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TITLE: Serendipitous Networking Dynamics and Internationalization of Agro-processing Firms in Tanzania.

ABSTRACT

Like in many other fields, unexpected networking opportunities may provide firms with social assets that trigger change of internationalization modes. To capture within and between mode changes, the term “change of internationalisation critical event” is used instead. This paper explores the dynamic influence of network serendipities in 89 changes of internationalisation critical events of 26 agro-processing firms in Tanzania. Its main contribution is the scholarly assessment of the forms and influence of network serendipities across internationalization modes, thus linking the concept of serendipities that appears to be realistic in internationalization. We separate network serendipities into classic serendipities (form of relationships that firms have never sought about) and pseudo serendipities (relationships from networks which were intended for other purposes). Findings reveal that classic serendipities are associated with early phase of internationalisation, while pseudo serendipities are more dominant in the later phase of internationalisation indicating that change of internationalization critical events both influence and influenced by change of forms of network serendipities. It further implies that the intensity of firms’ international control increases with the number of network relationships the firms are into, thus resulting into more pseudo serendipities than classic serendipities.
1. **Introduction**

In contrasting the relatively over researched planned view of the internationalization process, a stream of research in International Business (IB) focuses on network serendipities and its effects on internationalization of firms (Mayer and Skak 2002; Chetty and Agndal 2007, p. 11; Kalinic, Sarasvathy and Forza 2013; Merrilees, Miller and Tiessen 2015; Galkina and Chetty 2015). The authors argue that neither the planned model nor the “serendipitous model” alone can explain the internationalization process of firms. In other words, firms’ internationalization process depends on a balance between planned strategies and unexpected fortunes (Merrilees, Miller and Tiessen 2015). According to Frishammar and Anderson (2009), internationalization process often lacks strategic orientation because in practice, business environment is uncertain and since the future is difficult to predict, an unexpected networking events are likely to influence the internationalization process. However, these studies do not go beyond admitting the existence of serendipitous networking events (Mayer and Skak 2002; Chetty and Agndal 2007), the effects of serendipities on internationalization (Kalinic, et al 2013) and “random,” “opportunistic,” and “non-systematic aspects of networking (Ellis 2000; Moen and Servais 2002). As evidence of such mounts, networking serendipities cannot be dismissed as important, and it is rational to find new explanations of the phenomenon in order to inform the internationalization process literature.

More evidences in various sectors also maintain that network serendipities are important relational aspects during internationalization. Agro-processing firms in Tanzania for example, are often small and medium-sized enterprises with limited financial and managerial resources available for international expansion. Decisions about which market to internationalize into and the process of internationalization of these firms depend more on unexpected fortunes (serendipities) than planned networking strategies (Milanzi 2012; Rutashobya and Jaesson 2004). The term “network serendipities” refers to relationships that arise from unexpected events, normally unplanned or at least in a condition of minimum firm’s involvement in forming those networks (Mayer and Skak 2002). Several studies provide evidence that serendipitous networks offer social capital that influence and trigger internationalization. Mayer and Skak (2002) argue that through coincidental
relationships in a big trade fair in Frankfurt, opportunities emerged to assist Danish firms’ internationalization. During an interview with managers about how they meet their business partners abroad, Agndal and Axelsson (2002) find that most firms have little international market choice because they meet their customers by chance and “through” unplanned networking events. Moreover, network relationships with government export agency triggered a firm in New Zealand to change its internationalization mode (Chetty and Agndal 2007).

Another stream of research provides evidence that networks evolve with change of internationalization mode (Easton and Araujo 1992; Coviello 2006; Boojihawon 2007; Agndal, Chetty and Wilson 2008). Change of internationalization mode and change of internationalization critical events are terms used interchangeably in this study to allow the influence of both within and between mode changes. The reason behind this stream of research is that networks change with change of internationalization critical events. Farooqi and Miog (2012) argue that often social networks precede business networks during internationalization. Agndal et al (2008) assert that serendipitous networks are often associated with early internationalization critical events, while efficacious networks are dominant in later modes. Although most of the studies highlight the dynamic role of social capital (Agndal, et al 2008), the influence of networks at different points of internationalization (Boojihawon 2007) and the role of serendipitous networks during the internationalization process (Merrilees, et al 2015), it appears that the dynamic role of network serendipities in the internationalization process is neglected.

However, network serendipities can affect and be affected by internationalization critical events (modes), depending on the firms’ position within the internationalization process. Arguably, serendipitous networking events may increase as well as decrease over time. This happen as firms deepen existing relationships, establish new ones and terminate problematic ones (Chetty and Agndal 2007). For the internationalizing firm, this means that serendipitous networking events available when doing business domestically are likely to be different from the serendipities available when the firm intensifies its international sales (Agndal, et al 2008). While the dynamic nature of networks is intensively discussed in the internationalization literature, few studies explicitly consider
how network serendipities change during the internationalization process (Agndal and Axelsson 2002). To our knowledge, few – if any – studies approach network serendipities in this way (Agndal, et al 2008). Our main objective in this paper is to examine networking under uncertainty during internationalization process by integrating the Uppsala model of internationalization (Johanson and Vahlne 2009) with effectuation dynamics (Sarasvathy 2008). Considering a dynamic view of network serendipities, precisely, this paper studies the dynamic role of network serendipities at different points in the (internationalization process) – the so called internationalization critical events.

We chose the effectuation theory and the revisited Uppsala model because they jointly offer a “platform” to explain how unexpected networking events change with the change of internationalization mode. Sarasvathy (2001) argues that in an uncertain condition – effectuation perspective, entrepreneurs create opportunities by basing their decisions on the affordable loss principle than the maximization of expected returns. Firms operating through serendipitous networks start with a given set of resources, and then collaborate with willing partners to increase these resources to co-create goals (Kalinic, et al 2013; Sarasvathy, et al 2014; Galkina and Chetty 2015). The revisited Uppsala model (Johanson and Vahlne 2009) recognizes the role of networks as firms increase resource commitments in foreign markets. The model further provides the basis for understanding the internationalization critical events. Since the two theories are rooted from behavioural theory (Simon 1958; 1959), the concepts of networks, serendipities and resource commitments that feature in the theories are useful in developing new insights on serendipitous network dynamics in the internationalization process.

This study contributes to the IB literature in three ways. First, the combined discussion of the effectuation theory and Uppsala model enriches the literature by describing and explaining internationalization process of firms in a relatively new approach. The details regarding forms of network serendipities and how they influence and change with change of internationalization critical events provides theoretical grounds to argue that effectuation theory is not static but change with change of international circumstances. Second, managers of various firms that wish to internationalize, are informed on how to create an environment that allow serendipities to occur and seize the serendipitous
opportunities to help them leapfrog in their internationalization trajectories. As for Tanzania for example, this study informs the government on how policy intervention may create suitable environment for serendipitous networking events to happen, which in turn boost overall internationalization of firms. Third, we contribute to the network research in IB by deepening our understanding regarding the dynamic role of network serendipities in the international process, and by means of both qualitative and quantitative methodology (Slotte-Cock and Coviello 2010).

