# Generational Shadow in Farming Business: How Does It Affect the Succession Process?

Youzhi Wang[1], Michael S. Delgado[2], Maria I. Marshall[3], Craig L. Dobbins[4]

Department of Agricultural Economics
Purdue University

Sept. 19, 2016

## Abstract

We examine the interaction between a generational shadow and generational conflict. We also look at how they affect the succession planning process in small and medium sized family farms. A generational shadow refers to the prior generation's excessive and inappropriate involvement in a farm (Davis & Harveston, 1999) – essentially, it reflects the incumbent's unwillingness to transfer the business. A generational shadow potentially increases conflict between generations (particularly between the incumbent and the successor). In our study, we suggest that there is a two-way relationship between generational shadow and conflict, such that apart from conflicts due to a generational shadow, a relatively high level of conflict between generations is also likely to result in higher unwillingness for the incumbent to transfer the business. Hence, these bi-directional effects can impede the succession process.

***Keywords**:* family farm business, succession planning, generational shadow, generational conflict

[1] Graduate Student, Department of Agricultural Economics, Purdue University. Email: wang2861@purdue.edu
[2] Assistant Professor, Department of Agricultural Economics, Purdue University
[3] Professor, Department of Agricultural Economics, Purdue University
[4] Professor, Department of Agricultural Economics, Purdue University

## I. Introduction

Family farms refer to farms having a principal operator, and individuals related to the primary operator by blood, marriage or adoption own a majority of the business (USDA, 2015). Family farms are an extremely high proportion of farm business and food production: according to USDA (2015), 97 percent of all U.S. farms are family owned (NASS, 2015), and are responsible for 85 percent of the U.S. farm production (ERS, 2014).

Family farms differ from non-family businesses in that they are owned and are controlled by family members, providing them a great potential to engage in or to influence business matters (Davis & Harveston, 1998). Therefore, family farms face many unique and complicated problems not found in non-family farms.

Among all the problems, the high mortality rate of family businesses points to the problem of succession (i.e. the transfer process) as a substantial challenge faced by these farms. Bowman-Upton (1991) indicates that less than one-third of family businesses survive the transition from the first- to the second-generation ownership. Sureshwaran (2011) also estimated that 70 percent of U.S. farmland would change hands in the next 20 years.

One important factor that often impedes the long-term sustainability is the conflict generated within the family business. Conflict is classifies by its source of generation, including life cycle conflict, role conflict, identity conflict, and justice conflict (McClendon & Kadis, 1991).

Previous literature has dealt into the issue of succession palnning itself and the impact of tension on succession. Christensen (1953) proposes the systematic process of a succession planning: (1) the identification of the pool of potential successors; (2) the actual designation of the successor; (3) the notification of the successor designated and other major power figures of the

designation by the predecessor or by appropriate higher authority. Applegate (1994) indicates that difficulty in instituting a structured succession planning attributes to factors including the reticence of entrepreneurs to accept their mortality, reluctance to let of of power, generational envy and the the unwillingness to select a successor, which are centered on the conflict between the successor and the incumbent. This reluctance is called "generational shadow", referring to the prior generation's excessive and inappropriate involvement in a farm (Davis & Harveston, 1999). Previous literature analyzes how generational shadow potentially causes conflict between two generations in family farms (Davis & Harveston, 1999; Sonfield & Lussier, 2004; Lussier & Sonfield, 2009; Chirico & Nordqvist, 2010).

However, not many literatures explain why generational shadow, in another word, the unwillingness to transfer the business, is there in family businesses. One possible reason is that with the implementation of succession planning, more conflict between two generations will be generated during the process, which may increase the incumbent's unwillingness to transfer the business and cause the termination of the process. Therefore, there may exist a simultaneity between generational shadow and the conflict between two generations, instead of a sole causality relationship.

The problem is during the process of business transfer, the conflict generated on a family farm is frequent and detrimental to the succession of the business. On the contrary, with more tension generated in the business and the family, the incumbent is more willing to hold the farm in his hand instead of passing down to the next generation. Therefore, this reasoning leads to our two hypotheses:

*Hypothesis 1:* More conflict will lead to higher unwillingness to carry out succession planning.

*Hypothesis 2:* Being unwilling to transfer the business will generate more conflict between the generations.

The objective of this paper is to increase the probability of family farm's succession by understanding the dynamics between conflict and succession planning by identifying if tension and succession are two-way related when other factors affecting these two terms are under control.

## II. Conceptual Model

The following chapter discusses the theoretical framework that helped shape analysis of succession process and the problem. Two major models presented here are the Three-Circle Model and the Life Cycle Theory. Each model will be introduced according to its assumptions, formation, description, model extension, advantages, and how the model is going to be used into this framework. Integrated framework of two models and implications on empirical modelling will be presented at the end of this chapter.

One significant contribution of this framework is that instead of using a single model, it combines two models in one, allowing us to look at the succession process from two perspectives: position movements of the core family members during the succession process (namely, horizontal movement), and the change of influence of core family members over time (namely, vertical change). This provides us more comprehensive understanding about how generational shadow problem interacts with succession. Therefore, when it comes to empirical modelling, we will be much clearer about relationships among variables and which variables are critical to succession planning outcomes.

### The Three-Circle Model

One of the theoretical strides were made in the field of family business research when the Three-Circle Model – a system of integrated dynamics of family business systems (FBS) – was developed by Taiguri and Davis in their paper: *Bivalent Attributes of the Family Firm* (1982, 1996). The model remains to be one of the central organizing frameworks for scholars to understand family businesses ever since it has been developed. One major contribution of the Three-Circle model is that it has immediate face validity and captures enough complexity in FBS to help researchers, managers and families think more clearly about the strengths and challenges of these systems (Davis, retrieved from http://johndavis.com/three-circle-model-of-the-family-business-system/). This following section will be a step-by-step guide to demonstrate how to understand succession planning process by using the Three-Circle Model.

There are a few assumptions made by Taiguri and Davis in their original paper for the purpose of the model functioning well. To be specific, the model deals only with family-controlled companies where two or more individuals who are owners or/and managers are simultaneously members of the major owning family. If the owners (managers) are all from different families, or there is only one owner (manager) of the company (this typically happens with start-up companies, which are not yet considered as family businesses), the Three-Circle Model are not the one to capture dynamics there. In this study, I would like to narrow down the target companies to those family businesses with both the father (or the senior, incumbent) and the son (or the junior, successor) involving in the business, and the son is expected to take over the business at some point (or the son has already taken over the business) in order to better understand succession issues in FBS.

