 'luxury' product with only two intense sales periods per year (February, for the US Valentine's Day; and May for Mother's Day). And, as explored in the Literature Review of this paper, the intensely-coordinated nature of the value chains for high-value agricultural commodities such as roses places extreme pressure on producers to comply with rigorous production standards, tight timing schedules, and demanding quality and variety requirements.

**Data Collection**
This study relies primarily on fieldwork in Ecuador to understand the realities of life and work for smallholder, export-oriented rose producers. Starting with a broad research question I entered the field with an intent to "give voice to the [producers] in the early stages of data gathering and analysis" (Gioia et al. 2013). During the time in the field, I refined and re-focused the study per the interests of the farmers I met and in concert with the literature I encountered.

Before going to Ecuador, I conducted broad research into smallholder producers, looking at the common collective (cooperatives, producer’s associations) formations available to small-scale farmers to increase their ability to compete on global markets. In the field, however, the focus shifted away from these associations because I struggled to gain access to association representatives. Although Global Value Chain theory provided great insight, especially to the upgrading behavior and aspirations of smallholders, in keeping with Grounded Theory, I tried not to impose the concepts of the GVC framework on my interviews; but kept it in the back of my mind while listening to smallholders describe participation in the global floriculture market in their own words. As a result, I got to hear about the importance of trust and inter-firm
alliances which the smallholders use, which became an important theme for the remainder of the study.

I collected data during a two-month period from mid-April until mid-June, 2018. Based in the canton of Cayambe, Ecuador, I conducted the research in Cayambe and the neighboring canton of Pedro Moncayo. The interviews and observation took place specifically in the towns of Cayambe and Tabacundo, and in the surrounding communities of Santo Domingo I and II, Tabacundo and La Esperanza (see figure below for a map of the research area). I gathered data through semi-structured interviews with producers and other actors in the flower value chain (association representatives, transportation companies, etc.), which I supplemented through casual conversation with producers and other actors - nearly everyone in the community has been involved in floriculture in some way, or at least held an opinion about it.
Business studies commonly use semi-structured interviews (Eriksson & Kovalainen 2008) because they allow the interviewer and interviewee to collaborate in the storytelling around and discussion about the experience of taking part in business activities (Seale 2012). I had a set list of topics to cover with each interviewee, but the order, pace and depth in which we covered each question depended upon the interviewee's own story. Following the Grounded Theory approach, the list of set topics to cover with each interviewee also evolved as I came to better understand the context in which they operated, and as interesting issues emerged from the stories told by the producers (Gioia et al. 2013). I supplemented these semi-structured interviews with observational field notes.

**Access**
Informed my preliminary desk research, I thought that producer’s associations were going to offer key insight to understand smallholder competitiveness. I wanted to hear from association representatives, association members, and from independent or unassociated smallholder producers. The focus of the study evolved and I eventually veered off from the association angle, but the first points of contact I made in the field were with the Asociación de Productores de Pedro Moncayo (APPM), a member-owned processing and export association; and with Ana Farinango, the smallholder rose grower I introduce at the beginning of this thesis. Patricio Mena-Vásconez, a researcher whose work I cite throughout this paper, knew both APPM and Ana and agreed to introduce me to help me get started with my field research.

Access to and through APPM proved difficult throughout my time in the field, as the association was experiencing a series of transitions which made them reluctant to communicate with a researcher. I gained second-hand insight on that, and other, associations through interviews with producers who were also members, or who had previously been or considered being members. The producers themselves were generally open to give interviews, some of which were brief (20-60 minute), one-time conversations; whereas others occurred over multiple interactions. Ana, for example, welcomed me to her farm for a full day each week over the duration of the study period. I found other producers by canvassing the countryside, or through introductions from their neighbors and colleagues.
In total, I conducted interviews with 31 producers, 30 of which still cultivate their flowers on < 2 hectares of land; one which started small but has experienced dramatic growth and now cultivates on + 10 hectares. With eight of these producers I met multiple times, conducting first a lengthy primary interview and then continuing through casual conversation on the subsequent visits. Of the 30 current smallholders, the majority were outgrowers, which is to say that they sold their roses to another farm, which then sold them for export. But ten of these smallholders had in the past, were currently, or were preparing to export directly themselves.

Appendix A of this thesis includes some additional information about each producer interviewed. As a fluent Spanish speaker, I initiated and conducted these interviews independently, however my appearance proved alarming to some producers. As a European-looking person I was not only easy to peg as an outsider, but also met with great suspicion by some smallholders who believed me to be an agent of the rose breeding companies (most are centered in The Netherlands and other European countries). Usually, a visit from the breeders bodes ill for the small producers because the breeders either demand payment for the royalties owed or threaten to remove the plants. Many of the growers accepted my interview request cautiously and only with an agreement to keep their names out of any publication. Ana's name appears throughout the papers of Mena-Vásconez et al., so I keep hers intact but refer to the rest of the producers I met as "Producer 1, Producer 2", etc.

Data Analysis

Grounded Theory methodology provides very clear marching orders for how to interact with and analyze data. Interaction with data begins upon collection, with immediate identification of and reflection on subject-centered "first-order" themes (Eriksson & Kovalainen 2008, Gioia et al. 2013). Each day after conducting fieldwork and observations, I wrote down impressions about the major themes which had emerged in conversation that day. Through these conversations I began to build a mental picture of the lives and realities of the Ecuadorian smallholders, and of the issues which were important to them about their businesses. For example, the associations

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5 In many places, smallholder outgrowers sell to large producer/exporters; this was the case for some of the outgrowers I met; whereas others sold to nearby smallholder producer/exporters, often neighbors or family members.
were less important than I originally had thought, and the reasons for starting their flower farms
were of great importance to the interviewees. Though I retained many of my original interview
questions throughout the fieldwork, I added and refined those questions - and even my core
research question - as time progressed.

Part of the rigor of Grounded Theory depends upon, as long as possible, identifying themes and
codes and categories in the terms of the interviewees themselves (Gioia et al. 2013). I created a
large-number of first-order codes using the vocabulary of the smallholders, and as I moved on to
the second-order phase of coding, I retained this vocabulary for if possible. I conducted
interviews, took notes and identified early themes in Spanish. For the process of second-order
coding I moved forward exclusively in English. In the process of second-order or "axial"
(Strauss 1990) coding I brought in theoretical frameworks and concepts to meld with the themes
of the interviewees (Gioia et al. 2013). Having read most of the theoretical work in English, I
translated the original codes and analysis into English so that I could merge the wording for the
data and the theories. I used direct translations wherever possible, but substituted the English
terms from the literature for the direct translations of terms used by interviewees if the term in
the literature expresses the concept more succinctly.

During this theoretical engagement phase I found the large body of literature on Global Value
Chains. At first I simply used the GVC literature to inform and provide vocabulary for some of
the emerging themes, especially the concepts of "outgrowers" vs. "independent exporters" and
the theme of "upgrading". Finding the GVC literature also provided a much more drastic insight,
that these small-scale Ecuadorian rose growers were not only interesting to me personally (as a
flower fanatic and proponent of small farms); but also, quite unique on the global stage. This
kind of realization would not have been possible without the iterative Grounded Theory
approach.

Once I became familiar with the GVC framework, both its concepts and its limitations, I realized
that I would need additional theories and constructs to get a full, multi-dimensional picture of my
data. I wanted to reach beyond the mechanical descriptions of firm behavior in GVC literature
and into something more experiential. Borrowing from the other research areas of
entrepreneurial motivation, interfirm cooperation (IFC) and social capital theories, and even circling back around to the original producer’s association frame of reference, I gained vocabulary to describe the informal, collective-oriented strategies of the interviewees.

The next step in the data analysis was to narrow the axial codes into a few final, selective categories which I could then incorporate into a table to illustrate the emergent themes of my research (Gioia et al. 2013). At this final phase of the analysis I identified four final themes (with seven sub-themes), all of which I translated to English for ease of inclusion in this write-up. The next chapter describes the findings of the research, organized by these seven themes, all of which relate to the motivations of Ecuadorian rose growers and their approaches to succeed and upgrade in the floriculture GVC.
Chapter Four: Findings

This chapter describes the findings of the empirical research for this study, distilling the conversations with thirty Ecuadorian smallholders into a narrative about their experiences in the floriculture Global Value Chain, and especially their orientation towards and attempts to increase their competitive position within that value chain. Although the smallholders in this study vary greatly in their attitudes and approaches to this work, a few patterns emerge from the data.

First, a fundamental belief which these producers have about the benefits of pursuing export-oriented rose cultivation. This belief prevails despite the adverse conditions in which they operate, a recurring theme in this chapter. Second, I recount the ambitions of these producers, many of whom actively pursue opportunities to improve their position within the global floriculture value chain. To borrow the Global Value Chain terminology, they do so through upgrading: process upgrading (increasing the effectiveness or efficiency of their production), product upgrading (developing a unique or superior product or targeting their product at niche markets), or functional upgrading (developing new capabilities to capture value at other places along the value chain, either ‘upstream’ or downstream’).

The third section of this chapter looks into the heart of the study, at how Ecuadorian smallholder rose producers take the unlikely step to pursue exporting, either independently or through formal or informal collective activities. Though not all Ecuadorian smallholders attempt to export, the data in this study reveal a much more ambitious and nuanced picture of smallholder rose producers than what the GVC framework predicts. This chapter offers observations of the critical importance of building and leveraging trust-based relationships, both formal and informal, and whether-or-not the smallholders are actively pursuing opportunities to upgrade.