The remainder of this research work is divided into six main and sub-sections. The next section reviews the literature on network serendipities and develops four propositions. The literature combines effectuation theory with the revisited Uppsala mode, thus contributes to an integrated conceptual framework. To test the robustness of this framework, a combination of qualitative content analysis (for case studies) and descriptive statistics (for quantitative data) was useful. The methodological perspectives are detailed in the subsequent sections. The findings of this study are based on both qualitative and quantitative empirical information. The final part of this article contains discussion, conclusions, implications and limitations of the study.

2. Literature Review

We subscribe to Johanson and Vahlne (2009) and Sarasvathy (2001) in order to understand theories that describe network serendipities in the internationalization process. They both admit that a successful internationalization of firms depends among others, on networks. Sarasvathy (2001) asserts that international networks are either formed from intentional motives (strategic) or unintentional opportunities (serendipities) because the business environment in which firms operate is often unpredictable, dynamic and turbulent. Johanson and Vahlne (2009) on the other hand, recognizes the role of networks in the internationalization process, arguing that as firms get involved in network relationships, they commit more resources on international activities.
2.1 Theoretical Literature Review

The network approach to internationalization of firms is one of the most common, trusted, established and informative theoretical propositions in the internationalization literature (Keupp and Gassmann 2009; Coviello 2006; Boojihawon 2007). This is because networks influence internationalization of firms with resource constraints whose dominances outweigh the resource sufficient ones (Galkina and Chetty 2015). Networks help firms to obtain financial resources, new capabilities, and knowledge about foreign markets and shape their institutional structures. In addition, networks reduce transaction costs, exchange costs and minimize governance problems – corruption, through trust and moral obligations (Oviatt and McDougall 1994; Etemad 2004). However, the network theory does not sufficiently highlight the internationalization mode selection or changes of internationalization critical events. This study on network serendipities borrows the Uppsala model and the effectuation theory as used by Kalinic, et al (2013) and Galkina and Chetty (2015) to study network serendipities in the internationalization process. Even so, the network approach informs the two theories used in this study about moral obligations, relationship structure, governance and trust during internationalization (Johanson and Vahlne 2003).

2.1.1 Networks in the Revisited Uppsala Model

The main focus in the initial Uppsala model was on market knowledge and market commitment (Johanson and Vahlne 1977). Their propositions are based on facts that firms tend to avoid “blind” commitment of resources henceforth, as they acquire knowledge they commit more resources. According to Johanson and Weidersheim-Paul (1975) firms start internationalizing to markets with close proximity before venturing into distant markets. The term “close proximity” means almost or exactly similar geographical distance, culture and business conditions. Firms start with sporadic exports, and then replace with independent sales agents, foreign sales subsidiaries and, eventually foreign manufacturing.

Although networks were initially not included as components of internationalization process, in their later work Johanson and Vahlne (2003) recognizes the role of networks
in the international expansion. They argue that entry barriers are not associated with country-specific policy conditions but related to the establishment of new international networks. Johanson and Vahlne further argue that issues of psychic distance, geographic barriers and liability of foreignness are no longer important because they are replaced by the liability of outsidership firms’ experience in their new network positions. Firms which have acquired an insidership position in a network can successful internationalize into any market.

Building on their arguments, the following characteristics of networks in the revisited Uppsala model can be highlighted (Galkina and Chetty 2015). First, networks established during the internationalization process of firms are not always based on pre-determined goals. However, both the pre-determined and unintended networks are important “gears” for the internationalization process because they help firms in acquiring an insider position in a foreign network (Galkina and Chetty 2015). Second, the concept of “liability of outsidership” mentions uncertainty as one of the elements that affect firms’ positions in a network however, the revisited model is not supposed to be considered as one of uncertainty avoidance, rather should be viewed as internationalization barriers that may be overcome by creating new networks (Johanson and Vahlne 2009). Although the authors do not specifically mention serendipitous networks, their proposition has an inbuilt implication that networks are both pre-determined and serendipitous. Third, the concept of bounded rationality in the model suggests that decision making regarding internationalization process are based on human mindset, thinking and network coordination. The third argument has an implication that the model among others, accept unintended strategies.

2.1.2 Networks in the Effectuation Theory

The central argument in the effectuation theory is based on non-predictive logic (effectuation) rather than on predictive logic of reasoning (Sarasvathy 2001; 2008). The theory describes that entrepreneurs make decisions not based on pre-determined goals but on affordable loss principle. To be illustrative enough, let us think of firms that allow losses in the organizational budgets to encourage creativity, extra thinking and new discoveries among employees. Without the allowed loss, creativity would have been
difficult because the process has a lot of wastes before one reaches into new discoveries. Individual employees are unlikely to bear the losses of creativity but if the organization is considerate enough, allowing loss in its budget is an option. In a summarized form, the effectuation approach has the following assumptions: means driven instead of goal action; leveraging contingencies instead of exploiting pre-existing knowledge; affordable loss instead of counting expected returns; partnership instead of competitive analysis; and controlling the uncertain future instead of predicting it (Sarasvathy 2001;2008). For small firms, especially in developing countries it is difficult to allow losses in their budgets because of resource constraints. Therefore, considering the nature of firms in the agro-processing sector, this paper focuses on partnership assumption because it gives “room” for discussing and describing network serendipities that are also uncertain human relational actions see e.g. Wiltbank, Dew, Read and Sarasvathy 2005 and Galkina and Chetty (2015) who also found the theory useful in describing effectual networks in the internationalization process.

In conditions of uncertainty, entrepreneurs instead of conducting extensive and expensive research on pre-selected markets, firms establish effectual networks (Sarasvathy and Dew 2005) with interested stakeholders such as customers, suppliers, distributors, professionals and other institutions (Kalinic et al 2013). The co-created networks serendipitously define what market to enter or what new market to create (Read and Sarasvathy 2005). Sarasvathy and Dew (2005) indicate that effectual networks often dominate and trigger internationalization at early stages whereas later on, the networks become more goal-oriented. Therefore, from the theory there is an implication that as network change from classic to pseudo serendipities, internationalization critical events change responsively. In other words, if classic network serendipities trigger internationalization at the early phase, pseudo serendipity will be more important in triggering internationalization at later phase.

2.1.3 Comparison of Networks in the Uppsala model and Effectuation Theory

According to Bello and Kostova (2012), a theoretical rigor is achieved when both similarities and differences of theories are established. To start with similarities, Sarasvathy et al (2012) argue that both the revisited Uppsala model and the effectuation
approach are process-based concepts. The effectuation theory describes the new entrepreneurial ventures while the revisited Uppsala model explains the deterministic international expansion process. Johanson and Vahlne (2009) indicate further that the revisited Uppsala model often resembles the effectuation approach to include similar environmental characteristics, a limited number of available options, incremental expansion or growth and effectual networks.