To make the assumptions clearer, our target businesses include any company that has the following characteristics: a) ownership controlled by one family, b) includes the senior and the

junior of the same family in its management. The authors also assumed that the company should have non-family employees. However, in this study, nonfamily employees are not necessary for the reason that we will be mainly focusing on small- and medium-sized family farms, which are mostly run by family members solely.

The theory claims that a family business is compromised of the three independent yet interdependent and interacting systems: family, management, and ownership, as diagramed in *Figure 1*. Each subsystem has its own goals, values, and development, and maintains porous boundaries that separate it from the other system. The family subsystem targets the individual members of the family and any interactions among them (Bubols & Sontag, 1993). Blood, marriage, or adoption or the people who share goals, resources, and a commitment to the family over time relate all individuals. The business subsystem is defined as follows: individuals who are employed by the business or who share common goals, values, and commitment to the whole; the interdependence and interactions of these individuals within their business environment create the business system (Distelberg & Sorenson, 2009). The key to this subsystem is that the business determines who is a member of this subsystem (Distelberg & Sorenson, 2009). For example, succession is one of the processes to determine who next will lead the business. Therefore, individuals within the business subsystem share common goals and resources relating to business survival. The ownership subsystem, as the other two subsystems, shares common goals, values and commitments. This subsystem has a great deal of overlap with the other two, especially during the early development stages, and we will elaborate this point more in the following chapter (Gersick et al., 1997). Integration among three subsystems is required to have the entire system functioning in a unified and optimal way (Poza, 2010). Additionally, Poza (2010) indicates that in order to cope with the increasing complexness of external environment, the three subsystems and

the FBS as a whole all have to increase internal capabilities to reverse the progression toward entropy or decline (Poza, 2010).

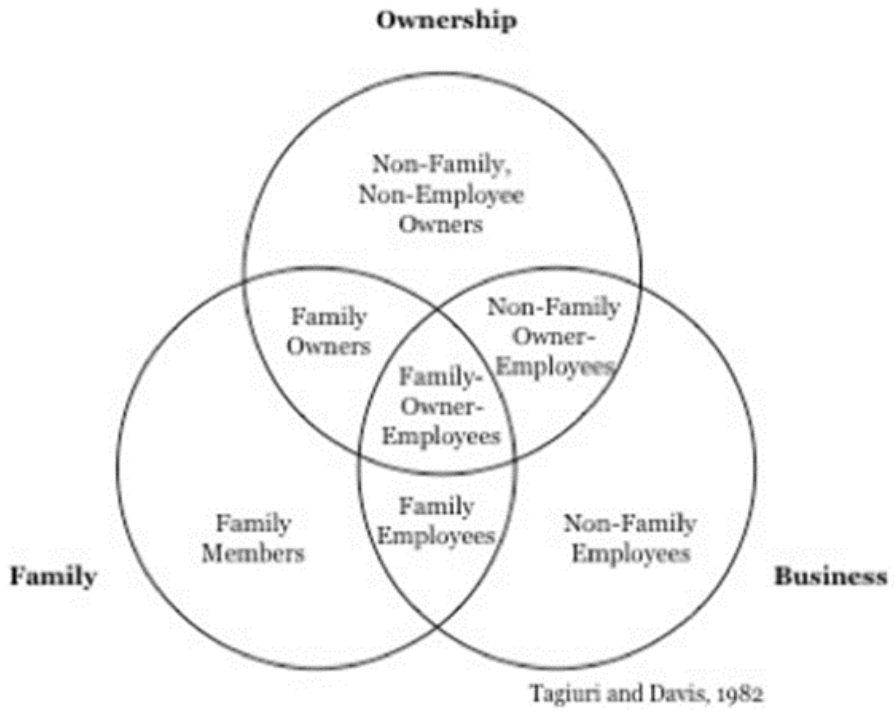


*Figure 1.* The Three-Circle Model (Tagiuri and Davis, 1982)

Moreover, Distelberg and Sorenson (2009) indicate that many issues of FBS dynamics could not be viewed unless we consider those issues from three different levels of analysis: the individual level, the group (subsystem) level, and the FBS level (p. 66). One cannot evaluate the individual without regard to his or her group and FBS level, and vice versa (Distelberg & Sorenson, 2009). For example, we would be able to develop a process model of succession planning by recognizing: attributes of the individual being treated (individual level), the influence of the family, which is a group level analysis, and finally organizational characteristics (FBS level) (Davis & Harveston, 1998). Individual level contributes to the model by recognizing goals, values, characteristics, and demographics of a specific person of interest. In this paper, it is vital to

integrate this level of analysis into our conceptual and empirical model to capture misalignments between the incumbent and the successor, although they both belong to the family subsystem. The group level analysis is based on the three subsystems: family, business and ownership. Finally, the FBS level analysis include all dynamics (alignments and misalignments) in the whole system.

One of the benefits of the level analysis is that it reveals to us that misalignments exist on an individual base, and on a group base. Each subsystem has different goals, values and commitments. In addition, even though one subsystem has shared goals, values and a commitment to the subsystem over time, individuals may vary in the extent to which they share goals, values, and commitment (Distelberg & Sorenson, 2009), also possibly leading to misalignments.

This argument leads to our following two implications of the Three-Circle model. Firstly, a key insight the Three-Circle model provides is that it firstly suggests that a family firm is a complex and dynamic social system that can only be understood and studied as a whole. The level analysis indicates that three subsystems and individuals in each or multiple subsystems are integrated through reciprocal adjustments to function together. Understanding comes only when all three subsystems, with their interactions and interdependencies, are studied as one system (Poza, 2010; Bronfenbrenner, 1979; Taguiri & Davis, 1982/1996; Distelberg & Sorenson, 2009). Therefore, it is impossible to maximize the utility of each subsystem separately or choose each subsystem separately to maximize the utility of a family business. The family subsystem is expected to have an impact on the ownership and management subsystems, and vice versa. Emphasis in this research stream is appropriately focused on the interactions of the three subsystems and on the integration mechanisms used to determine outcomes of the larger system that provide mutual benefits to all system members.