Motivations for Entering the Rose GVC
The stories of these producers tell of their desire to improve their livelihoods via improving their place and performance in the global floriculture value chain. They fervently believe that building or converting a greenhouse and filling it with roses to sell for export will improve their lives and the lives of their families. Despite the enormous challenges, and whether-or-not the risks ultimately pay off, most of the interviewees retain a deep loyalty to their ventures.
Algo Propio - Autonomy
First, the appeal of disentangling themselves from difficult work for someone else, and putting that energy into something of their own, is powerful:

“Si yo ya trabajo, es por algo mismo” /
“Now when I work, it’s for something of my own”

The interviewees in this study believe that going into flower production allows them to gain autonomy in their work and control over their lives.

For some, the priority is to have more time for their families. One woman said “when I was working from 7-16:00 on the large rose farm, my daughters spent a lot of time alone at home,” but now that she works on her own rose plot behind their house, she feels more available to her children. This flexibility was evident during the interview process, during which people often invited me to join the mid-day breaks for a long lunch with the family when the kids arrived home from school.

Running their own greenhouse also represents an opportunity to control, and potentially increase, their earnings. One interviewee talks about her former employer, a large rose farm, repeatedly failing to issue her monthly paycheck “I had the bad luck that they didn’t pay my wages … for four months and because I needed work I got out of there and took advantage of the experience I had gained … and so my mother and I initiated this business”. Whether-or-not they actually do earn more as rose farmers - indeed, some interviewees still earned just the basic monthly income of $375, which is less-than or equal to what they earned when working on the big farms - they take pride in having their labors fill their own coffers, rather than those of someone else.

Symbolic Value
More than just providing materially for the families, the rose farms also hold important, symbolic value as the means to create something better for their children. One woman tells the story of how her family worked the lands of large Ecuadorian haciendas for generations, and that even after the agricultural reforms of the mid-twentieth century, they used their own small plots of land for subsistence production and worked on the large farms nearby. She sees her rose business
as a chance to, in her words, escape the "exploitative" working conditions on those large farms. Their farm also challenges the assumption that they, the poor peasants, must work for the wealthy landowners; because these smallholders are themselves landowners, and can work for themselves.

Some producers believe that the farm itself creates the opportunities for future generations by generating jobs for their grown children. Many of the producers which have recently begun to directly export their flowers do so thanks to the know-how of their tech-savvy children who take on the vendor or sales role for the family company. Other families dream of using the farm as a platform for something bigger for their children. One father declares proudly that his farm provided a good education for his daughter who is now a doctor, “not working in the mud like me”. Ana Farinango believes that running her own farm shows her children (especially her teenage daughter) how to be strong, responsible and independent.

**Challenges**

These goals, whether only dreamed or actually accomplished, do not diminish the risks and pitfalls along the way for smallholder rose producers. They encounter the typical hazards of agricultural production, compounded by additional challenges they face as small producers. As with any farming venture, climate and pests can throw off production at any time. During the research period, central-northern Ecuador experienced wetter-than-average conditions, leading to low production levels because the roses could not get enough sun for the buds to mature. The wet conditions also increase humidity levels in the greenhouses, increasing the risk of fungus and other infections for the roses. On top of threatening immediate supply, the producers worry that weather-induced variations threaten their relationship with buyers. On one farm visit with Producer 6, a phone call from a buyer interrupted our interview. The producer repeatedly tried to convince the caller “No, we are not withholding our flowers. No, we are not selling them to someone else. We just don’t have any mature roses right now.”

When the producers hold direct relationships with their buyers, they rely heavily on clear communication and on trust, since the buyers are located far away and cannot regularly – if ever – visit the farms. In other cases, though, the farmers rely on intermediaries which may be
relatively anonymous third parties or with which the producers also hold relationships. These relationships facilitate, but do not guarantee, sales. Producers expect sales to peak during late January/early February (for the Valentine’s Day holiday in the United States) in March (for Women’s Day, which is especially popular in Russia), and in May (for Mother’s Day), with a smaller rise in sales during the month of December, around the Christmas holiday. But even the peaks can be fickle, as found during interviews conducted around Mother’s Day this year, when interviewees expressed dismay that the demand never materialized because buyers already filled their quotas and sales were sluggish.

Slow sales present a challenge for any business, especially when those businesses lack cash reserves to tie them over during meager times. Most smallholders possess no such savings and still live, for the most part, “paycheck to paycheck”. Producer 9, the most successful of the producers I interviewed who started with ¼ of a hectare and now cultivates 10 hectares, believes that the largest barrier most smallholders face is the lack of (what he calls) a “cultura financiera”. He describes this as the struggle to adapt to, and shoulder the financial uncertainties of floriculture – the intense demand during high sales months, and low demand for the rest of the year; or the fact that rose exports come with very long payment periods, up to 50 days. Many producers do cite this as a real challenge when they begin exporting themselves; others say that they have chosen specifically not to export themselves because of the payment risk, preferring instead to sell to an intermediary who will pay more often, close to every two weeks. Some will stick with their intermediary – even if the demand and/or prices are low – because they get consistent and frequent payments.

The hoped-for control and financial payoff can be more of a hope than a reality for these smallholders, yet they persist. Perhaps they continue because of the lack of viable alternatives to rose farming – few express interest in going back to subsistence farming or to other former business ventures; and none of the interviewees want to return to work for large flower farms. They also feel committed (“stuck”, in the words of some) due to the relative enormity of their investment in the roses. Of the 30 smallholders interviewed, only one actively considers divesting from her rose farm; two more think of scaling back as they near retirement. But even those two producers say they plan to stay in the rose game as long as they are physically able and
can earn even a small profit. Whatever their reasons, most of the Ecuadorian smallholders I met look forward to expanding their production, improving their product and/or taking on additional value chain activities to cut out some of the intermediaries between them and the final buyers.

**Upgrading Trajectories**

Some GVC scholars believe that "Participating in global markets which allows for sustained income growth requires the capacity to learn and upgrade" (Kaplinsky & Morris 2001: 24). Not all the Ecuadorian smallholder rose growers in this study successfully upgrade, but many attempt some form of upgrading in order to assert and maintain their ability to compete in the global flower industry. Four of the forms of upgrading described in the GVC literature are evident among the Ecuadorian smallholder rose growers: GVC *entry*, or competing in the value chain for the first time; *process upgrading*, or improving the efficiency, organization or technology of the production system; *product upgrading*, or producing more sophisticated products; and *functional upgrading*, or taking on new activities within the value chain. This section describes each of the upgrading steps and the way the smallholders orient themselves to the task. It also examines some of the additional challenges they face in the act of upgrading, and the means they use to address those difficulties.

**Entry**

As an upgrading concept, the GVC literature depicts *entry* as the step which producers take to move beyond local markets and to compete regionally or globally for the first time (Fernandez-Stark et al. 2012, Bamber et al. 2014). However, none of the Ecuadorian smallholder rose growers start through domestic sales - all of them set up their rose operations with the explicit purpose of selling to export markets. In practice, most of them sell to whatever markets are available - first offering their product for export (either directly or through various intermediaries); then offloading any surplus through the local and national markets.

Two of the producers interviewed became independent exporters right off the bat, because they already had international client relationships (one thanks to his former job as a sales manager for a large farm, the other to her experience as an international flower broker) and sufficient capital to set up a post-harvest facility of their own. Most of the smallholders initially access the export
market as outgrowers for other producer-exporter farms, which may simply buy from the smallholders or may also provide some up-front financial investment in the farms. Other investment, as described in the 'Study Setting' section of the Methodology chapter, comes from institutional loans and the sale of whatever productive assets the smallholders may have.

**Process and Product Upgrading**

Many of the smallholder rose growers show keen interest in improving the efficiency of their operations. Not all efficiency improvements can be classified as upgrading - some (maximizing labor output, etc.) are simply necessary to remain competitive in the field. Others aim at "transforming inputs into outputs in a more efficient way" (Melese 2018: 24), and can therefore be classified as *process upgrading*. Among the producers in this study, the most common process upgrading activities include expanding cultivation and investing in new infrastructure or productive equipment. Expanding cultivation improves efficiency by allowing producers to near economies of scale by spreading their production costs across more productive units. However, producers also express a common concern about not growing too much or too quickly to avoid hiring employees because they want to avoid the obligatory basic wage and employment taxes required by Ecuadorian law. Eleven of the thirty smallholders currently employ non-family members in their greenhouse, the rest employ only family members.

*Product upgrading* entails developing a more sophisticated product line to reach new or higher-value markets. In some cases, this means bringing in new rose varieties which aren't as commonly-grown in the area and which fetch high prices on international markets. Many of the smallholders start out with old and well-established rose varieties, for which the markets have been proven, of which root stock is more readily available, and to which they do not have to pay such high royalties. "Freedom" (a red) and "Mundial" (a white) are two of tried and true varieties grown in the Pichincha province; but because they are so ubiquitous they can be difficult to sell, or the prices are very low. They may, then, start with a small batch (a few hundred or thousand plants) of a newer or more in-style variety to learn about how that variety grows, and to test the sales appetite. New varieties present challenges for the production cycle, as it takes up to 8 months to harvest a sellable bloom after planting a new variety; during which time the appeal or trendiness of that variety may disappear.
Other product innovations pose less risk, in terms of timing. Producers observe, for example, a growing niche market for "vanity" or "dyed" roses during holidays and sports seasons and among buyers in China and Japan. They create these roses by immersing the stem of a cut flower in a water-and-dye mixture, which gets absorbed up into the petals and tints the blossoms with imaginative new shades. White and red flowers are the best canvas for dyed roses, but they can conceivably be created with any existing variety, allowing producers to follow their standard production schedule but to add extra value at the end of the harvest process. Exporting farms also mix-and-match rose varieties (and possibly supplement with other types of flowers from nearby farms) into pre-made bouquets.