Unlike the effectuation theory that considers effectual processes as several cycles of interaction between stakeholders (Chetty and Agndal 2007), the revisited Uppsala model regards the processes as deterministic internationalization critical events whose venturing depends on firm’s position in networks. By implication, the revisited Uppsala model considers networks as both deterministic and unplanned while effectuation approach accounts for only effectual networks occurring with minimum or no direct influence of the firm. Connecting to the aforementioned logics, Johanson and Vahlne (2009) argues that for firms which have acquired an inside position in a network; they can internationalize to any market though such networks.

In contrast, the two theories differ in terms of how they view and describe market opportunities. The effectuation theory does not regard market opportunities as given and exogenous to the effectual process while the revisited Uppsala model does. According to Dew and Sarasvathy (2008), effectual networks are not deterministic and they are co-created by chance as firms struggle to grow. Johanson and Vahlne (2009) on the other hand consider both effectual and deterministic networks as essential “elements” that respectively, trigger and enable internationalization process.

2.2 Empirical Literature Review and Propositions

The notion of “network serendipity” originates from an English novelist, Horace Walpole, youngest son of British Prime Minister Robert Walpole. They first used the term serendipity in 1754 (Remer 1965) after they managed to accidentally explain the camel loss event that they never knew before on their way to school. With its transition to international business, understandably the focus is on the nature, types, origin and role of serendipitous networks in the internationalization of firms. Although some network
scholars emphasize on resources arising from pre-planned or purposely created network relationships (Chetty and Agndal 2007; Farooqi and Miog 2012; Coviello 2006; Boojihawon 2007), others consider both actual and effectual networks (Galkina and Chetty 2015; Kalinic et al 2013; Chetty and Agndal 2007), the later perhaps unknown but still form important network relationships that trigger internationalization. To make it inclusive, we draw from Kalinic’s et al (2013) thinking that network serendipities are any form of relationships which is not initiated by the firm or at least the firm has a minimum control over their occurrences thus, network serendipities are not created but “co-created.”

Consequently, network serendipities have both structural and economic dimensions because they occur in different forms and influence internationalization respectively. The structural dimension is explained by several forms however, this paper focuses on pseudo and classic serendipities (Cuhna, Clegg and Mendonca 2010). The pseudo serendipities include networks relationships that arise from already existing network relationships. If a firm has business relationship with a supplier of raw materials and accidentally in a buyer-supplier meeting, the firm comes into contact with a new distributor of its products; such co-created network relationship refers as pseudo network serendipity (Merrilees et al 2014). The authors validate their arguments using Carlovers which is an Australian environment management consulting company that serendipitously secured contacts with a businessman who later became a Mexican Franchisee, in a meeting with suppliers. On contrary, the “purest” form of network serendipities are network relationships formed from unsought business events or ideas. Agndal and Axelsson (2002) observed Brown Brose case (a wine making company in Australia) and found that Kobe Steel Japan in a need to buy wines for its employees, places unexpected or unsolicited orders that increased international sales. This form of network serendipity is regarded as the “purest” form or classic serendipity because its occurrence was 100 percent unsought.

We develop a 0:100 percent scale that consistently describe more differences between classic and pseudo network serendipities based on the degree of control firms have on network’s occurrence. 100 percent control of the firms over network’s occurrence implies
no serendipity and slightly higher control than that percent results into pseudo serendipity (De Rond 2005). 0 percent or no control at all over network’s occurrence implies that the networks were serendipitously co-created in a classic form (De Rond 2005). Regardless of the form of network serendipities in question, unexpected networks have attracted research attention in international business studies because they have economic implications such that they enable and trigger change of internationalization critical events (modes).

Authors in this paper borrow a contention by Agndal, Chetty and Wilson (2008) that network serendipities are not static but highly dynamic, as their structural and economic dimensions change over time. Extant literature supports their notion. For example, studies show that at early phases of internationalization and entrepreneurs history, firms benefit more in family and friend’s network relationships than inter-firm networks (Boojihawon 2007; Farooqi and Miog 2012; Rutashobya and Jaesson 2004). As firms intensifies their exports, they interact with more international suppliers, customers and other business institutions that further enable the “co-creation” of more network relationships to include serendipities that further trigger internationalization (Johanson and Vahlne 2009). Granovetter (1973) support the contention on network serendipities by arguing that third parties can increasingly act as linkages to other networks because as firm’s interactions increase, serendipitous networking opportunities also increase.

Building on Granovetter’s (1973) contentions, we argue that as firms change from one form of network serendipity to another, internationalization critical events change responsively. Therefore, expecting a correlation between the change of internationalization critical events and network serendipities such that firms in pseudo network relationships operate in relatively different stages of internationalization from those firms in classic network serendipities. Although it is often difficult to distinguish stages involved in internationalization change, the ways in which they occur and the benefits triggered by forms of network serendipities for each event (Boojihawon 2007), we group internationalization critical events into two i.e. earlier and later phases of international market entry (Agndal et al 2008). To recognize the dynamic influence of
network serendipities, we contend that the type or forms of network serendipities do not benefit the phases of internationalization in the same way (Kalinic et al 2013).

Agndal et al (2008) argue that there is no one approaches to measuring change of internationalization critical events. They account for an international experience of “≥3” years as a measure such that firms with less or more than three years are considered to be in an earlier or later phase of internationalization respectively. However, their scale ignores the critical moments that firms experience as they grow through the internationalization process (Johanson and Vahlne 2009). To capture the international critical moments, this paper develops 50:50 scale borrowed from Johason and Weidersheim-Paul’s (1975) ideas that earlier phase of internationalization includes among others; change from domestic markets to sporadic exports to independent sales agents. The later phase involves among others, change from independent sales agents to establishing foreign sales subsidiaries to foreign manufacturing. The economic and structural dimensions of network serendipities dynamically evolve to trigger the changes of internationalization critical events (Kalinic et al 2013). The earlier and later phases of internationalization change with the change of both pseudo and classic forms of network serendipities (Agndal et al 2008). In addition, Agndal et al (2008) find a dynamic relationship between forms of network serendipities and nature of network relationships therefore, pointing to the structure of networks that reside in either direct or indirect relationships.

2.2.1 The Nature of Network Serendipities

As aforementioned, networking serendipity has structural characteristics because networks often take a form of direct or indirect relationship. Chetty and Agndal (2007) define direct relationships as firm’s direct interaction with for example, customers, distributors and suppliers. Firms may also establish or utilize indirect relationships with customers’ customers and suppliers’ suppliers (Agndal et al 2008). Therefore, an indirect relationship is a relationship a firm has “through” another firm. However, both indirect and direct network relationships form a “platform” to enable network serendipities occur because serendipitous networking events can often be “co-created”, searched for or destroyed (Merrilees et al 2015). For instance, organizations may set budget losses to
encourage creativity that includes network serendipities. Cunha et al. (2010), argue that firms that create environment to allow network serendipities, reap more serendipitous business opportunities than those firms which fail to create such motivating environment. Similarly, as the number of direct and indirect network relationships increase, both forms of network serendipities increase responsively (Agndal and Axelsson 2002).