Secondly, from a system perspective, the family firm will be facing different systemic alignments and misalignments as the next generation joins the firm, the earlier generation ages, and the firm experiences a new period of accelerated growth resulting from product or service innovation (Poza, 2010). Each individual in the family business system understandably has different perspective due to distinct position each one holds. According to Figure 1, each member of the family business is placed one of the seven groups: family members, family employees, family owners, family-owner employees, non-family employees, non-family-owner employees, and non-family-non-employee owners. Even in a small family business of four, the father, the mother, the son, and the daughter-in-law, one could easily observe that they have very different goals. Senior parents are family-owner employees, but the daughter-in-law works for other places and only plays a role in the family circle. Senior parents are likely to put the business as their first priority. On the contrary, the daughter-in-law cares about the business much less than the seniors.

Therefore, in most extreme forms, these misalignments lead to significant sub-optimization of each of the family, ownership, and management subsystem, commonly known as family-first, ownership-first, and management-first (Poza, 2010). Family firms can, thus, be categorized into three types: family-first businesses, management-first businesses, and ownership-first businesses.

Because of the complexity implicit in a system that is composed of three subsystems, each potentially with different goals and operating principles, family businesses are vulnerable to the consequences of blurred boundaries among the family, ownership, and management subsystems. Therefore, optimizing goals respectively for each sub-system (or individual) will hurl many issues to the forefront of family business. Therefore, implicit in systems theory is the capacity to jointly optimize interrelated subsystems in such a way that the larger system can be most effective and successful in the pursuit of its goals.

A joint optimization of subsystems is much more reasonable than separate optimization is also rooted in the joint goals of family businesses. Kuratko et al. (2001) suggest a four-factor structure of goal statements, including extrinsic rewards, independence/autonomy, intrinsic rewards, and family security. Extrinsic goals concentrate on wealth accumulation such as increasing personal income. Intrinsic goals, by contrast, include such as gaining public recognition, meeting the challenge and personal growth. This goal set structure implies that family business owners are more motivated by the security and autonomy they provide for their families instead of only financial rewards. In addition, this explains why family businesses tend to retain jobs, ownership rights in the family. On the other hand, under this goal set structure, the risk associated with running the business is far more complex than a simple economic risk versus return equation. Moreover, the value of a business observed by outsiders could be different from the firm's self-assessed value. The owner takes into consideration expectation s about future developments and soft information far beyond the balance sheet (Hines Jr. Protrafke, Riem, & Schinke, 2015). This self-assessment business situation will influence the decisions of ownership transfer and management transfer. To understand family business health, one must understand the values and goals that guide the family, business, and ownership systems, as well as the overall family business system; and it presents and inclusive definition of family and business based on systems membership (Distelberg & Sorenson, 2016).

The next topic is to reveal how the Three-Circle model comes into being. A good approach is to examine the relationship among individuals involved in family, management, and ownership according to the timeline after the business is founded. Through the following texts, we will be more aware of the logic link between the Three-Circle Model and the Life Cycle theory when we get to the next section.

**Scenario 1: Founding generation.** A way to understand the Three-Circle Model from the very beginning is to get started with the relationships among a founder (the first generation) of a business, his/her business, and his/her family, categorized by Figure 2. In this Venn diagram, the intersection of the founder with his business, represented by intersection B, shows the interaction between the founder and his business: emotional, physical, and financial involvement of the founder with business (Churchill & Hatten, 1997). One basic characteristic of the founder is that he owns the firm and operates the firm at the meanwhile. (This is the time that ownership actually overlaps with family and business subsystems as mentioned above.) Therefore, the founder is an owner-manager with complete absorption in the business's development and involvement 80 hours a week. For example, a founder of a start-up business also works during weekends, and spends a lot of time on the business during after-work hours. Intersection B is usually quite large; indeed the owner and the business are essentially one in early stages of start-up (Churchill & Hatten, 1997). As the business grows professionally over time, this overlap may become smaller. The other intersection, represented by area A, is the involvement of the founder with his family (wife, children, siblings, parents, etc.). For example, the founder spends time with his/her family for dinner, weekends, taking care of kinds, vacation and so on. In this graph, we assume that there is no intersected area between family and business. This case particularly occurs during the start-up period of a family business. The lack of overlap of the family and business sectors signifies only that family members are not involve directly in the business to any material extent. However, it does not mean that business does not compete with the family for the owner-manager's time nor that family consideration, such as private school and college tuitions, retirement plans, and the like, do not have a considerable bearing on business goals and strategies (Churchill & Hatten, 1997).

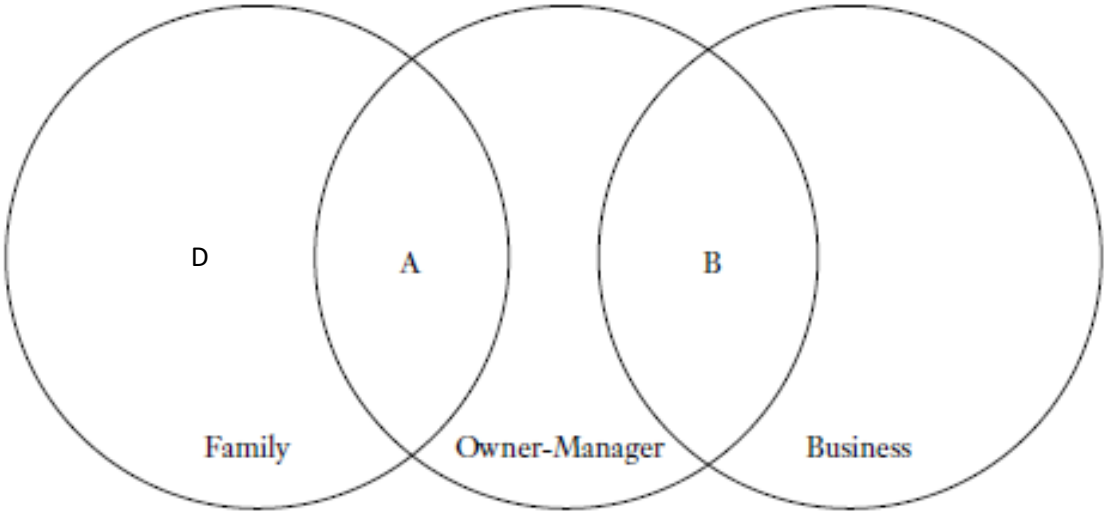


*Figure 2.* Founding Generation (Churchill & Hatten, 1997)