With process and product upgrading, producers conduct the same value chain activities but in a more efficient manner, and with an eye on innovative possibilities to satisfy new kinds of buyers. Many of the producers in this study are also, or instead, looking beyond their existing boundaries of production and to adding new value-adding functions.

**Functional Upgrading**

The series of activities along a high-value agrifood chain generally follows this trajectory: inputs → production → packing & cold storage → processing → distribution and marketing. As depicted in the figure below, in the Ecuadorian floriculture value chain, two of these activities happen differently. First, *packaging & cold storage*, and *processing* generally occur as one value chain function, referred to as "post-harvest and export" by the locals. Second, sales & export do occur in concert with processing/packaging/storage, but they require different capabilities on the part of the firms and thus the modified figure below depicts them as separate activities within the value chain.

Ecuadorian floriculture Global Value Chain segments

| Inputs | Production for Export | Processing, Packaging & Cold Storage | Sales & Export | Distribution & Marketing |

Figure adapted from Gereffi & Fernandez-Stark 2016
Processing, packaging and cold storage occur in a "poscosecha" or post-harvest facility, which features equipment to cut, hydrate, sort and package the flowers, and then a "cuarto frío" or cold storage room where the flowers rest before being sent to the airport. Post-harvest in Pichincha occurs either at producers' associations; or on farms, which aggregate their own flowers and those of other outgrower farms. General GVC wisdom suggests that these aggregating farms will be large farms, but the research for this study finds smallholder producers also constructing post-harvest facilities and taking over the processing and exporting functions for their flowers, and those of their neighbors.

Producers want to take over post-harvest and export to control more of their supply chain and thereby increase their earnings. Each producer's per-stem profit varies depending on the stem length (shorter stems of 40-50 centimeters sell for much less than roses of 80-100+ cm), the rose variety, and the seasonal demand. Producers estimate earning from 4-10 cents per stem when they sell as outgrowers, whereas they can earn around double that by controlling the post-harvest and export function in the value chain. There are two primary approaches which smallholders use to functionally upgrade - to do so independently, or collectively, via a member-owned cooperative or association.

**Functional Upgrading Approaches**

Many producers in this study view functional upgrading - or, in their words, doing post-harvest and export - as the ideal next step for their business:

> Of course, my goal for the future is to open a post-harvest and begin exporting myself.

For some, the ultimate goal is to upgrade independently; others choose to upgrade via producer’s associations to reduce the cost and risk of the upgrading venture; while still others attempt to blend the two strategies. The following sections describe these choices in detail.
Independent Exporters

When the smallholders describe the process of taking over the post-harvest and export functions for their flowers, they gloss over the work of setting up a post-harvest and focus more on the experience of becoming exporters. They view the post-harvest functions (building the facility, getting the equipment, sorting, processing and packaging the flowers) as simple enough; whereas they see exporting as more complicated and describe in-detail the challenges they have had in identifying buyers, working with customs agents, etc.

The producers in this study talk about "direct exporting" as the goal, by which they refer to gaining control over the international sales function for their flowers. It is worth noting that this connotation differs from the way "direct" would be used in GVC literature, to suggest that the producer sells directly to a final client outside of Ecuador. Some smallholders do hold these final client relationships if they carry them over from previous sales jobs and/or if they can travel abroad and meet buyers. Others consider it a success to sell through brokers, unpackers and wholesalers, both in Ecuador and outside. In both cases, upgrading to the processing, post-harvest and export functions requires smallholders to develop additional capabilities.

The smallholders involved in exporting independently - 8 currently, 1 formerly and 2 in the process - face interesting challenges when acquiring the necessary aptitudes to functionally upgrade. They can build the post-harvest facility out of readily available cinder block and concrete, but they must special-order the refrigeration equipment and insulated paneling to keep the room cool. These cold rooms also require reliable energy input, which can be tricky to come by in rural Ecuador. Although the majority contract with a third-party transportation company to pick up the flowers and deliver them to the airport, many of the upgrading smallholders also buy trucks to facilitate their expanding operations.

Producer-exporters must generally increase both the volume and variety they can offer, which means that they need more land. A few producers cited 3 hectares as the “magic number” for the amount of land needed to successfully meet export demand. Three hectares is also magnitudes larger than the plots held by smallholders, so they increase their production capacity by buying and cultivating more land of their own and/or by supplementing through outgrowers. Land is
becoming prohibitively expensive (one interviewee said that a hectare of land has quadrupled in cost since he began production), and the number of very small rose farms is increasing, so the outgrower option is more immediately feasible for the cash-poor smallholder producer-exporters. One such smallholder also says that net profits are much higher when she buys from others, than when she produces herself, so her family is expanding their production exclusively through outgrower arrangements.

Buying from outgrowers does remove production costs for the producer-exporters, but comes with challenges of its own. Outgrowers supply their flowers ad-hoc, bringing whatever quantity or variety they have available on any given day; and often selling to many different post-harvest exporters, depending on whose prices are better. The smallholder producer-exporters seem to sympathize, seeking not to control the outgrower supply through anything formal like contracts or exclusive purchase agreements; but instead incentivizing outgrower loyalty through timely and reliable payments.

The ease with which the smallholders take on the exporting sales function depends upon their previous experience and sales connections. Those who bring loyal clients from work in sales for large farms, or as brokers, delineate the importance of the trusting relationships they hold with their clients: "I work with clients that I've been working with for ten years … I know their strengths, their weaknesses, their advantages, disadvantages, their strong points and everything. We know each other. So right now, we're only with them, working with these clients and not with anybody else" (Producer 6). Those smallholders who do not already hold client relationships contract with third-party sellers; or they find clients themselves through trial-and-error. But whereas prospective clients can easily be found online, it still proves difficult to determine which are reliable.

Nearly all rose exporters, both large and small, deal with "estafadores", or sham clients which order but then disappear without making full or even partial payment. When building relationships with potential clients, producers typically send a sample order to display their quality and variety offerings. Interested clients then place larger orders, depending both on client interest and on what the producer has available. Payments are often accepted in installments, and
with hustler clients it is common that the first few installments are paid, but that later installments come very delayed or not at all.

One interviewee for this study, Producer 11, filled her first export order for Valentine's Day 2017, to a Russian buyer for $96,000 worth of roses. She received the first $16,000 in payments but then nothing more. The same client failed to pay many other producers in the area, but despite collectively pursuing legal recourse, they never received the money. One year after the incident, the smallholder has mortgaged her house and her land to attempt to pay off debts, such as back payment to suppliers and to her former employees. She let go all except two of her staff and sells now as an outgrower. Asked whether she considers pulling out of the rose business she says she is tempted, but that "the only thing that allows me to show my face is all of this. It's mine, and I still have the plants and the greenhouses."

She even expresses compassion for the buyer who conned her, "who knows, something might have happened to him, too". Indeed, smallholders accept non-payment as an inherent hazard of the business which they manage in a variety of ways. Some sell only to long-time, trusted clients. Others try to secure fixed contracts and/or advance payment for their flowers, both of which are unusual today but which are growing in popularity because of pervasive non-payment problems; and which buyers are increasingly forced to accept because more producers now demand them. Some producers also participate in an informal online forum they call ‘Flor Seguro’, a Skype chat group where they each voluntarily share information about their clients.

The myriad risks facing producer-exporters lead some smallholders to opt-in to member-owned associations with post-harvest and export functions, allowing them to participate in the GVC as exporters but without having to assume the full risk for export responsibilities.

**Collective Upgrading via Associations**

In this section I discuss the smallholder producers who are upgrading via member-owned associations. Although associations do function as sales intermediaries in the value chain, they offer producers more transparency and control than they would have over a third-party intermediary. For this reason, this study considers producers’ associations as extensions of the
farms themselves rather than as separate entities. Twelve of the smallholders I interviewed are association members (some more active than others); ten of them export via the association but two are producer-exporters in their own right and do not sell their flowers to the association. The producers in this study currently hold membership either with Asociación Pro Pedro Moncayo (APPM), the best-known and largest association in the area; or a smaller association called Asociación de Flores Bellas. I had limited success communicating with APPM representatives; and I was unable to reach Asociación de Flores Bellas.

Producers join associations in hopes of cheaper input costs, from buying fertilizers, pesticides, etc. and farm equipment (such as the plastic sheets which cover greenhouse roofs) in bulk. The associations encountered in this study do not offer farm financing directly, but they do facilitate access to credit through local banks or credit unions. The associations also possess small amounts of cash which they will lend to farmers in case of emergency, for example, to replace torn greenhouse plastics.

Associations also help smallholders to increase their collective influence in the community. As one APPM representative notes, "we add our flowers together, bit-by-bit, and then we have a production volume like that of a large farm." This gives them bargaining power with the local government, which previously paid little attention to smallholders but now works with the association to facilitate services and training for smallholders. Most notably, when association members had difficulty getting their farms certified with AgroCalidad (the body responsible for phytosanitary certifications in Ecuador, which are necessary to sell flowers for export), APPM worked with the mayor's office to provide training and local oversight to help the smallholders obtain the certification.

APPM hopes to leverage the same influence to reach an agreement with the rose breeders to reduce the royalty costs; however, none of the APPM representatives with whom I spoke provide any direct comment on whether they had progressed with negotiations. Conversely, a rumor circulating among smallholders suggests that the associations "sold out" to the breeders, striking a deal whereby they exchange the names of their members for a 10-15 cent discount on the
royalty for each plant. This discount represents up to 10% of the royalty payments, but many smallholders consider it to be insufficient.