As already highlighted earlier, Agndal et al. (2008) clarify that indirect network relationships are associated with later phase of internationalization while direct relationships are associated with the earlier phase. Perhaps their clarification is based on Penrose’s (1959) ideas that as firms grow from one life cycle to another, they acquire experience, knowledge, networks and other resources that assist their further growth. Building on the same logic, we propose that both pseudo and classic network serendipities are dynamically linked to direct and indirect network relationships. Firms’ direct interactions with suppliers, distributors and customers in already existing international business or trade thus, are providing opportunities for the firm to relatively control the occurrence of unintended networks known as pseudo serendipities.

Indirect relationships are often less cost because their existence depends on the nature of business environment that firms are involved and existing network relationships (Granovetter 1975). In addition, Hakansson and Snehota (1995) contend that with an increasing number of network relationships, the firms involved become better known in the network, better connected and learn more about the network. More knowledge and experience in the network implies more serendipitously networking events that in turn trigger internationalization. Extending these contentions, we argue that classic network serendipities are more likely to reside in indirect relationships than direct relationships and vice versa. In summary we propose:

**Proposition (P₁): In the early phase of internationalization, Firms are more likely to be associated with classic network serendipities residing in indirect rather than direct network relationships.**
Proposition (P2): In later phase of internationalization, firms are more likely to be associated with pseudo network serendipities residing in direct rather than indirect network relationships.

2.2.2 Serendipitous Networking Dynamics and Internationalization

Although both the pseudo and classic form of network serendipities are important “triggers” of internationalization of firms, their importance differ depending on whether the firms are in either early or later phases (Merrilees, Miller and Tiessen 2014; Galkina and Chetty 2015). Previous research has found that serendipitous network relationships trigger firms’ international expansion by providing access to various resources such as knowledge and experience (Chetty and Agndal 2007; Johanson and Vahlne 2009). Both planned and unplanned networks are considered important because through such network relationships firms acquire necessary resources for internationalization. When firms actively draw on and proactively exploit serendipitous networking opportunities, Merrilees et al (2014) refer as learning through pseudo networking serendipities.

We contend that network serendipities are dynamic in nature, implying that their roles change with or rather trigger change of internationalization critical events. In practice, firms may be connected into indirect and direct relationships. Through third parties, firms may acquire information that they never sought (Galkina and Chetty 2015) which in turn may help the firms with resource constraints to internationalize. This form of information acquisition through third parties is referred as classic network serendipities (De Rond 2005). Firms’ positive images and officials’ attendance into an international exhibition may help the firms to serendipitously receive unsolicited orders from unexpected client - the so called classic serendipity. Other network examples that may trigger internationalization of firms with insufficient resources include piggybacking and client following strategies (Boojihawon 2007).

In addition, in the extant literature, firms which have already established contacts with suppliers, distributors or customers may receive information about a new distributor that finally become a franchisee in a foreign market (Merrilees et al 2014). This type of network relationship is known as pseudo network serendipity. Although, the firm was
not aware of the new distributor, the information about this new distributor came from already existing network relationship. The more direct relationships the firm is connected into, the more the pseudo form of network opportunities the firm will experience (Chetty and Agndal 2007).

Unlike the classic form of networks that is considered to be the “purest” form of serendipities, occurrence of most serendipitous opportunities depends on already existing network relationships. However, both the pseudo and classic forms of network serendipities trigger internationalization (Galkina and Chetty 2015). It also implies that change of serendipitous networking opportunities between the two forms influence the change of internationalization critical events such that growth in the internationalization process is a response of network evolution from pseudo to classic serendipities and vice versa. Thus:

**Proposition (P₃):** In the early phase of internationalization, changes of firm’s internationalization critical events are more likely to be triggered by classic rather than pseudo forms of network serendipities residing in indirect network relationships.

**Proposition (P₄):** In later phases of internationalization, changes of firm’s internationalization critical events are more likely to be triggered by pseudo than classic forms of network serendipities residing in direct network relationships.

### 2.3 Model and Concepts

Our propositions are summarized in fig. 1

The propositions and model focus on two concepts, which include changes of internationalization critical events triggered by either pseudo or classic forms of network serendipities residing in direct and indirect network relationships. Approaches and criteria used to measure these concepts are presented in table 1. The table presents possible conditions that must be fulfilled for a change of internationalization critical event to be considered as either early or later phase of internationalization.
3. **Research Method**

*Research Design*

This paper focuses on change of networking serendipities and its influence on change of internationalization critical events. Therefore, it employs a mixed method design that involves a multiple case studies and survey. In the multiple case study approach, we use a retrospective method because it is considered appropriate in identifying and describing serendipitous networking “critical moments” in which firms pass through during internationalization (Galkina and Chetty 2008). According to Halinen and Tornroos (2005) in-depth case study is a good approach to study changes of networks or internationalization.

While this research is primarily qualitative in nature, it combines both qualitative and quantitative methods of analysis. Yin (2014) and Eisenhardt (1989) recommend this type of multiple case studies embedded design because they can fruitfully merge between theory and data collected from primary sources. Using quantitative data, frequencies of observations were established and cross-tabulation used to test findings for statistical significance.

The dynamics of network serendipities was in the context of agro-processing firms because the firms are regarded to be constrained by resources and often rely on networks to grow internationally (Milanzi 2012). It is also difficult for agro-processing firms to establish network relationships because being a “network insider” is considered expensive and time consuming (Johanson and Vahlne 2009; Chetty and Agndal 2007). Therefore, firms with limited resources often rely on networks that unexpectedly occur though other networks that the firms are not involved (Cunha *et al* 2010). However, the unexpected networks may trigger internationalization by influencing change of internationalization critical events.
Table 1