**Scenario 2: 2nd and 3rd generation.** With the development of the family business, the situation gets quite different from the start-up period when the 2nd- or 3rd generations take over the firm. Sectors A and B continue as before, but two new areas of family business interaction come into existence, as Figure 3 depicts. Sector C depicts the family members who are involved in the business without a great deal of interaction with the owner-manager. The reason that sector C rises is natural, for the owner-manager need to think of the issue of business transition ultimately to clearly reveal goals of the business. An example would be a son or daughter headed for or enrolled in a premedical program doing occasional odd jobs or working during school vacations. Sector D, on the other hand, represents the interaction that is at the core of a family businesses—the involvement of family in the activities of the business and the activities of the owner-manager—the operation, control, and direction of the enterprise. Family members involved in a business differ from non-family employees or managers because there are emotional relationships that have been formed outside the business. These family members bring roles and obligations in both the business and the family into the business. Thus, relationships in one area influence relationships

in the other. These role interrelationships are what make family businesses unique. They begin when a family member enters the business and end when the family member either departs or succeeds the owner-manager in control of the enterprise, because of the biological reality of the human life cycle.

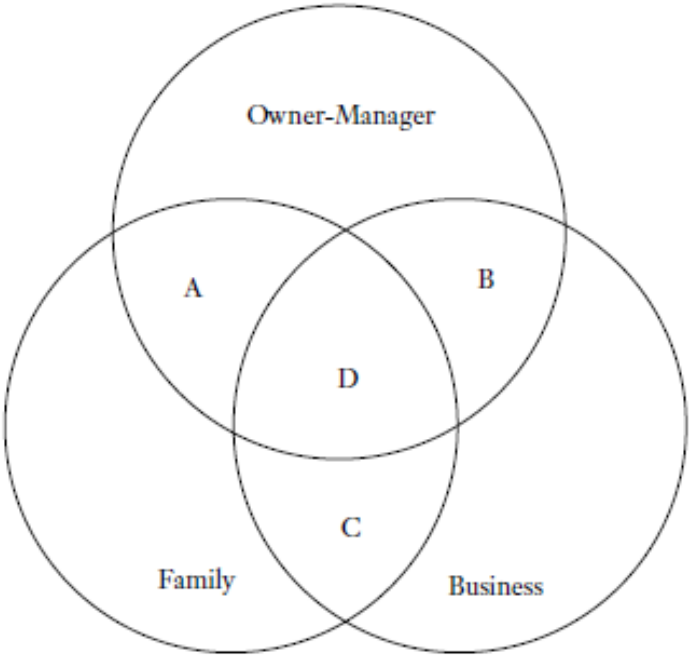


*Figure 3.* 2nd and 3rd generation (Churchill & Hatten, 1997)

This model helps to break down the complex interactions within a family business and makes it easier to understand what is actually happening – and why. It is a useful tool for understanding the cause of interpersonal conflicts, role dilemmas, priorities and boundaries in family firms. For example, when taking a view on the appropriate level of dividend payments, non-owning family members who work in the business (intersection of business circle and family circle) often take a very different view to their relatives who own shares in the business but who are not employed by it (intersection of family circle and ownership circle). The former may favor

cutting dividends in order to boost reinvestment in the business (and improve their career prospects), the latter may want a dividends increased to provide a better return on their investment. The more family members involved, the more complicated it can become, to take the time to pencil in family members in their respective zones. Having a clear picture of where everyone fits in will help in the decision-making process and increase the longevity of the family business.

In addition, the model enables us to place each person within the circles so that to better understand their behavior, which is often linked to the advantages and disadvantages of their position. For example, the person heading the company is usually found in zone 1 (the center). This person generally has a good understanding of the family as well as the strengths and weaknesses of each family member. The person also knows the company inside and out. The person is in a perfect position to help the family fully benefit from the company and vice versa. Nevertheless, also this person is responsible for arbitrating conflicts between the family, the company, and the owners. Exercising the power that goes with this position should not be confused with the roles of head of the family, head of the company, and owner. In addition, the person should not try to solve family conflicts by using the company, or use the family to solve company conflicts. The issues are different for the people in zone 4 (intersection of family and ownership). These family members own shares in the company but do not work in it. There is a strong possibility that they are more interested in the dividends they can receive in the short term than they are in the long-term performance of the company. By becoming aware of the interests of the people in zone 4 (intersection of family and ownership), the owner-manager will be in a better position to make the right decisions.

The Three-Circle Model has been used for analyzing many issues, but it has not often been used for succession process. Figure 4 depicts the movements of the incumbent and the successor

during the succession process. The red arrows represent the senior's change of position, and the green arrows represent the movements of the successor.

Successor is identified among family members, and then he is brought into the business as an employee or a manager. In the end of the succession process, he takes over the ownership from the last generation operator, and becomes a family-owner manager. To the business, this movement is a part of the succession process. To the successor himself, this is his own career development path.

For the incumbent, the story is a little bit complicated. There are two ways for an incumbent to transfer the business. First, he gives up the management control and then transfers the ownership control. The other way is to give up ownership and then management. This makes up the second part of the succession process. To the incumbent, this is his retirement plan. Apart from these two types of paths, there is a third type, which is the incumbent stays in the business in the form of ownership control or management control, or both. This is what we called generational shadow, reflecting the incumbent's unwillingness to transfer and it potentially leads to more conflict. One thing that should bear in mind is that although keeping ownership control and management control are all generational shadow, they cause different level of tension. Extra tension generated is actually moderate as long as the incumbent does not involve in decision-making process. Moreover, if the two-generation operators achieve an agreement over the distribution of ownership and management, tension is expected to be less.