During the research period, I observed tension within and around APPM, and ambivalence towards associations in general among the smallholders. Two of the interviewees remain very loyal to associations, otherwise, members and non-members alike view the costs of associations to be greater than the benefits. One couple adamantly avoids associations now, saying they tried a few times (over a decade ago) to start producer’s associations, but they inevitably crumbled due to mismanagement or unwieldy membership. Another producer says that she will not associate simply because she prefers her independence and does not wish to take the time to go to meetings.

Other producers are actively weighing the pros and cons of associating. At the outset of this study, a group of five small producers, led by Ana Farinango, have come to a verbal agreement that they will pool their resources to build a post-harvest facility. They actively vacillate between associating formally so that they can access expanded lines of credit as a new collective entity; and between simply working together to contribute cash and materials to the project. Associating formally could lead to a substantial cash advantage, but they are also disillusioned with the associations and resist the idea of being locked into a project together.

Over the course of the research this producer group moves away from the idea of formally associating and Ana independently breaks ground and begins to build the structure for the post-harvest on her land. But they maintain their intention of working together – Ana says that they agree that she will buy from them as outgrowers, but that if they want they can ‘buy in’ to the business in the future if they wish. Ana says she wants them to have equal share of the post-harvest profits because she wants all of them to earn a fair price; and although I only talked with one (Producer 10) of the four other producers, that producer expressed a great deal of confidence that Ana would stay true to her word. As of June 2018, Ana has nearly completed the post-harvest facility but not yet set up processing operations or export functions.
During the conversations with Ana and with Producer 10, they talk much more about the motivations for upgrading than the mechanics of doing so. They speak at length about being tired of the producer-exporters taking advantage of them and of wanting to look after each other and work together to get a better price. But answers to my questions about how they will operate collectively and work out the financials are very vague. Ana says “let’s see how much I invest in the construction and in equipment and machines. Then we’ll see how much I have put in and then they will pay me back. But if they don’t want to pay me back, I’ll be the only owner of the post-harvest.”

This affords all the producers a chance to test their alliance before making a binding decision to work formally together. Of course, this “wait and see” attitude comes with its own uncertainties - the four other producers must trust Ana’s good will that she will buy from them and Ana must trust that they will sell their flowers to her and that they may also provide cash investments in the future. They do not exclude the formal option of associating, but in the face of uncertainty they prefer the informal course of action. These producers illustrate a few important themes which emerge throughout the data in this study and which appear whether-or-not the smallholders are actively upgrading. First, these producers use a mix of formal and informal channels to navigate the hazards and uncertainties of Global Value Chains, generally opting for the informal for as long as possible. Second, they also rely heavily on trust and alliances along the way, to make decisions and to test the waters.

Participating and upgrading in the rose GVC requires smallholders to learn how to manage the myriad risks that come attached to participation in this global industry. To manage these risks, they depend upon alliances with other firms, both peer producer firms and downstream firms (local or international buyers). And they use trust to guide their decision-making and alliance-building. The next section describes the various ways they manage risk as their businesses evolve, exploring the themes of informal vs. formal alliances, and the importance of trust throughout.
Managing Risk
Thus far I have used the formal/informal distinction in regards to the producers’ decisions to functionally upgrade through a members’ association (formal) or independently (informally). In this section I also use the terms formal and informal to describe other kinds of behavior – formal denoting any contractual or legally-binding business transaction or alliance; informal describing anything bound only by agreement and good-will.

When the smallholders first launch their rose ventures, they tap into family and community resources to obtain financing, set up the greenhouse and production equipment (like irrigation systems), purchase rootstock, and get advice on the best way to run their production. Not discounting the importance of institutional support in this process – most smallholders take out at least one institutional loan to launch their businesses – family and community support also feature prominently. This support may be direct as in “my cousins have a large farm and gave me money and advice to set mine up”; or the influence may be more symbolic. Producers decide to take the risk to start their own rose farm after seeing the success of their neighbors or family members, as is the case with Ana Farinango. When she first began growing roses, her family ostracized and wouldn’t speak with her, believing it was foolish to take such a big risk on flowers. Since then however, seeing the success of her farm, one of her brothers and a cousin have set up greenhouses on their own family plots nearby.

Most smallholders also hold trusting relationships with their initial sales partner. In this case, even if they have no previous relationship, trust is presumed because the smallholder needs an initial buyer; and their buyer (usually a producer-exporter, either large or small) wants to improve the supply of roses flowing to their post-harvest. In pursuit of this, the buyer may even invest in the smallholders’ setup costs in the forms of loans, construction materials and ‘know-how’. They also guarantee a sales outlet for the new producers - though guaranteed is a relative term, though, as they rarely sign contracts and both parties know that there are no exclusive purchase or sales agreements.

Interviewees cite two primary reasons to remain loyal to a buyer: timely payments (as mentioned previously) and access to emergency funds. Without formal insurance policies, and often without
savings of their own, smallholders rely on their buyers to help them out during tough times. The most common reason for cashing-in on support is to replace the plastic sheets on the greenhouse roofs, which easily tear and blow off in intense weather and which are quite expensive to replace. Multiple smallholders say they stick with their buyers – even if they receive less money for their roses – if they can call in the favor to replace their greenhouse plastic. On the other side Producer F, an exporting farm, says “if I trust my providers, I’ll help them out in times of need. For example, when their plastics tear, they come and ask for an advance to replace them. I do this for the producers who are loyal to me, but I refuse otherwise.”

In some cases, this trust is not transaction based, but kinship based. One smallholder producer-exporter, Producer 21, is known widely for paying better prices to family members than to other smallholders in the community. Their family members enjoy this advantage and feel that they get a good price for their flowers, “I’m a cousin, so of course I get paid more”; whereas other, non-family outgrowers feel taken advantage of. As one producer, a non-family member outgrower for Producer 21, put it as we dropped her flowers off at the post-harvest facility, “You see that fancy new truck that just drove by? That all belongs to Producer 21. And you see all this land? His family members own all of this, they are all getting rich.” Questions of fairness aside, the higher prices enjoyed by family members help them maintain their businesses.

These family ties also help producers as they begin to upgrade. One of Producer 21’s family outgrowers, Producer 25, says they recently began cultivating some experimental rose varieties as suggested by Producer 21. These varieties are expected to be very trendy and to sell for a high price. But they could also be difficult to grow and the trend could pass before the roses are ready for harvest. Producer 21 trusts Producer 25 to determine the optimal growing conditions for these new roses; and Producer 25 trusts Producer 21 to secure a buyer. Producer 25 also trusts that, if the experiment pays off, Producer 21 will pass along the higher earnings.

Once producers have established their post-harvest and exporting functions, they continue to navigate the global value chain via informal alliances. Watching one producer-exporter conducting sales, he uses a variety of online platforms and messaging applications, with Skype being the preferred channel, to let his buyers know what flowers he has available, listing them by
quantity, length and variety. After he sends the “dispo”, or availability, he waits a few minutes and then the Skype messages start streaming in, each interested buyer listing how much they are willing to pay, with some offering the same amount per stem. Explaining how he chooses to whom to sell, “I will probably sell to the buyer who I know, if they have helped me out in the past. I like to be reciprocal.”

Even the most established producer-exporters operate in this ad-hoc manner, offering up the chain that which they grow and that which their outgrowers decide to deliver to them. This means that the producers usually balance uncertainty on two fronts – supply from their outgrowers, and demand from their clients. The more formal practice of standing orders is rare, only one smallholder producer-exporter has such an arrangement. Contracts of any sort with buyers are unusual, but producer-exporters feel increasing pressure to secure them in case anything happens to the clients. In such a case, suppliers want to have a written contract so they can legally lay claim on that businesses’ assets in order to recoup some of their money.

This suggests that there are clear advantages to formalizing some aspects of their business operations as smallholders upgrade along the value chain. In the case of producer’s associations, for example, the members have chosen the formal, legal structure of the organization because they believe it should eliminate some of the uncertainty they face. As members of an association, they worry less about “to whom can I sell my flowers”, and they hire professional staff with the export know-how to run the business. They also worry less about the cost of inputs because the association promises to buy these in bulk and pass on the cost savings to the members.

Still, even the associations do some things very informally, for example, associations expect their members to sell their flowers exclusively to the association for export, but the producers do not sign contracts to this effect and often sell to other exporters, too, depending on where they can get the best price. On the other side, members expect that the association will pay fair prices, but when there is a surge in production or a drop in demand, the associations may have to reduce their prices to offload the flowers. In these situations, they cannot guarantee the best price to their members, or even that the price will cover production costs.
Upgrading ≠ Formalization
Across the smallholders interviewed, the position on the value chain and the level of formalization do not automatically correlate. Even those smallholders with relatively sophisticated operations and many formal practices engage in informal activities as it suits them – a prime example is the informal Skype group where the producer-exporters share information and warnings about clients. Another group of producers, both new smallholders and growing smallholder producer-exporters, has started meeting unofficially to discuss the issue of the royalties. After APPM proved incompetent, in the judgment of the smallholders, at negotiating with the breeders, a large group of smallholders (both independent producers and APPM members) is holding a series of meetings to discuss the issue.

Far from relying entirely on formal structures as they progress along the GVC, smallholders hold on to their informal arrangements to retain flexibility and the ability to adapt. And they do this even more in situations when the stakes get higher. For Producer 11, the smallholder who lost nearly everything on her first export, the survival of her business now depends on her family. After the attempts to pursue the estafador through legal (formal) channels failed and she risked losing her business, she turned to family for help. Her sister, who had also started a post-harvest facility around the same time, agreed to buy her flowers until she gets back on her feet. For Producer 11 and many of these smallholders, informal alliances and resources serve as the fallback plan when formal approaches fail.