Description of main concepts

<table>
<thead>
<tr>
<th>Concept</th>
<th>Conditions to be fulfilled for the concept to apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct relationships</td>
<td>1) Relationships with a party with which the firm currently does, or has done, business within the past.</td>
</tr>
<tr>
<td>(Agndal et al 2008)</td>
<td>2) Either relationship (a) with domestic or foreign firm such as customer, supplier, owner, subsidiary, other business partner, supporting organization or other stakeholders or (b) with individual human being.</td>
</tr>
<tr>
<td></td>
<td>3) Other party may act as a broker or as a customer/partner in new markets.</td>
</tr>
<tr>
<td>Indirect relationships</td>
<td>1) Relationship with party with which the firm has not done business prior to the change of internationalization critical events.</td>
</tr>
<tr>
<td>(Agndal et al 2008)</td>
<td>2) Relationships exist through another party e.g. customers’ customers, suppliers’ suppliers, members of owner’s or subsidiary’s network and “friends of friends”.</td>
</tr>
<tr>
<td></td>
<td>3) A third party may act as a broker or a new customer/partner.</td>
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<tr>
<td>Earlier phase of internationalization</td>
<td>1) Change from domestic to sporadic exports.</td>
</tr>
<tr>
<td></td>
<td>2) Change from sporadic exports to independent sales agents.</td>
</tr>
<tr>
<td></td>
<td>3) Other firm specific changes within the phase.</td>
</tr>
<tr>
<td>Later phase of internationalization</td>
<td>1) Change from independent sales agents to foreign sales subsidiary.</td>
</tr>
<tr>
<td></td>
<td>2) Change from foreign sales subsidiary to foreign manufacturing.</td>
</tr>
<tr>
<td></td>
<td>3) Other firm specific changes within the phase.</td>
</tr>
<tr>
<td>Pseudo forms of</td>
<td>1) Change of internationalization critical event as a response to an opportunity.</td>
</tr>
</tbody>
</table>
| Network Serendipities | Presented to the firm by a network partner with which the firm has a direct relationship.  
2) Firm has a planned strategy but unexpected opportunity rise in the course of executing that strategy.  
3) Firm was not aware of the opportunity until it was presented to them by that external party.  
4) Change of internationalization critical event(s) represents an unsolicited opportunity. |
| Classic Form of Network Serendipities | 1) Change of internationalization critical event is a response to an opportunity presented to the firm by a network member with which the firm has indirect relationship or no relationship at all.  
2) Firm has no any form of planned strategy and unsought opportunity rises unexpectedly.  
3) Firm was not aware of the opportunity until it was presented to them by that external party.  
4) Change of internationalization critical event(s) represents an unsolicited opportunity. |


**Case Method**

Based on saturation principle by Yin (2014), we selected 21 case firms to include those internationalized to regional markets and the rest of the world from Tanzania and firms from regional markets operating in Tanzania. The reason for considering firms from regional markets operating in Tanzania was the resource and operational characteristics which were found almost similar to firms internationalizing from Tanzania. Only firms with more than 10 employees were included because it is practically rare to find internationalizing firms with less than ten employees and at least three years of experience. Although 26 firms were considered for multiple case studies embedded design, only 3 case stories were detailed to inform some variables that could not be explained by quantitative approach. For example, in identifying internationalization’s critical moments and changes of networks, details from the three case studies were used to complement the quantitative data.
**Sample Selection, Data Collection Methods and Analysis**

The unit of analysis in the study is the changes of internationalization critical events that Agndal *et al.* (2008) term as Foreign Market Entries (FMEs). 89 internationalization critical events were relatively identified and analyzed based on the following criteria. First; those firms operating at least in the sporadic export mode (Galkina and Chetty 2015). Second; firms which operate as foreign manufacturers from Tanzania or those from regional markets operating in Tanzania. Both firms were selected from Tanzania country’s data base of all exporting firms and those operating in Tanzania (NBS 2012).

The main methods of data collection were semi-structured interview and questionnaire. 25 interviews were modified from major interviews of a joint project known as Successful African Firms and Institutional Change (SAFIC) and the remaining firms were supplemented by the researcher during SAFIC’s data collection exercise. The interviewees included Chief Executive Officers (CEOs), marketing managers, export managers or founding owners of the business. Although the interview method produced substantial information, the retrospective approach became difficult in some cases because some interviewees could not easily recall internationalization moments. However, it was not surprising because human minds are not always in a natural capacity to remember everything. Therefore, in such limitations, more than one interview was conducted to make a total of 28 respondents.

Approximately, 30 minutes for each firm were enough because the research specifically focused on networks. For the case of information obtained from SAFIC data, only networks of those internationalizing food processing firms were considered. Other documents such as company’s profiles collected physically and online during SAFIC’s data collection exercise were used for triangulation purposes. Before analysis of case information, all interviews were reviewed, summarized and brainstormed to produce case stories for 3 firms whose details were used to supplement data from other methods. This kind of case story summaries were used because Pettigrew (1990) suggested that case studies should often be organized into chronological case stories to eliminate information that appear irrelevant to the subject under study.
4. **Findings and Discussion**

**Analysis of Results**

The analysis process was carried out in several steps. First, the 26 case firms were systematically interviewed to describe the critical moments they encountered during internationalization (as can be seen in Appendix 1 and 2, these 26 firms were mostly internationalized into African markets). However, only detailed reports of three firms were used to supplement quantitative information. Second, 89 internationalization critical events (see Appendix 1) were identified to establish evidence whether network serendipities influence change of these events in a dynamic way. Third, having established consistency, we used these fine-grained data to build theory focusing on an identified contribution, the dynamic element of effectual networks. Since our data are not normally distributed, however, we had to use non-parametric statistics and, since our measures are binomial, chi-square was the correct statistical technique (Agndal et al 2008). Finally, in order to provide more clarity of these abstracted data (Johanson and Vahlne, 1975), illustrations on change of internationalization critical events are used. The overall research design is appropriate to the study of complex social science phenomena, such as serendipitous networking dynamics. Indeed, Halinen et al (2011) point out that, “increasingly, social science research, including economic research, is employing both quantitative and qualitative methods on a retrospective basis in studying complex changes of networks in the internationalization process.

**4.1 Case Stories**

**4.1.1 Case C₁**

C₁ is a small firm from Tanzania founded in 1992. An interview conducted by SAFIC team reveals that the firm started as a mango grower trying to imitate mango growing culture of some firms in Kenya. Later on, the mango growing firm engaged in processing cashew nuts, mango pickle, and other food packed spices. At the time of data collection, it had 41 where 20 were permanent staff and 21 employed as causal workers for cultivation in the mango farms. Their first export started in the year 2000 and currently
they have minimum export but thinking of increasing volumes to meet a high demand in export markets especially Dubai. The following narratives from both SAFIC’s and a second telephone interview with the founder of C₁ illustrate the firm’s internationalization and networking during this process.

When asked about how the firm started to internationalize, the answer was: “I cannot say there was something started yet because I don’t feel that way. We never thought of the market at Dubai, it is all of a sudden information brought to us by our relatives residing in Dubai that they needed some products from Tanzania. We could send them mango pickles, and fresh mangoes for their personal consumption. We did not do this to get opportunities in Dubai however, in the course of action; they informed us about independent sales agents residing at Dubai who could buy up to 2 tons of our products and distribute them to supermarkets in Dubai.

Still I don’t feel that we an international company because unfortunately we stopped exporting in 2007. When asked why stopped exporting the answer was: As you know we got a “sudden” order from sales agents in Dubai at the point that we could meet the demand. 2 tons a year for us was not easy because no factory, refrigerators and other complex processing equipments to satisfy such demands in the export markets. We also stopped exporting because our independent sales agents wanted to have long-term relationships with us (become our agents/partners) but we were afraid we could not produce enough to maintain such relationships. We don’t want to lose them. It is a matter of time; more products will be shipped to them. We have currently, currently established contacts with USAID and they have promised us to get scientists who will assist production after opening our new factory. We shall increase our exports.