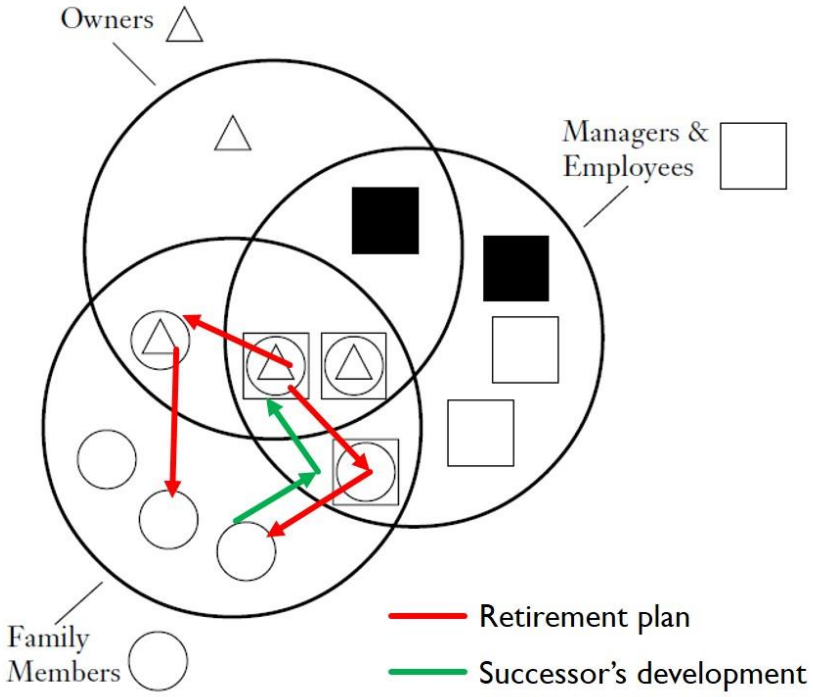


*Figure 4* Succession Plan in the Three-Circle

**Life Cycle Theory**

Churchill and Hatten, in 1997, proposed a life-approach research framework of family business with succession as its anchor, aimed to better understand and to improve the operations during succession process. The framework is built on stages of the family business that derive from the biological reality of parent and child being separated in age and business experience but joined by blood and family experience (Stafford et al., 1999).

The paper starts with a simple but critical step: identifying the intrinsic and distinct characteristics of family businesses from entrepreneurs, which are the involvement of family members in the business and non-market-based transfers of power between family members (Churchill & Hatten, 1997). By recognizing the inevitable and natural path of human life: the biological imperative, the authors examine the degree of influence two generations (a senior and a

junior) have on the direction and operation of the business concurrently. A natural periodicity, therefore, is developed and produces unique stages within the family business, repeating from generation to generation (Churchill & Hatten, 1997). The following text will discuss the theory in detail, and more importantly, will show how life cycle theory is related to the Three-Circle Model regarding succession issues.

There are several assumptions made by Churchill and Hatten in their original paper. First, two individuals of the incumbent and the successor are both involved in the business. The reason to have this assumption is that in the following text we will see what happens to the father's and the son's level of influence respectively. Second, we assume that only two generations operate the business at the same time. However, this assumption does not rule out multi-generational family farms. The way to control this factor multi-generational operation of the business will be illustrated in the next section: integration of the two models. Third, the incumbent and the successor are connected by a family relationship, i.e., biological or adopted parent-child relationship. This criterion excludes the possibility of having a non-family friend or employee as the successor. Third, the incumbent and the successor are different in age. Although this assumption rules out the case of having a family member with the similar age of the incumbent (e.g., a sibling, a cousin) as the successor, it does not devalue the theory because it reinforces our focus on different generations in the transfer process. For demonstrative purpose, hypothetically, a typical entrepreneur who founds a business at age 35 or 36 and who had a child when he was 26. This child enters the business full-time around age 24. Notice that this age hypothesis varies across different family businesses.

Churchill and Hatten (1997) indicate that the most important influence on succession does not involve market values but the relationship that exist between the parties both in the business

and in the family (p. 54). Therefore, succession is in response to natural biological forces of change and not a market-driven transaction. One could obviously agree that there is an inevitable human path from birth to death. The path normally begins with a development and learning period, followed by a period of high activity, and a period of gradual phasing down, although the time span of the path and length of each period differ among individual. Figure 5 depicts age (time) against the frequency of activity to represent this path, showing that the curve is firstly convex and secondly concave, and the curve has a global maximum at some age of an individual (exact age varies case by case). After this age, the person's frequency of activity gradually decreases. Churchill and Hatten (1997) argue that when, to family ties within the business, is added the biological inevitability of an eventual transfer of power; family succession becomes an alternative to selling the business – a transfer based on non-market considerations.

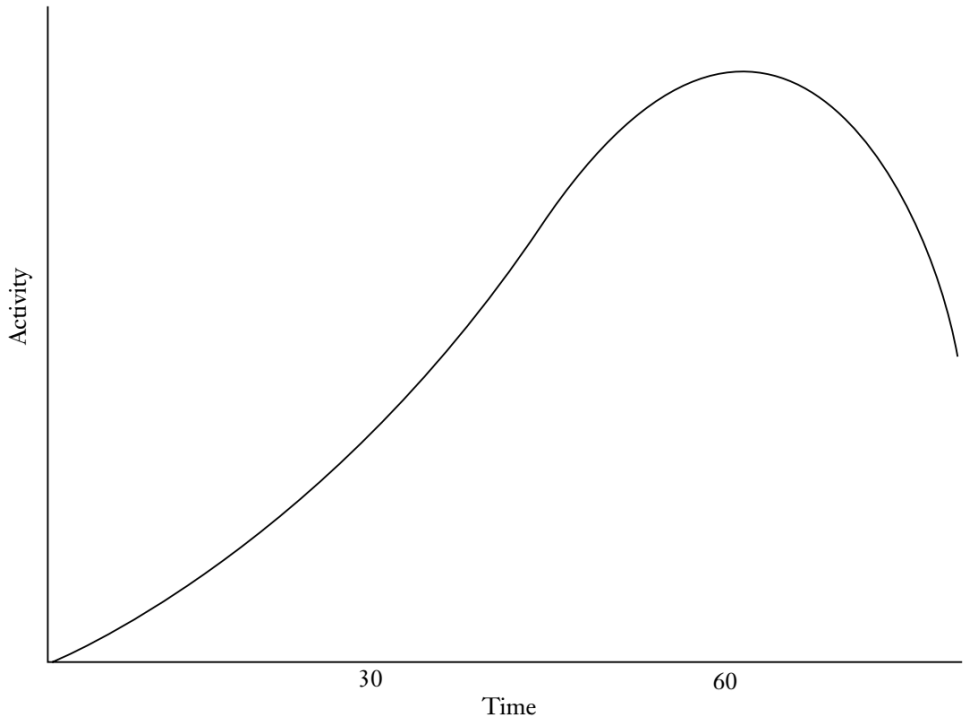


*Figure 5* The Human Life Cycle: Biological Imperative (Churchill & Hatten, 1997)

When two generation's life cycles are examined on the same graph, the phase differences between the senior and the junior provide a way to divide succession process into four stages: owner-managed business, training and development of the new generation, partnership between the generations, and transfer of power, as shown in Figure 6.