The data in this study do not show concretely whether, or when, or how formal business arrangements become more attractive to the smallholders; only that informality is a common and recurring theme. These producers depend upon informal linkages to other firms to grow their businesses and connect with new clients, and they even revert from formal to informal behavior when times get tough. In parallel with reliance on informal strategies comes a recurring theme about trust, which underpins many of the inter-firm alliances (both formal and informal) and is one factor which smallholders often cite as the reason for working with one firm over another.

Trust-Based Alliances
The interviewees in this study sprinkle their stories with references to trust and so the concept appears frequently in the Findings sections above. It warrants further examination here to
identify the ways in which trust develops for these smallholders. The sentiment of trust underpins many alliances between firms, including peers (fellow producers), associations, producer-exporters, international buyers and outgrowers (for the producer-exporters). The smallholders put their trust into other firms for a few reasons: thanks to existing family or community ties; because of common goals or necessity; or by building it over time through repeated transactions.

In the case of family or community ties, the trust comes from familiarity. When asked how she and Producer 10 and the other neighbors decided to associate with each other, Ana laughed and said "Oh I don't know, we've just always been in this together." In other cases, trust may also be presumed, but may precede any existing relationship if the producers share a common goal or need. Many producers see the act of associating as an act of good faith, where the common goals are clear and a legal framework exists in case the trust is breached, but where the association can only function if it has the collective trust of its members. In the case of the informal organizations, like the Skype group sharing information about buyers. Many of the producers in this group do not know each other personally, but they have a common goal to avoid sham clients and assume their fellow producers to be more trustworthy than the international buyers.

Repeated transactions are very important to build trust where there is no previous relationship, and in any situation to reinforce trust. The process of building trust through repeat transactions features heavily in the producer-buyer relationship, where it is initially a gamble for both, but once they win trust, they work hard to maintain it. To reinforce trust through ongoing interactions, these firms look for certain demonstrations or signals of reliability and good faith. Smallholders signal trustworthiness to their buyers (both producer-exporters and international clients) through loyalty, or selling flowers to that buyer, rather than another buyer even if a higher price is offered. Reflecting on the value of timely payments, Producer 21 says "I once sold to post-harvests, too, I remember what it was like. It was important to me to get payments every two weeks, and I remembered this when we started our post-harvest. I have won suppliers by making sure that I pay on time."
Connections based on trust, or trust-based-alliances (TBAs) are not fool-proof, they can be broken and the producers can become disillusioned (as in the case of APPM). But the data in this study reveal that smallholder rose producers view TBAs as instrumental for their participation, survival and thriving in the floriculture GVC. In some cases, these TBAs are fortuitous (i.e. relationships among family members and close community members) but they can also be built over time.

Having launched themselves headlong into the risky venture of flower production, these producers justify their commitments on the dream of making something better for themselves and their families. With this fierce determination to make it on their own, they nevertheless need alliances with other firms to survive in the uncertainty of their industry. They rely heavily on trust to build and maintain these alliances. The table below compiles and summarizes these and other key themes which emerge in this Findings chapter:

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description/Characteristics</th>
<th>Examples/Illustrative Quotes</th>
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<tbody>
<tr>
<td><strong>Motivations</strong></td>
<td></td>
<td></td>
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<tr>
<td>Autonomy</td>
<td>• Working for themselves, leaving the big farms&lt;br&gt;• Taking control over scheduling&lt;br&gt;•</td>
<td>• Leaving ‘exploitative’ working conditions&lt;br&gt;• Spending more time near home, available to</td>
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<tr>
<td></td>
<td>The opportunity to control (and increase) earnings&lt;br&gt;• Leaving ‘exploitative’ working</td>
<td>the children</td>
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<td></td>
<td>conditions&lt;br&gt;• Spending more time near home, available to the children</td>
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<tr>
<td>Symbolic Value</td>
<td>• Providing a better life for their children and future generations&lt;br&gt;</td>
<td>• Ana wanting to act as a good role model for her daughter&lt;br&gt;• Producer S reflecting on</td>
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<td></td>
<td></td>
<td>changing the intergenerational assumptions about peasant farmers</td>
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<td><strong>Nature of the floriculture GVC</strong></td>
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<tr>
<td>The Ecuadorian rose GVC</td>
<td>• Few fixed contracts&lt;br&gt;• Many buyers and sellers&lt;br&gt;• Less coordinated, less formal&lt;br&gt;</td>
<td>• Ad-hoc buying and selling practices by smallholders and producer-exporters&lt;br&gt;• Producers</td>
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<td></td>
<td>Few truly ‘direct’ buyers, intermediaries still playing key roles&lt;br&gt;</td>
<td>often selling wherever they can get a good price&lt;br&gt;• Producers sell to many actors:</td>
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<td></td>
<td></td>
<td>associations, brokers, other intermediaries</td>
</tr>
<tr>
<td>Risk and Uncertainty</td>
<td>• Typical agricultural risks and uncertainties (weather, pests, etc.)</td>
<td>• Low production because of rainy weather&lt;br&gt;• Wind blowing off greenhouse roofs</td>
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</table>
• Uncertainty in the demand and trends for roses
• Royalties
• Difficulty finding reliable buyers
• High royalty payments for rose varieties, especially new/popular varieties, are prohibitive for smallholders
• ‘Estafadores’

### Managing Risk

| **Formal vs. Informal Alliances** | **Producer 9, the smallholder-turned-large-farm, still uses informal outgrowers**
| | **Seeking fixed contracts with buyers but also selling ad-hoc**
| | **Producers leaving/not joining APPM but joining the informal group meeting to negotiate with breeders**
| | **Producer 11 closing her post-harvest and selling informally as an outgrower to a family member**

| **Trust-Based Alliances** | **Among family members, close neighbors (like Producers Y and Z; Ana and Producer 10)**
| | **In the case of associations, of new buyer-seller relationships**
| | **In the case of most buyer relationships, developed through repeat transactions and shows of good-faith**

| **Trust – how it’s built** | **Inter-firm linkages, both formal and informal, which hinge on trust**
| | **Formal associations (APPM, Asociación Flores Bellas)**
| | **Informal associations (Skype group ‘Flor Seguro’, Ana and Producer A)**
| | **Buyer-seller relationships (between outgrower-postharvests and between exporters and international buyers)**

This chapter has described the ambitions of the Ecuadorian smallholder rose growers as they enter the floriculture GVC to assert their own autonomy and to create something better for their children; it also describes the enormous challenges they face at the onset and along the way. The chapter then shows how the Ecuadorian floriculture value chain works, and how smallholders experience the industry and upgrade within it taking functional upgrading as a focus. Although the producers pursue upgrading either collectively or more-or-less independently, nearly all the producers in this study rely heavily, and talk a lot about that reliance, on other firms. This leads into a discussion on the preference for informal inter-firm relationships, though none of the producers make an exclusive choice between the two. The importance of trust with other actors
in the value chain also emerges as a pattern, and underpins most of the alliances made by these smallholders. This observation leads to the concept of the trust-based alliance (TBA).

Considering these themes around four broad categories – producer ambitions, risk management, TBAs and the nature of the global value chain for Ecuadorian roses, the following Discussion chapter will engage these themes with the literature. The chapter draws both from within the global value chain tradition and from other areas of research to suggest implications of these findings for smallholder Ecuadorian rose growers.
Chapter 5: Discussion

This study has explored the question "what is it like to be a smallholder rose grower competing in a global value chain, and how do they do it?" by conducting an empirical Grounded Theory study of Ecuadorian smallholder rose growers. Drawn from the stories of the producers themselves, the empirical data in this study reveal four key themes regarding their experience in the global floriculture industry: motivations for launching their rose businesses; reflections on how the floriculture GVC functions; risk management; and trust-based alliances. The Global Value Chain framework remains useful to understand some aspects of this study, but the data also call out and push up against gaps in the GVC literature. This chapter enlists additional streams of literature to provide insight on the experiences of the Ecuadorian smallholders. This chapter also suggests what the implications of this data might be for the producers in this study as they continue to compete and upgrade within the floriculture GVC.

Motivations

In some respects, the producers have straightforward motivations for starting their rose farms, one of which is to gain more autonomy in their work. For the Ecuadorian smallholders, the concept of autonomy links directly to control – over schedule, over money, etc. To find autonomy as an entrepreneurial motivator is not surprising in itself – autonomy appears regularly in the literature on entrepreneurial motivation, to the point that it even gets “taken for granted” that entrepreneurs want to gain autonomy (van Gelderen & Jansen 2006: 24). However, in the context of rural, largely poor entrepreneurs, it is surprising to find autonomy as a driving motivator for business venturing. The widely-cited Global Entrepreneurship Monitor (GEM) survey observes that “the poor are often propelled into self-employment due to lack of economic opportunities” (VanSandt & Sud 2012: 328, from GEM 2009); and although studies in developing countries find both necessity and opportunity (or innovation)-based entrepreneurship, the assumed correlation between poor entrepreneurs and need-based entrepreneurship persists, especially when referring to agricultural entrepreneurs (as in VanSandt & Sud 2012). And, as shown in Chapter Two if this thesis, GVC literature often suggests the same.
Proposing a duality between needs-based entrepreneurship and opportunity-based entrepreneurship also leads to the assumption that if wage work is available, people in poor contexts will choose employment over entrepreneurship. But as in other studies (e.g. Koster & Rai 2008), the data in this thesis paint a different picture. As they tell in their personal and family histories, the Ecuadorian smallholder rose growers largely conformed with this hypothesis in the past – in the absence of good rural jobs they practiced necessity entrepreneurship (raising crops and cattle for local sale); then the large flower farms came along and they took on additional wage work on those farms. Yet their drive for autonomy lends them sufficient ambition to choose floriculture entrepreneurship.