4.1.2 Case C₂

C₂ is Kenyan-Tanzanian large enterprise that processes nile perch fillets for export. It was founded in 1992, and its raw materials range from nile perch fishes and Tilapia found mainly in the lake Victoria. It is the largest processor of Nile Perch in the EAC region with an installed capacity of 15,000 MT of fish fillet per annum. The company produces three products, which are fish fillets, fish maws, and by-products. The fillets form about
90% of total sales followed by fish maws (8%) and the by-products (2%) respectively. About 98% of company’s revenue is generated through exporting the fillets and fish maws. The by-products are 100 percent sold to local customers in Mwanza and other regions in Tanzania. C2 employs 400–560 workers and uses subcontractors. In 2012, the annual turnover of the firm was 556.8 billion Tanzanian Shillings out of which, 98% were from international sales. At the time of the interview, C2 had a foreign processing plants in Kenya however, the two sister processors were exporting globally.

When we asked managers about how they started internationalization process the answers revealed a means-driven form of effectual networks. They say: we started as fish exporters in Kenya where our focus was on octopus fish found along the Mombasa coast. Later on, we found market opportunities for nile perch and tilapia through unsolicited internet search. We used independent fishermen in the Lake Victoria located in Mwanza, Tanzania who later became our agents for fishing using our fishing boats. We decided to have a processing plant in Mwanza however; we combine all our end products with those at Mombasa before exporting to other countries. It is not that we do market researches, it is all about frequent “pop ups” through the web and say hello! We are from Tanzania; can we supply you with nile perch fillets? By attending at exhibitions in Dar es Salaam, we also managed to get new customers from China to buy fish maws. It is through this unplanned form of networking that we build trust and sustain our international customer base.

4.1.3 Case C3

C3 is a medium-sized Tanzanian firm founded in 1998. It was initially a transport company that owned up to 170 trucks for hauling goods to neighbouring countries of Rwanda, Burundi and Congo D.R. however; currently designs and produces local clothes known as Khanga, Kitenge and Dilla. The products are made in different parts of Africa but the main producing plant is located at Mbagala Mission, Tanzania. Currently, the team has 573 people, four of whom are partners owning shares of the firm, while the others are permanent employees and casual workers. While C3 has a wide network, it has to actively maintain these relationships to retain them in the hopes they may eventually
be of use. The firm has a sales subsidiary in Malawi and a foreign manufacturing in Congo D.R.

Their expansion into Congo was not planned, but was rather a ‘vague’ intention. It is a current trend for Tanzanian firms to expand into Congo, Malawi, Rwanda, Burundi and Uganda as these countries are landlocked depending on Dar es Salaam port and they also share boarders with Tanzania. As one of the founders of C₃ states: “we never did any market research about textile and design industry there. There was no strategic decision. It is our image that lightened our future. You know…we are considered very specialized into textile business. We are also close to the port of Dar es Salaam where we clear fabric freight easier than any counterpart in landlocked countries. It was common to find unsolicited orders from Congo, Malawi, Rwanda and Burundi. Through our customers, we also got one guy who was looking for partnership in textile making business and became our partner at a subsidiary in Malawi. It was easy for him to link our business to Malawi as he spoke Malawi languages well. The following narrative illustrates the effectual and causal nature of networking:

“While operating at Malawi we have developed a strategic list of potential clients and retailers, and we try to network according to this list. But often finding good partners is a matter of intuition: it is a matter of feeling. Things go in a really unpredictable way. I really don’t know how they go… It is complete chaos… Things roll like a snowball; nothing is clear at this point… Things just happen, we don’t plan them. It is hard to trust your potential partners in this situation. But we have kind of general trust in people, so we are optimistic about them even before we have any business together. It is all about a business partner who approached us to jointly establish a foreign manufacturing in Congo. We now work very well together.

To make it more clear, the three cases were summarized distinguishing between pseudo and classic forms of network serendipities. This distinction depends on the opinions of managers interviewed because all were aware of what network serendipities are; how they happen and influence internationalization. Those who could not differentiate the
two, the classification were noted down during analysis. Table 1b illustrates different forms of network serendipities that were identified from the three case studies.

Table 1b

<table>
<thead>
<tr>
<th>Case study category</th>
<th>Form of network serendipity</th>
<th>Reason for such classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Classic networks</td>
<td>Pseudo networks</td>
</tr>
<tr>
<td>Case C1</td>
<td>Relatives provide</td>
<td>The independent</td>
</tr>
<tr>
<td></td>
<td>information about</td>
<td>customers at Dubai provide</td>
</tr>
<tr>
<td></td>
<td>independent sales agents</td>
<td>information on more market</td>
</tr>
<tr>
<td></td>
<td>in Dubai who later became</td>
<td>opportunities.</td>
</tr>
<tr>
<td></td>
<td>customers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Institutional relationship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with USAID</td>
<td></td>
</tr>
<tr>
<td>Case C2</td>
<td>Online networking/unsolicited customers search</td>
<td>Independent fishermen became our business partners (joint ventures)</td>
</tr>
<tr>
<td></td>
<td>Exhibition results into unexpected network with Chinese buyer of fish maws.</td>
<td>-Exhibition alone makes the network unsought before exhibition</td>
</tr>
<tr>
<td>Case C3</td>
<td>unsolicited orders from potential customers in Congo</td>
<td>Business partnership in Malawi arose from customers’ information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Summarized from case stories 2016

4.2 Results from Survey

Survey results are presented in tables and figures. Chart 1 for example, describes the sectors involved in internationalization and the levels of internationalization firms have reached. Foreign independent sales agents were the dominant level while foreign sales subsidiaries and sporadic exports were the less dominant levels. By operating in various internationalization critical events, firms were able to respond on how network serendipities influenced change of internationalization modes. Fish processing was found
to be the most internationalization (about 38 percent) while soaps and detergents was the least dominant sector in internationalization. Other sectors that were internationalizing include: edible oil that processes oil and fats, coffee processing, cashew nuts processing and grain milling sector.

A cross tabulation that aimed at comparing two mean samples between the sectors firms were involved and the level of internationalization reveals that firms in any sector can internationalize to any level. Appendix 3 shows ($\chi^2 = 22.750), p = 0.064 > \alpha = 0.5$ indicating that we should reject the hypothesis that not all sectors can internationalize to the level of foreign manufacturing in any country. It is therefore statistically supported that firms in any sector being fish processing or textile can grow to the level of establishing foreign manufacturing in any country.