From point A to A', as Churchill and Hatten illustrated, is the first stage: owner-managed business. The enterprise is not yet a family business until the entrance of another family member into the business. In this start-up stage, family considerations influence the business but are not a part of it. We could refer to Figure 2 that the business and the family are linked to each other mainly though the founder himself.

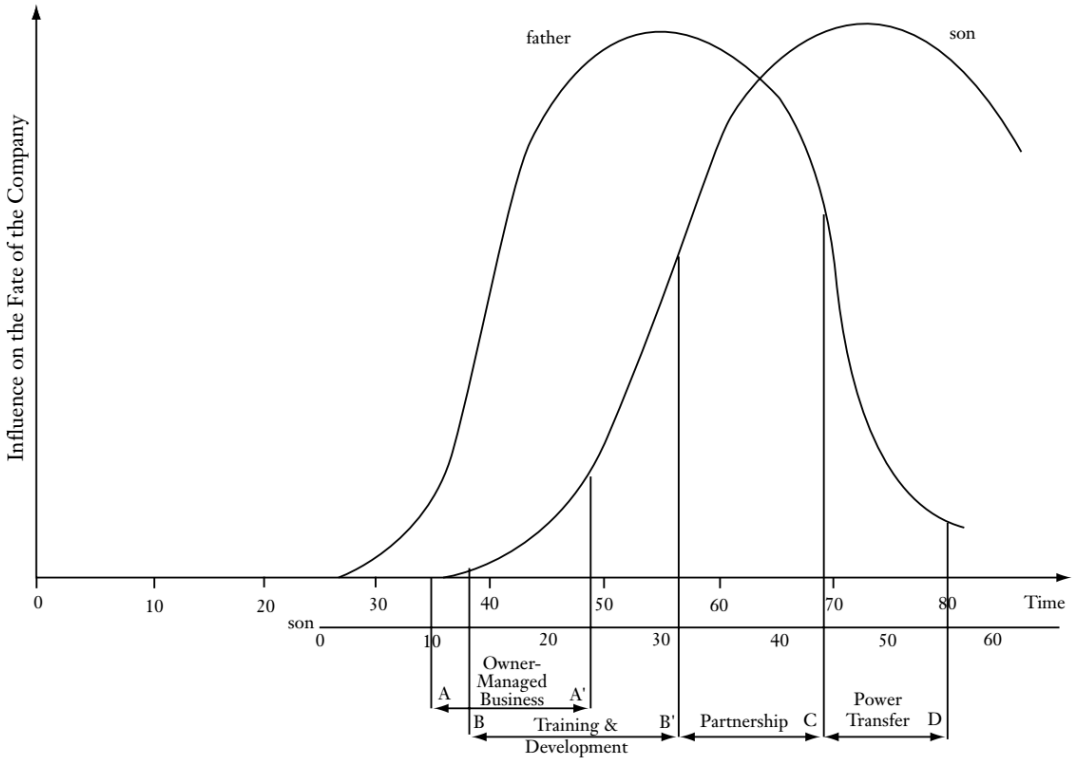


*Figure 6* Life Cycles of Two Generations

Second, from point B to B’ is the phase of the training and development of the new generation. Churchill & Hatten (1997) suggests that the training and development comes much earlier than people usually think. This occurs around the dining-room table in early childhood and through part-time and vacation employment until college (Churchill & Hatten, 1997). Point A' is the start point of an intensified development of the development of technical, interpersonal, and managerial knowledge, judgment, and skills, because the successor is brought into the business as a full-time employment.

Third, the partnership between the generations takes up the period from point B’ to C. After point B’, the offspring has acquired sufficient business and managerial competence to begin to be involved in policy decisions for a part of the enterprise. The successor is able to fully assume the responsibility and starts to share partnership with the senior on operations and goal and policy determination—point C.

The last stage comes the actual transfer of power. Operating responsibilities, policymaking, and goal setting are expected to shift from one generation to the other. It begins in the later stages of partnership and accelerates as the senior begins the retirement process and reduces his active participation in the business. This can occur with or without a formal transfer of ownership (Barnes and Hershon, 1976). With the presence of generational shadow, the level of influence of the senior will not phase out, but remain at a certain level.

The purpose of the Life Cycle Theory is to suggest a research framework for studying family businesses in order to better our understanding and, by this understanding, to improve the operations of family businesses as well.

One of the limitations of this model indicated in Churchill and Hatten's paper is that the model is only a two-dimensional model of a complex phenomenon (Churchill & Hatten, 1997). Not shown is the characteristic that cause individuals to be considered to take a particular position and assume relevant responsibility, which undoubtedly affect the succession process from selection to the actual transfer. Chrisman et al. (1998) suggest that integrity and commitment to business are the two considered most important by the incumbent (p. 19-34). The potential successor is expected to make decisions that are in the best interest of the business and the family. Although desired attributes followed the third and the fourth important are the ability to garner the respect of employees and decision-making skills, what the senior owner-manager mainly looks for is the potential successor's commitment. Therefore, a potential extension of this model is to add the level of commitment the successor makes to the business as the third axis to build a 3-dimensional space.

**Integration of the two models**

If we actually compared two models with each other, we would find that the reasoning of their formations are essentially the same. The three-circle model and the life cycle theory model are actually two sides of a coin. However, even if they are the same thing, it is worth to put them together to study the family business, instead of consider any one of them is redundant. One of the benefits of viewing them at the same time is that this allow us to not only horizontally look into the movement of each family member (especially the successor and the incumbent), but also understand vertically from the change and the transition of power over time. One important link of these two models is: we can see from the three-circle model that there are two aspects to this transfer of control or power: a transfer of ownership or control of property rights to the business, and a transfer of management control of the business's operations and strategic direction. The Life

Cycle Theory model, on the other hand, suggests us that although these two types of transfers are overlapping to each other, an entrepreneurial-small business framework has a comparative advantage in dealing with management transfer (Churchill & Hatten). Given the fact that a failure in management of the business can make transfer of a property right irrelevant because the business is no longer profitable, management transfer can take place without ownership transfer. However, if we only rely on the three-circle model, we would imagine that these two aspects are parallel.