This ambition stems also from the producers’ deep conviction that roses represent “something better” for them and their families. Patricio Mena-Vásconez and colleagues attribute this to the “mimetic desire”\(^6\) which producers feel to attain and replicate the quality of life enjoyed by others in flower production (2016: 229). This desire becomes stronger as the smallholders begin to see other smallholders, people like them, initiating and having success with flower production. In their interviews with Ana Farinango, she says “Everywhere I looked, I saw flower farms, and I wanted to do it too” (2016: 232). Like the other producers who previously worked for the large flower farms, Ana held no illusions about the difficult nature of flower production, but she may not have known (or turned a blind eye to) the harsh realities of selling on a global scale. Yet she holds on tight to her belief in her rose farm, and the “rose imaginary” (2016: 232).

**The GVC for Ecuadorian Roses**

The rose imaginary has a deep hold on the entire community in the cantons of Cayambe and Pedro Moncayo because of the well-established rose industry. From the global perspective, Ecuador’s rose industry is unique because it is both mature, and relatively uncoordinated. As compared to the floriculture industry in some other rising producing countries like Ethiopia, Ecuador possesses a strong and relatively stable position. With a few notable exceptions, for example around the global financial crisis of 2008-9, Ecuador's rose exports have grown steadily. The Ecuadorian rose garners recognition worldwide for its beauty and size, with producers in

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\(^6\) The term mimetic desire is attributed to René Girard’s 1961 *Mensonge romantique et vérité romanesque*
other countries holding the Ecuadorian rose as a benchmark, with initiatives aimed at helping growers “produce roses of the same quality as Ecuador” (Evers et al. 2014: 21). With large numbers of growers spread throughout the country, available productive inputs (fertilizers, agrochemicals, knowledgeable engineers and consultants, etc.) abound. Having access to this brand image and these resources gives Ecuadorian smallholders a considerable "leg-up" as they try to enter the floriculture GVC.

Yet despite being well-established, the GVC for Ecuadorian roses appears much less stringent than those of other high-value agrifood products, which means that it has fewer barriers to entry for smallholder producers. The smallholders in this study, both those who sell simply as outgrowers and those who are exporting themselves, sell without fixed contracts and instead look for the highest bidder through various sales channels to marketing to many different buyers. They treat the floriculture GVC as a venue for market-based (ad-hoc, arms-length, and between many producers and suppliers) transactions (as defined by Gereffi et al. 2005). As one smallholder producer-exporter puts it "I sell to anyone, local sales agents, international brokers, wholesalers; and I sell anywhere, to the domestic market, to Peru, and abroad, depending on the prices I can get." Far from being captive to the buyer-driven, tightly-coordinated GVC channels, these smallholders enjoy a more producer-driven chain, through which they deliver whatever they have, to whichever buyer is interested.

The most popular markets for Ecuadorian flowers also differ from those profiled in the GVC literature. The smallholders prioritize Russia, former Soviet countries like Ukraine and Moldova, and the United States for their flowers, and in that order. They state explicitly that they find it much easier to sell to Russia and to former soviet countries, because those countries love the large-budded, long-stemmed roses which grow easily in Ecuador; and because the quality standards and controls are much less demanding. They view the United States buyers as only moderately demanding in terms of standards, but less appealing because competition is fierce, especially with Colombian roses; and because the prices are very low. Very few producers target European markets because of the product and production standards required. This orientation towards informal, less coordinated markets aligns with what Melese 2018 (forthcoming) finds in
regards to the Ethiopian floriculture value chain; and with what Bamber & Fernandez-Stark 2013 and Bamber et al. 2014 observe in their writing on "limited" value chains.

This also shows that the producers in this study approach value chain upgrading in a limited way. As noted in Chapter 4, of the seven types of upgrading observed in GVC literature, these growers only exhibit four: entry, product, process and functional upgrading. These are challenging upgrading trajectories but they are relatively ‘linear’, involving upward movement in the existing value chain. The remaining three types – inter-sectoral upgrading, or moving into new but related value chains (Humphrey & Schmitz 2002: 19); backward linkages upgrading, or providing tradable inputs or services to companies in other value chains; and end-market upgrading, or moving into more complex markets which require more rigorous standards (Gereffi & Fernandez-Stark 2016) – are largely absent.

These more complex upgrading trajectories require producers to interact with other value chains and with new markets. While this may not be necessary to survive as a rose producer, some smallholders in this study already observe that their growth opportunities lie in other markets. For example, one producer observes that Ecuador cannot price compete with Colombia, Ethiopia, etc. because Ecuador has much higher production costs. He believes that the industry will need to shift towards niche markets, such as the “sustainability” market (for environmentally and socially responsible flowers) because they fetch much higher prices. But to make this shift also requires updating production practices and obtaining extensive formal certification, both of which are out of reach for most smallholders.

**Risk Management: Informality and Alliances**

The tendency for informality extends beyond the way producers engage with the market, to the way they interact with other individual firms in the value chain – peers, suppliers and buyers. From eschewing formal contracts so that they can sell-or-buy as it suits them to creating unofficial associations to address shared challenges, the interviewees in this study often choose

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7 Only two of the 31 producers in this study, Producer 1 and Producer 9, exhibit additional forms of upgrading. Producer 1 has achieved further functional upgrading, extending to the marketing and distribution functions for her own flowers. Producer 9 has achieved both backward-linkages and end-market upgrading.
informal business practices, a preference which can be framed in terms of managing an uncertain and risky business environment.

The choice to operate informally can be viewed from a limitations point of view. Like many people in resource-scarce contexts, the vulnerability of these small-scale producers is pronounced, “one wrong choice can be highly detrimental to survival” (Chiova & Ringov 2016: 50), which restricts choices. Developing societies are known generally known for their informality (Hansen & Shaumburg-Müller 2010), and so in choosing the informal path, rose smallholders opt for what is familiar. This is evident in the producers who work exclusively with family members and with long-standing clients they bring from their previous jobs. They counter the myriad “unknowns” in their business by working in ways and with entities which they know.

Looking at the preference for informality another way, the smallholders may extend their opportunities by working informally, because it increases their ability to pivot and adapt to changing and uncertain conditions. This, at least, is how Ana and Producer A and their neighbors view their choice of informally associating at first, keeping their options open until the realities of the post-harvest and export become more clear. Operating informally and formally are not mutually exclusive choices, and both options feature alliance-building behavior by the smallholders.

Collective behavior among firms – referred to as ‘alliances’ in this chapter, as ‘inter-firm linkages’ in the GVC literature, and ‘Inter-Firm Cooperation’ or IFC in the IFC literature –is a critical strategy for smallholders in this study, where 21 of 30 smallholders interviewed explicitly describe their connections with, and how they rely on, other firms. Reliance on alliances is not unique to informal settings and developing countries. The notion from classical economics that firms operate purely on competition has been discounted in the literature (Polenske 2004); and the modern business zeitgeist provides ample evidence that firms of all types, sizes, industries and regions benefit from alliances and networks.

To describe alliances, the definition of IFC suits this thesis well, “quasi-stable and durable, formal or informal arrangements between two or more independent firms, aiming to further the
perceived interests of the parties involved” (Pitelis 2012: 1362). As portrayed in the literature, alliances are either equity-based (joint ventures, minority ownership) or non-equity (may be contractual or non-contractual) (Das & Teng 1998: 497). The producers in this study form equity-based alliances in the case of formal producers’ associations (APPM and Asociación Flores Bellas) and in the unusual case of Producer 30. She owns the land and the greenhouse, but a large farm owns her plants and the large farm pays her wages to cultivate and harvest the roses from those plants. Otherwise, the alliances observed in this study are of the non-equity type.

Alliances also serve two primary purposes, to give each firm a “leg up”, a chance to leverage their collective resources in a way that exceeds the resources of any individual firm; and/or to provide a buffer against risk or uncertainty (Polenske 2004, Pitelis 2012). Each of these features in the businesses of the Ecuadorian rose smallholders. Though the literature acknowledges that alliances may be formal or informal, when describing how alliances form it generally focuses on the legal (formal) process of entering collective agreements and operations (Pitelis 2012). Where the GVC literature highlights the importance of alliances, it also focuses on the formal type. Even the term “outgrower” is synonymous with “contract grower” in the literature (e.g. Barrett et al. 2011, Bamber & Fernandez-Stark 2013). However, in this study, “outgrowers” includes all producers selling to another processing farm, both with and without (the majority) a contract. Legally-binding arrangements are only somewhat important for the producers in this study, who instead express more interest in the topic of trust as a key ingredient to link their alliances with other firms.

**Alliances: Trust and Control**

A slightly different way of looking at the formal or informal question is through the lens of firm ‘confidence’ in alliances. Confidence is “a firm’s perceived level of certainty that its partner firm will pursue mutually compatible interests in the alliance, rather than act opportunistically” (Das & Teng 1998: 491). And confidence comes from the presence of two distinct, but complementary forces in inter-firm relationships: trust, and control. This thesis thus-far engages with “trust” as synonymous with “confidence”, but Das & Teng interpret confidence as related, but separate concept which is formed by both trust and the additional dimension of control. Per Das & Teng, control refers to the level of certainty of each alliance partner that the other firm
will not act opportunistically; whereas trust refers to each firm’s belief about the other firm’s intrinsic motivations to act cooperatively (1998: 493). Control is behavior-oriented, relying upon mechanisms (both formal and informal) of ensuring the other firm’s compliance with the collective agreement. Trust stems from the perception of the “goodwill and reliability” of the other firm (Das & Teng 1998: 498).