**Table 2: Chi-square tests**

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asymp. Sig.</td>
<td>.063</td>
<td>.000</td>
<td>.020</td>
<td>.008</td>
<td>.019</td>
<td>.033</td>
</tr>
<tr>
<td>Sig.</td>
<td>.045*</td>
<td>.000*</td>
<td>.011*</td>
<td>.011*</td>
<td>.011*</td>
<td>.011*</td>
</tr>
<tr>
<td>Monte Carlo Sig.</td>
<td>90% Confidence Interval</td>
<td>Lower Bound</td>
<td>.009</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upper Bound</td>
<td>.081</td>
<td>.026</td>
<td>.030</td>
<td>.030</td>
</tr>
</tbody>
</table>

*a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.8.  
b. Based on 89 sampled tables.*
X₁ in table 2 illustrates relationships that exist between classic networking serendipities and change of internationalization critical events. 39 observations out of 89 internationalization critical events reveal that classic networking serendipities are responsible for change of internationalization critical events. Correspondingly, X₃ describes the possibility that classic networking serendipities often occur at the early phase of internationalization. 29 observations out of 89 provide evidences that the true form of network serendipities arise at the early phase. Similarly, X₅ shows that classic forms of networks reside more in indirect than direct relationships. These results are also supported by several values of \( \chi^2 \) at 10 percent level of significance in three folds: First, for X₁ the values \( (\chi^2 = 8.921), p = 0.063 \) provides statistical evidence that classic networking serendipities are at least among important factors that enable change of internationalization mode. The logic behind our interpretation is that \( p < \alpha = 0.1 \), thus we accept our hypothesis. We consider the asymptotic significance instead of Monte Carlo’s because internationalized agro-processing firms in Tanzania are relatively few, therefore, our sample is considered adequate.

Second, for X₃ the \( (\chi^2 = 11.618), p = 0.02 < \alpha = 0.1 \) signifies that classic network serendipities occurs more at the early phase than later phase of internationalization. The phases of internationalization are defined in the internationalization stages by Johanson and Vahlne (1975). This is also confirmed by the Monte Carlo significance level of \( p = 0.011 \) that falls in the acceptance region of our binomial distributed data. We use non-parametric tests because for categorical data that are not normally distributed, the tests give robust results.

Third, for X₅ the \( (\chi^2 = 11.730), p = 0.020 < \alpha = 0.1 \) implies that the classic form of network serendipities reside more in indirect than direct relationships. Finally, the X₁, X₂, X₃ results in table 2 testify that change of internationalization among others, is influenced by the classic form of network serendipities that reside more in indirect than direct relationships and often occurring more in the early than late phase of international engagement. Possibly, the managerial innovative behavior is another factor that does not clearly feature in our data however, they influence internationalization. X₁ for example, shows 17 observations that consider classic serendipities as neither important nor
unimportant, indicating indifference among factors. However, there is also possibility that change of internationalization critical events was dependent on pseudo than classic networking serendipities. Therefore to understand our analysis, the pseudo form of network serendipities was described separately.

In table 2 $X_2$, $X_4$ and $X_6$ describe the influence of pseudo network serendipities in influencing change of internationalization critical events. 50 observations out of 89 consider pseudo network relationships as the most important factor in triggering change of internationalization modes. Correspondingly, for $X_2 (\chi^2 = 27.348)$, $p = 0.000 < \alpha = 0.1$ indicating that at 10 percent level of significance, pseudo forms of network relationships triggers change of internationalization modes. The question of which mode changes they enable or trigger is discussed in the next paragraph.

$X_4$ on the other hand describes whether pseudo network relationships are more influential at the later than early phase of internationalization or not. It is noted that also 50 observations out of 89 changes of internationalization critical events were in favor of pseudo network relationships. In other words, about 57 percent mode changes were triggered by pseudo networks. Chi-square test also provides evidence to argue that pseudo networks are dominant at the later than earlier phase of internationalization. For $X_4 (\chi^2 = 27.348)$, $p = 0.000 < \alpha = 0.1$ it is statistically significant to accept the alternative hypothesis and reject the null hypothesis at a 10 percent significance level. As for $X_6 (\chi^2 = 10.494)$, $p = 0.033 < \alpha = 0.1$ indicating that we should reject the null hypothesis. Therefore, there are statistical evidences to support the statement that at the later phase of internationalization, pseudo network relationships residing more in direct than indirect relationships trigger changes of internationalization critical events. To confirm if pseudo networks are dominant at which phase of internationalization, we consider the chi-square figure for $X_5$. $(\chi^2 = 11.730)$, $p = 0.033 < \alpha = 0.1$ accepts the alternative hypothesis which state that pseudo network serendipities are dominant at the later than earlier phase of firms’ international engagement. However, from the statistical evidences provided both pseudo and serendipitous forms of networks are important in enhancing change of internationalization.
4.3 Discussion

Our findings confirm that network serendipities are not static but dynamic because they change over time. Interestingly, however, both pseudo and classic network serendipities are important in the early and later phase of internationalization. Although pseudo networks were found to influence change of internationalization critical events at later phase, some possible changes were observed at the early phase. For example, C₁ reveals that relationship between a mango exporting firms acted as information center about other independent customers at Dubai. Surprisingly, C₁ was not able to meet demands and stopped exports. This proves that even pseudo form of network relationships were useful at the early phase of international engagement. In contrast, classic networks were dominant at the early phase compared to the later phase as confirmed in the survey results. However, case studies provide more evidences for this scenario. An online networking search results into unsolicited orders from foreign or global markets for C₂. In the same way, a long built firm image for C₃ resulted into unsolicited orders from customers in Congo.

Statistically, there is significance on the argument that at the early phase firms are attached into more classic than pseudo network serendipities which also means that the two forms of networks influence change of internationalization at each phase respectively. Our findings are similar to the findings by Agndal et al (2008) that the classic form of network serendipities are often associated with early than later phase of internationalization. In particular, Galkina and Chetty (2015) confirm that at the early phase firms are regarded as “infants” to create strategic networks therefore they are less likely to control the formation of networks. The classic form networks that may arise without any firm’s efforts are often useful triggers of change if the firms choose to use them.

Nevertheless, our results regarding the dynamic of serendipitous networks in the internationalization process are less equivocal. Not only do the pseudo and classic forms of serendipities change over time but they are sometimes dynamic in arbitrary way. In contrast Agndal et al (2008) argue that regardless of their form, network serendipities
often occur at the later phase of internationalization. We provide both statistical and case study evidences that network serendipities are not static because they change with change of internationalization critical events. With respect to this change, we extend theoretical discussions by Sarasvathy (2001) that effectual networks are not only important for firm’s internationalization but they are dynamic over the internationalization process. We also provide evidences to argue that the internationalization process literature by Johanson and Vahlne (1975) is not static because change of internationalization modes is influenced by and influence change of forms of network serendipities such as classic and pseudo network relationships.