Building on this insight, the integration of two models functions a coordinate system during the succession process. Figure 6 puts two models together to give us a clear and neat picture. For each stage of the succession process, there is a coordinate indicate the positions of the senor and the potential successor regarding the management transfer. For example, during the early stage of the management transfer, we would expect to see that the incumbent is holding a position in the center of the intersection of three circles. The potential successor is involved in the family circle, being identified by the incumbent and waiting to be brought into the business. Similar idea applies to the ownership transfer. During the early stage of the is involved in the family, waiting to be brought into a part of the stakeholders. However, a failure of management transfer could possibly lead to a suspension of the ownership transfer. Therefore, when the ownership transfer takes place, the successor might be already brought into the business as an employee or a manager, which is the training and development phase or the partnership between two generations phase, suggested by the Life Cycle Theory. In this case, we would assume that the incumbent holds a position in the intersection of the ownership and the family circles, or the center of the systems. The successor holds a position in the intersection of the business and the family. The second coordinate responds to the level of the influence of the incumbent or the successor to the business. For example, if the successor has already brought into the business and the business has started the partnership

between generations, two generations are expected to have roughly equal level of influence to the business. Referencing to the Three-Circle Model, we would not be able to identify this second coordinate. However, this identification of the level of influence is essential to the study of succession for the reason that the level of influence of different generations serves as an indicator of the generational shadow. Higher level of the influence of the senior generation and lower level of the influence of the junior generation correspond to a higher level of generational shadow. The third coordinate is the successor's level of commitment to the business. Holding constant the positions of the incumbent and the successor, and the level of influence of the two generations, the level of commitment of the successor is expected to have an impact on how successful the transfer process will be. This level of commitment is a critical coordinate that cannot be ignored, because it naturally roots in the the interest of the potential successor and why he would like to join the business. Researchers studying commitment in family firms discovered that although successors of different family firms exhibit similar behavior regarding the decision of joining the business, the bases or compelling reasons for their behavior differed considerably (Poza, 2010; Sharma et al., 2000; Handler, 1989).

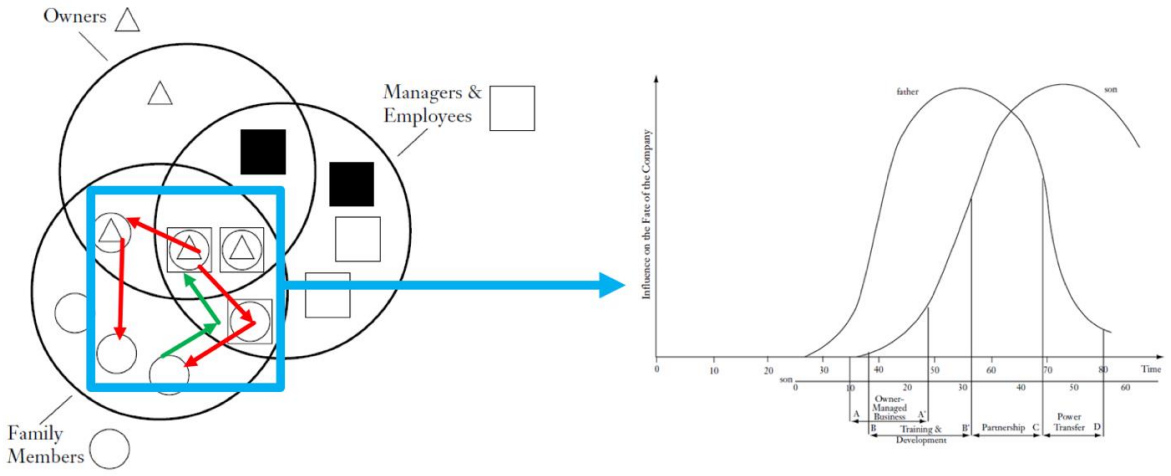


*Figure 7* Integration of the Three-Circle Model and the Life Cycle Theory

Although this integration model only provides a framework to study two generations at the same time, it does not rule out the businesses with three or more than three generations operating the farm. To illustrate this point, take a three-generational business as an example. When the first and second generation are in one of the phases indicated in the Life Cycle Theory, the second and the third generation cannot be in a phase that is ahead of where the first and the second generation are. For instance, if the second and the third generation in their partnership, the second and the third generation can only be in the phase of training and development of the third generation or in the phase of the partnership as well, which is a rare situation. This means that the first generational cannot skip the second generation and directly transfer the business to the third generation if the second generation has already been working in the business. Thus, we would be able to control the third generation and leave him out of the life cycle of the first and the second generations. If the second generation shows no interest on assuming the responsibility of taking care of the business, as our third coordinate suggest, the generation does not make any form of commitment to the business, he will not be identified as the potential successor. Then, we will be back to our normal two-generational model, taking the third generation as the potential successor.

## IV. Empirical Modelling

The data I will be using are from the 2012 Intergenerational Family Business Survey, which was a 30-minute telephone survey of rural small and medium-sized family businesses in Illinois, Indiana, Michigan, and Ohio. All the interviews were conducted through phone from April 2011 to February 2012. The final sample contains 736 family businesses for an overall response rate of 34%.

The fundamental reason that makes family business dynamics being much more complicated than non-family business is their unique goal set, which is not relegated to traditional

performance-oriented goals or financial-oriented goals. Previous research suggests a simultaneity of family objectives and business objectives (such as profit, wealth accumulation) in family farms. As discussed in the previous section, family specifically seeks for independence/autonomy, human interactions and relationships, and intrinsic awards. Therefore, when studying family business succession both the state of business condition, such as profit, and the family objectives, such as harmonious human relationships, should be considered together as variables affecting the probability of the success of the transfer process. This point has been clearly made through our conceptual model in the previous section.

Simultaneous goals in family businesses also indicate a simultaneity between the conflict level and the level of generational shadow (i.e., the unwillingness to transfer the business). Because the incumbent wants to achieve goals for both the business and the family, on the one hand, when a high level of conflict is generated between generations, the incumbent id less likely to pass down the business because of the disharmonic human relationship. On the other hand, when the incumbent has a hard time to let go og the power, as previous literature indicates, the profit is more likely to be lower. Moreover, this unwillingness to transfer the power impedes the successor's personal growth. Therefore, more conflict is generated between generations.