This distinction is helpful to understand some differences in the trust-based relationships among smallholders, for example, the presumed and unexplained trust between family/community members (e.g. Producers 21 and 25, Ana and Producer 10), contrasted to the control-based trust between Producer 9 and his outgrowers. The control is not necessarily hierarchical in the last case, because both parties know the conditions which foster confidence by the other party (the offer of insurance/support in exchange for consistent delivery of flowers). Control and trust are separate forces, but they also interact. As with the producers in this study, Das & Teng also observe that trust can be built over time through the effective exercise of control mechanisms and mutual demonstration of reliability. After each party consistently demonstrates reliability and goodwill, they begin to assume the same.

Like much of the management literature on alliances, the work by Das & Teng assumes that even non-equity alliances will be contract-based (formal, in the eyes of this paper). Yet they do introduce the concept of “social control” observing that inducing and reinforcing behavior through ‘soft’ measures enhances trust between organizations. Their definition of social control overlaps with the concept of “social capital”, a concept which emerged from sociology but has broad application in business contexts. Various definitions of social capital exist, many of which incorporate some reference to trust and connections between and within organizations. A more specific interpretation useful to this thesis is the idea, using game theory, that social capital is “the propensity to play the cooperative solution” even if one, or both, players have some incentive not to keep trust (Paldam 2000: 637).

Though the literature on social capital in business offers more valuable insights than this paper can effectively summarize, it helps position the findings of this paper in a few key ways. First, it allows for more fluid and flexible interpretations of inter-firm behavior than the contract-bound
approach of alliance literature. Social capital is a fundamentally human concept, bridging “the distance between the sociological and economic perspectives” (Portes 1998: 2-3). This is especially important in small businesses, where the personal networks of the entrepreneurs overlap with and influence the firms’ networks (Stam et al. 2014). Social capital literature also confirms that the presence of such positively impacts firm performance (Stam et al. 2014).

The importance of social capital and the deeply trust-based nature of the alliances between the producers in this study and their peers and other value chain actors may have implications for how Ecuadorian smallholders participate in the floriculture GVC in the long-run.

**Long-term implications of informal venturing**

Like many entrepreneurs in developing countries, the producers in this study operate in the context of institutional voids and resource-scarcity (Chliova & Ringov 2016), where informality prevails. Informality seems well-suited for the current operating context of the Ecuadorian smallholder rose growers, but that begs the question of whether it will continue to serve them as they try to further grow their businesses or as the floriculture GVC evolves.

This study reinforces new scholarship (e.g. Melese 2018, forthcoming) with the concept that the floriculture GVC is not as homogenous and not as entirely buyer-driven and tightly-coordinated as previous literature on high-value agrifood chains might suggest. And even if the European, and (to a lesser extent) the North American, markets for flowers continue to constrict, other markets of increasing importance (Russia, the Middle East) offer potential outlets for producers wishing to continue operating in a more ad-hoc, market governance structure. If flower consumption continues to grow in these regions, the producers in this study can continue their current practices. But consumption can drop suddenly and precipitously in these markets, as it did in Russia in 2012.

Changes in GVC governance aside, even in the current environment many of these smallholders struggle. Ana, after 5 years producing roses on her own, says she still earns only the basic monthly income on average. She has managed to grow her farm and to repay most of her start-up debts, but she hasn’t achieved success by some of her own measures (buying a truck, expanding
her greenhouse). The possibility of success fuels her motivation to build the post-harvest and begin exporting, but how well will her current strategies suit her? The collective and trust-based strategies of these smallholders give them resilience in the face of the crippling challenges they have faced thus far. They also allow them to evolve and pivot rapidly. Whether these strategies serve them in the long-run remains to be seen. This question illustrates some of the limitations of this study and potential areas for future research.

**Limitations and Future Research**

This thesis draws out interesting themes regarding Ecuadorian smallholder rose growers which are not available through previous research. These themes emerged thanks to the application of Grounded Theory methodology; however, this study like many Grounded Theory studies, constructs concepts which need deeper inquiry to generate solid theory. This study has two broad categories of limitations: the immediate limitations of its capture and analysis of the stories of the Ecuadorian rose growers; and the broader limitations of the applicability of their stories to other smallholder producers and in other value chains.

In capturing the full picture of Ecuadorian smallholder rose growers this study falls short in the following ways. First, in the sample selection process I set my eyes very generally on smallholder farmers in the Pichincha province, but chose interviewees more opportunistically (based on access) than purposefully. A second limitation relates to the sample size and characteristics. Some scholars believe that the sample size for a Grounded Theory study should remain small (Eriksson & Kovalainen 2008), in which case the 30-producer sample from this study might be satisfactory to paint a representative picture. However, as the research progressed I came to understand some very fundamental differences among these smallholders - for example, that someone producing on a full hectare runs a very different type of operation than someone producing on one tenth of a hectare; or that some sold as outgrowers while others exported directly.

Treating the producers as a catch-all group allows me to observe some trends and patterns across all groups; but the differences between them also warrants specific study. For example, the data raise questions about the differences between producer-outgrowers and producer-exporters,
especially whether their reliance on formal operations changes in measurable ways as they upgrade. I can observe that producers continue to use informal strategies, but not whether or how they use more formal ones.

A third limitation of this study is that I did not methodically analyze the data until I left the field, which means that I did not adequately identify emerging themes in the field and “double back” to former interviewees or at least adapt the sample or the interview questions for future interviews to reflect those themes (Gioia et al. 2013). Some of this happened intuitively, but had I engaged more systematically with the data in the field, I might have explored the distinction between producer-outgrowers and producer-exporters. A future Grounded Theory study of the two groups as case studies could address some of these questions.

Finally, although this study seeks to understand the strategies which smallholders use to compete in the floriculture GVC, it can only draw conclusions based on a snapshot of time in the lives of these producers. Though the producers can share the histories and present realities of their farms, without a longitudinal study I cannot weigh in on the efficacy of certain strategies over time. Because I set out to understand “what it is like” and “how they do it”, I also don’t use specific or objective measure of success or progress.

This study also sets out to fill an important research gap on smallholder producers in high-value agrifood chains, but only further research can verify its relevance elsewhere (for other smallholders, of flowers or other crops, in Ecuador or other countries). Grounded Theory (and many qualitative research methods) commonly receives this critique - that the theoretical concepts observed in one narrow setting fail to hold up in other contexts. This paper serves to observe and report the interesting patterns and trends of the Ecuadorian smallholder rose growers and then to distill them into a digestible summary which can be held up for comparison in other places.

According to GVC literature (Zylberberg 2013) and personal communication with researchers, in other floriculture regions smallholders participate only as outgrowers, so an immediate study

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8 Jorge Rodriguez, 9 May 2017; Patricio Mena-Vásconez 15 May 2018; Ayelech Tiriwha Melese, 29 August 2018
of upgrading smallholder flower exporters might not be possible. A macro-level analysis of the national and regional factors differentiating the floriculture industries might suggest some of the reasons why these producers are present in Ecuador but not elsewhere. Two other high-value agrifood products – coffee and cocoa – might also offer insight as to what macro-level factors influence smallholder participation, since many smallholders participate in these value chains.
Chapter 6: Conclusion
In setting out to address a few important gaps in the GVC literature, namely the absence of the individual perspective and the assumption that smallholders cannot participate fully in GVCs, this study provides insights and raises questions which may be useful to other researchers.

The producers in this study are unique both in the fact that they participate in the floriculture value chain; and in the strategies they use to remain competitive and to upgrade along the value chain. There is little coverage of smallholder producers in high-value agrifood GVCs, and the literature suggests that smallholders participate only in limited ways: through limited markets, development interventions and/or intermediaries, which may be member-owned (like producer’s associations) or third-parties. This literature portrays smallholders as an anomaly or a target for development intervention, but the prevalence of Ecuadorian smallholder rose growers suggests that other forces are at play.

One important factor behind the success of the smallholder rose grower is the organization of the Ecuadorian floriculture GVC. Contrary to the assertion that high-value agrifood GVCs are tightly-coordinated, buyer-driven and modularly-governed, Ecuador's floral GVC is dynamic, decentralized and shows market-based governance. This indicates that high-value agrifood industries are not a monolith, a finding that substantiates other recent scholarship (Melese 2018, forthcoming) and calls for a refresher of some assumptions in the GVC scholarship. Partly, to examine high-value agrifood chains in additional regions, as most of the research centers on the connection between African producers and European buyers. But Melese’s work reveals that even these chains, at least for floriculture, act differently than predicted.

This thesis also offers a detailed view of the producer experience in high-value agrifood chains and of the key factors required for success. Other studies identify the required capabilities for participation in the floriculture GVC but, even at the firm level of analysis, offer only an abstracted view of the experiences of these firms (e.g. Staritz et al. 2017, Melese 2018). Drawn from the stories of the producers themselves, this study shows that less-tangible capabilities are important to confront the uncertainty of the GVC, both in daily business and in the case of large
upsets. The most important of these for the Ecuadorian smallholders are the trust-based alliances among producer firms and their peers and other value chain actors.