Statistical and case evidences also reveal that both within and between modes changes are influenced by classic networks. Change from domestic sales to sporadic exports was for example our concern during data analysis. Similarly, change from sporadic exports to international sales by using agents was influenced by classic serendipities more than pseudo networks. On the other hand, change from international sales through foreign subsidiaries to foreign manufacturing was associated with pseudo networks. Our findings provide evidences to contrast the view by Agndal et al (2008) that network serendipities are static and dominant in the later phase of internationalization. Thus, network serendipities especially the classic form will often be associated with early while the pseudo form of network serendipities is often associated with later phase of internationalization. We offer several possible reasons for this. At the early phase of internationalization, firms are less likely to be in strategic networks because they lack resources to establish such networks. However, their possibility to internationalize depends on the “truest form of fortunes” often referred as classic networks because firms have no or limited control over network occurrences. This is also the same when firms enter into new distant markets such as Europe or America because of the “psychic” distance arising from language, culture, geographical and standards barriers (Milanzi, 2012). At the later phase, firms have intensified their international activities and they are likely to engage in strategic partnerships and networks (Johanson and Mattsson 1988). As the number of network relationships in which firms are involved increase, serendipitous networking opportunities also increase known as pseudo serendipities because firms
already know some partners who provide information about the unexpected network relationships.

We also found that both direct and indirect relationships are important in internationalization change for all our firms, but indirect relationships (third parties outside the networks) dominate in the early phase where also classic network serendipities often occur. This illustrates that, initially, firms are not connected to any networks therefore their entry into international markets is often difficult to predict. Then, as the firms become better known in their networks in classic networks, they engage into more direct network relationships and of course there are also possibilities that more indirect network relationships increase. This finding however contradicts the arguments by Chetty et al (2008) that direct network relationships are associated more with early than later phase of internationalization change. Perhaps because the authors’ concern was not the form of network serendipities however their arguments that as firms intensifies their international activities often at the later phase, indirect network relationships increase; is found logical and consistency with our findings.

We provide evidence to support an argument that at the early phase firms are more connected with more classic than pseudo network serendipities residing in more in indirect than direct network relationships respectively. Overall, our findings are, thus, consistent with Farooqi and Miog (2012) and Boojihawon (2007), who argue that at the early phase of internationalization, firms are often connected to social networks that appear to be indirect than business networks which are often regarded as direct relationships. The case study C1 confirms our arguments because sporadic export mangoes to Dubai was enabled by family connections that initially had no any business relationship with the exporting firm. This raises the question; do indirect network relationships increase as the firm grows through the internationalization process? The answer becomes clearer when both classic and pseudo forms of network serendipities are found at the early and later phases of internationalization. Agndal et al (2008) thus, remains inline considering both forms of network serendipities. However, it appears that by neglecting the pseudo form of networks, one may fail to highlight the dynamics of network serendipities in the internationalization process which our study has justified.
4.4 Conclusion and Future implications

This paper has several theoretical and empirical contributions. First, it combines the effectual network theory with the internationalization process literature into one framework to provide deeper insight into how serendipitous networks dynamically influence change of internationalization critical events as firms grow from one model to another. The study also contributes on how effectual networks such as classic serendipities affect internationalization in a negative way. Second, it develops new operationalizations for network serendipities by providing a structured analysis of this elusive concept (Agndal et al 2008). Third, it shows that network serendipities and effectual networks are such dynamic by systematically assessing the role of both classic and pseudo forms of network serendipities at different points in the internationalization process. The findings show that at the early phase of internationalization, firms are engaged more on classic than pseudo network relationships residing in indirect and direct network relationships respectively. In contrast, at the later phase of internationalization, firms are engaged more into pseudo than classic network serendipities residing in direct than indirect network relationships. Both forms of network serendipities however, are considered to influence change of internationalization modes.

The frequency observations of both classic and pseudo forms of network serendipities implies that managers should be able to distinguish between early and later phases of internationalization, direct and indirect relationships and the association between different forms of network serendipities with phases of internationalization. Since classic network serendipities reside more in indirect than direct relationships and indirect network relationships are less costly with weak ties (Granovetter 1975; Agndal et al 2008), managers should prepare all possible environments to allow firms benefit from classic serendipities as they arise. However, managers should be carefully because sometimes unexpected network events may negatively affect internationalization of their firms. Case C1 illustrates an example where firms serendipitously joined into business networks with partners that required long-term relationships thus making C1 to stop exporting because customers’ demands were beyond their production capacity.
Our findings also show that firms which have never internationalized are often limited with information about international market opportunities. In case the firms are also constrained by other resources, no possibility of doing international market research to establish international networks. In such circumstances, classic network serendipities residing in indirect network relationships may enable internationalization by increasing international networking. Galkina and Chetty (2015) found a similar contention where a Japanese firm placed unsolicited orders of wines for the employees to Swedish company that never sought about such a customer. Findings from this paper also suggest that indirect and direct network relationships that dominate the later phase of internationalization can enable the occurrence of both classic and pseudo network serendipities to enhance internationalization.

One limitation of this research is that it can make only analytical generalizations (Agndal et al 2008) as it is a qualitative study based on theoretical sampling of 26 firms. However, given the nature of Tanzanian economy, there are relatively few internationalizing firms. Thus, our findings are possibly contextual statistical generalizations. Future research could focus on increasing statistical sample by involving many firms in the regional markets. In addition, future studies could apply more rigorous quantitative models to test the variables. Another limitation of this study is that it focuses on the dynamic nature of network serendipities however the question on what governments and firms do to increase serendipities is explicitly an explored. Future research could specifically focus on policy issues at the firm and government level and how such policies enhance occurrences of serendipities to boost internationalization.

Appendix 1: Examples of Internationalization Critical events used (unit of analysis)

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change from agents in the rest of the world to regional markets</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Change from Agents to FM (rest of the world)</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Change from agents to subsidiaries in the rest of the world</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Change from domestic - sporadic exports (regionally)</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>4.5</td>
</tr>
</tbody>
</table>
Change from domestic exports to subsidiaries in the rest of the world
Change from domestic sales to FM (rest of the world)
Change from domestic sales to foreign manufacturing (regionally)
Change from domestic sales to sales agents (regionally)
Change from domestic sales to sales agents (rest of the world)
Change from domestic sales to subsidiaries (regionally)

Appendix 2: List of visited firms

<table>
<thead>
<tr>
<th>Name of the Company</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arusha Coffee Mill LTD</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Azam Bakers Ltd</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>7.7</td>
</tr>
<tr>
<td>BDOO Oil &amp; Soap LTD</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>11.6</td>
</tr>
<tr>
<td>Buko Coffee Estate</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>15.4</td>
</tr>
<tr>
<td>Cashew Factor</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>19.0</td>
</tr>
<tr>
<td>CYPRUS Tanzania</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>22.7</td>
</tr>
<tr>
<td>Fishing Industry Ltd</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>26.9</td>
</tr>
<tr>
<td>East Coast Oil &amp; Fats LTD</td>
<td>1</td>
<td>3.6</td>
<td>3.6</td>
<td>30.5</td>
</tr>
<tr>
<td>Fruits Dealers</td>
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Appendix 3: Sector Vs level of internationalization

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24 cells (100.0%) have expected count less than 5. The minimum expected count is .12.
Reference