This simultaneity between the degree of generational shadow and the tension level is important to empirical research: this is a strong evidence of endogeneity in statistical models. Traditional statistical models that ignore this simultaneity will be unable to provide reliable estimates of the parameters, because endogeneity issue will not be addressed (Maddala, 1983). Another issue with the data is that they are all categorical variables, which suggests that linear regression model will not work. Therefore, for my case, I propose to use bivariate ordered choice model to take care of both simultaneity and ordered choices (Maddala, 1983):

$$y_{i,1} = \alpha_1 y_{i,2} + X_{i,1}\beta_1 + \epsilon_1$$

$$y_{i,2} = \alpha_2 y_{i,1} + X_{i,2}\beta_2 + \epsilon_2$$

Where $y_{i,1}$ and $y_{i,2}$ denote the degree of generational shadow and the conflict level respectively. The conflict variable is the result of a discrete choice question where business managers or owners were asked whether what the level of conflicted generated by the confusion over authority in the family business is. This type of conflict could be a proxy for the reason that how blurry the authority is regarding the position of the main operator is the main source of the conflict between two generations. The degree of generational shadow is defined by the business manager's response to the following three questions: 1) "To what extent is the senior generation prepared to give up control of the family business by delegating management to heirs or successors?" 2) "Has the senior generation actively engaged in discussing possible transfer plan alternatives with heirs or successors?" 3) "Has the senior generation developed a succession plan and shared the plan with heirs or successors?" The vector of $y_{i,1}$ we used in the end is the sum of the numbers to the response of the each question from each individual manager.

There are several control variables that are relevant to $y_{i,1}$ and $y_{i,2}$. First is the variable of generation. Davis and Harveston (1999) suggests that the conflict across generations comes from two aspects: generation and generational shadow. They indicate that conflict will be higher among family firms headed by second-generation leaders than among those firms headed by the founder. In a small or medium-sized family business, many employees are also family members. The social influence the founder extends to the felt level of conflict present among members of the family business during social and business interaction (Davis & Harveston, 1999). Davis and Harveston also mentioned the founder's social influence in the other paper they wrote, suggesting that the

family business will gradually develop its “upper echelon”, consisting of the core family owners and managers, and the kinship, consisting other family members who do not work for the business. The kinship will be larger when the latter generations head the firm. The measure of generation variable coms from the responses of the question: “Are you a first or founding generation, a second generation, a third generation, a fourth generation or a fifth or more generation owner?”

Family functioning indicators are also vital to the optimization of a family business, as suggested by the Three-Circle Model. Many researchers have investigated into how to precisely measure the family functioning. In this paper, we used a family business functioning assessment: FB-Brag, created by Wiatt and Marshall (2016). The advantage of using FB-Brag as a family assessment is that it allows users to measure family business functioning from a variety of viewpoints, in a way that holistically incorporates family and business functionality into one assessment (Wiatt & Marshall, 2016). Four questions of this assessment are: 1) “How often are you satisfies that you can turn to people at home and work for help when something is troubling you?” 2) “How often are you satisfied that others in your family and business accept and support your ideas or thoughts?” 3) “How often are you satisfied with the way others in your family and business share time together?” 4) “How often are you satisfied with the outcome when a decision has to be made in favor of what is best for the family versus the family business?” The vector we are using here is the total points of the four questions added together.

Two control variables to account for the business circle are profit and the managerial accountability. Many scholars suggest that the business is less likely to be transferred to the next generation in a less profitable business. The data comes from the question: “In 2010, what was the gross income of your business?” Matinez et al. (2007) indicate that managerial accountability as a possible weakness in family businesses when compared top non-family businesses. Therefore,

adding a variable on this measure is a reasonable assessment of the profitability and the condition of the management in a family business.

Finally, as we suggested in the previous section that the successor's commitment to the business as the most important measure of the characteristics of the successor plays a critical role to the successfulness of the transfer process. In addition, we expect that the level of generational shadow will be lower when the successor makes a stronger commitment to the business.

## IV. Results and Discussion

To be developed …

## V. Conclusion

To be developed …

References

Brun de Potet, S., Wrosch, C., & Gagne, M. (2007, December). An Exploration of the Generational Differences in Levels of Control Held among Family Businesses Approaching Succession. *Family Business Review, 20*(4), 337-354.

Cabrera-Suarez, K. (2005). Leadership Transfer and the Successor's Development in the Family Firm. *The Leadership Quarterly, 16,* 71-96.

Chirico, F., & Nordqvist M. (2010, July). Dynamic Capabilities and Trans-generational Value Creaton in Family Firms: The Role of Organizational Culture. *International Small Business Journal, 28*(5), 487-504.

Churchill, N. C., & Hatten, K. J. (1997). Non-Market-Based Transfers of Wealth and Power: A research Framework for Family Business. *Family Business Review, 10*(1), 53-67.

Davis, P. S., & Harveston P. D. (1998). The influence of Family on the Familiy Business Succession Process: a Multi-Generational Perspective. *Entrepreneurship Theory and Practice,* 31-54.

Davis, P. S., & Harveston, P. D. (1999, December). In the Founder's Shadow: Conflict in the Fmialy Firm. *Family Business Review, 12*(4), 311-323.

Hines Jr., J. R., Potrafke, N., Riem, M., & Schinke, C. (2015). Inter Vivos Transfers of Ownership in Family Business.

Maddala, G. S. (1983). *Limited–Dependent and Qualitative Variables in Econometrics.* Cambridge University Press.

Kadis L. B., & McClendon R. (1991, December). A Relationship Perspective on the Couple-Owned Business. *Family Business Review, 4*(4), 413-424.

Secton D. L., & Bowman-Upton, n. b. (1991) Entrepreneurship: Creativity and growth. Macmillan Pub Co.

Sonfield, M. C., & Lussier, R. N. (2004, August). First-, Second-, and Third-Generation Family Firms: A comparison. *Family Business Review, 17*(3), 189-202.

Sonfield, M. C., & Lussier, R. N. (2009). Founder Influence in Family Businesses: Analyzing Combined Data from Sic Diverse Countries. *Journal of Small Business Strategy, 20*(1), 103-118.

Poza, E. J. (2010). *Family Business.* South-Western.