GVC scholarship is not blind to these factors, yet the most socially-cognizant of the six dimensions of GVC analysis, "Institutional Context" and "Other Stakeholders", receive the least direct attention in the literature. This is not surprising considering that the GVC framework was first proposed as a tool to observe and analyze the changes in production and trade patterns at a global level, concerning itself with the systemic perspective. GVC scholarship first concerned itself with governance and geographical context, only later adding more granular levels of analysis. This study has drawn from that research but also from organizational studies and development literature to obtain a vocabulary around trust-based alliances and to analyze the stories of the Ecuadorian smallholder rose growers.

Their stories may provide insight to one new area of research which considers GVC participation and upgrading from a social point of view. Recent articles on "social upgrading" (e.g. Barrientos et al. 2010, Milberg & Winkler 2011, Evers et al. 2014) observe that participation in global value chains influences not only the economic development of an area, but social development as well. This research stems from the intersection of GVC and development literature and uses the impact on the local labor force as one point of consideration. While the observations of this thesis relate more to the social mechanisms than social impact of GVC participation and upgrading, the experience of the Ecuadorian smallholders hints at an intriguing extension of the labor discussion. Disgruntled by the negative impacts on their lives, these people take matters into their own hands and claim value chain activities for themselves. To my knowledge, no research has explored this transition from labor to producer.

There is no certain future for the producers in this study, for whom the floriculture Global Value Chain holds great promise, and great risk:

"I worked in exploitative conditions on the big flower farms until, with my siblings, we decided to start our own rose farm. It has not been easy. … We sold to an estafador and almost lost everything, the whole family works on this farm. Only my niece has a job [off-farm] it’s thanks to her that we had any food at all during those months. … But now we are back on our feet and exporting again." - Producer 27
The ups-and-downs of production and sales experienced by the producers in this study are magnified by, but certainly not unique to, the fact that they are small-scale producers. The floriculture industry today, after expanding steadily in the late twentieth century and then contracting dramatically during the global recession after 2008, has only made moderate recovery (Rabobank 2016). New markets for cut flowers continue to present themselves, but those which are predicted to be the most profitable - the East Asian market (Japan and China), and the market for sustainably-produced-and-traded flowers - are also more strictly coordinated.

Coordination is on the rise, but this study also shows that the international floriculture industry is more varied than what scholars predict. Whether Ecuadorian smallholder rose producers will be pressured to adapt and conform to increasing levels of standardization remains to be seen. The changes to come will test whether the smallholders’ preference for informal, trust-based and flexible strategies continues to serve them; or whether it constricts their ability to participate fully in the floriculture global value chain.
Works Cited


Appendices

Appendix A: Table of Producers
Information about producer businesses and their affiliations/alliances with other producers in this study or with other entities which they discussed with me. The producers appear in order encountered.

<table>
<thead>
<tr>
<th>Producer</th>
<th>Type</th>
<th>Alliances (if known)</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producer 1</td>
<td>Producer-exporter</td>
<td>Does not buy from outgrowers</td>
<td>1</td>
</tr>
</tbody>
</table>
| Ana Farinango | Currently an outgrower, building a post-harvest and preparing to export | Producer 21 (buyer)  
Producer 10 (possible association partner) | Multiple |
| Producer 2  | Outgrower          |                                                                                   | 1      |
| Producer 3  | Outgrower          | Producer 9 (buyer)  
Former association member and founder | Multiple |
| Producer 4  | Outgrower          | Has decided not to join an association                                             | 1      |
| Producer 5  | Outgrower          |                                                                                   | 1      |
| Producer 6  | Producer-exporter  | Producers 11, 14, 15 (outgrowers)  
Attending informal meetings to deal with royalties | Multiple |
<p>| Producer 7  | Outgrower          | APPM (active, President)                                                           | Multiple |
| Producer 8  | Producer-exporter  | Buys from 1 outgrower, a family member                                             | 1      |
| Producer 9  | Producer-exporter  | Buys from 7 outgrowers, including Producer 3                                         | 1      |
| Producer 10 | Outgrower          | Ana Farinango (possible association partner)                                       | 1      |
| Producer 11 | Outgrower, former producer-exporter | Producer 6 (buyer, family member) | Multiple |
| Producer 12 | Outgrower          |                                                                                   | 1      |
| Producer 13 | Producer-exporter  | Launched thanks to support from cousins, who own a large farm                      | Multiple |
| Producer 14 | Outgrower          | Producer 6 (buyer)                                                                | 1      |
| Producer 15 | Outgrower          | Producer 6 (buyer)                                                                | 1      |
| Producer 16 | Outgrower          |                                                                                   | 1      |
| Producer 17 | Producer-exporter  | Buys from 4 other farms                                                           | Multiple |
| Producer 18 | Outgrower          | Producer 21 (buyer)                                                               | 1      |</p>
<table>
<thead>
<tr>
<th>Producer</th>
<th>Status</th>
<th>Attending informal meetings to deal with royalties</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Outgrower</td>
<td>Asociación Flores Bellas (not active) 1</td>
</tr>
<tr>
<td>20</td>
<td>Outgrower</td>
<td>Producer 21 (buyer, family member) 1</td>
</tr>
<tr>
<td>21</td>
<td>Producer-exporter</td>
<td>Buys from 18 outgrowers, including Ana Farinango, Producer 18 (outgrowers, non-family); Producers 21, 25 (outgrowers, family members) Asociación Flores Bellas (not active) Multiple</td>
</tr>
<tr>
<td>22</td>
<td>Producer-exporter</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>Producer-exporter</td>
<td>Only exports his products 1</td>
</tr>
<tr>
<td>24</td>
<td>Outgrower</td>
<td>Sells to cousins, who have a large farm 1</td>
</tr>
<tr>
<td>25</td>
<td>Outgrower</td>
<td>Producer 21 (buyer, family member) Asociación Flores Bellas (not active) 1</td>
</tr>
<tr>
<td>26</td>
<td>Outgrower</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>Producer-exporter</td>
<td>Buys from 3 other farms Flor Seguro (Skype group sharing buyer info) 1</td>
</tr>
<tr>
<td>28</td>
<td>Outgrower</td>
<td>APPM (active member) 1</td>
</tr>
<tr>
<td>29</td>
<td>Outgrower</td>
<td>Producer 30 (family member) 1</td>
</tr>
<tr>
<td>30</td>
<td>Outgrower</td>
<td>Producer 29 (family member) 1</td>
</tr>
</tbody>
</table>
Appendix B: Acknowledgments

As a lifelong lover of flowers, this thesis is the culmination of many years of thought, conversation and exploration. It also represents my first step to understand the global flower supply chain and to build my career around making the floriculture industry more efficient, transparent, equitable and sustainable.

I first knew that I wanted to work with flowers in 2007, when a bouquet from my high school friend Jenn Griffeth arrived on my doorstep and brightened up a very dark time in my life. Not long after, Kristina Sutcliffe introduced me to the magical world of floral design. A few years and a few jobs later, conversations with my godparents, Jeff and Trési Houpt; and my friend and mentor Lee Davis rekindled my interest in flowers by brainstorming with me the idea to work with and learn from flower producers in Ecuador.

It was with this ambition that I applied to graduate school in Finland, which seems like a circuitous route to take to learn about South American flower producers, but as my wise friend Marie Sand reminds me, “sometimes you have to go east to go south.”

Indeed, without arriving to Finland and finding the encouraging and supportive communities of the Aalto EIM department, The Shortcut and Kasvuryhmä, my research journey to Ecuador may never have materialized. I am deeply grateful to my advisor, Myrto Chliova, for her enthusiasm about my topic and the flexibility to work at my own pace; and for connecting me to her colleagues in Ecuador to begin piecing together the story of smallholder farmers.

The Ecuador dream finally came true this spring thanks to my cousin and kindred flower spirit, Sarah von Pollaro, who generously funded our trip to Ecuador. For ten days, we traveled around the country, visiting farms and marveling at the beauty of Ecuador’s flowers, rivers and mountains.

After Sarah left and it was time for me to begin fieldwork, I relied on the support and good humor of Patricio Mena-Vásconez, who showed me around Cayambe and Tabacundo and introduced me to Ana Farinango. Ana was the first of many producers in this study to open her greenhouse and her life to me. I am grateful for all she taught me about flowers, and even more for her friendship. The producer families 3, 6, 13 and 17 also provided me with rich and informative interviews; as well as with friendship, food, and fun during my time in Ecuador. They made me feel at home, as did my landlords Rosa and Hector, who gave me a comfortable room with a beautiful view of the volcano Cayambe.

Patricio Mena-Vásconez and Ayelech Tirtuwa Melese provided invaluable insight as I analyzed the data and prepared this write-up. I also thank Pippi van Ommen for the information in her thesis, and all the scholars at the Duke Global Value Chains Initiative for providing much of the research I interact with in this paper.

I am grateful to my parents for instilling in me the drive and curiosity to explore interesting questions; to my sister Alice, whose eyes I try to see the world through; and to my partner, Aleksi Meriläinen, for supporting me in every way possible. And to Anne Badan, Brenna Schaetzle, Ally Imbody, Kristin Swan, Leana Mayzlina, Semih Ersoz, Xiaotong Yun, Jose Luis, Claudius Feger, Marla Rathbun, Lily Chan, Heikki Leskelä, Rossana Manosalvas, Erika Noponen, Yessimth Sanchez, Roorpe Nykänen, Sharbel Dahlan, Marielle Sidell, Kamilla Sultanova, Minna Mustapää, Jukka-Pekka Heikkilä, Miia Saukko and Jana Mayfield for providing advice, editing drafts and/or cheering me on throughout this process.

This has been a long and challenging journey, perhaps the most rewarding I have ever taken.

-Kati Mayfield, Helsinki, 27 October, 2018