

Comparative Analysis of Competitive Advantage, Profitability, and Growth

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### Abstract

This research study tests data gathered quantitatively and qualitatively to determine the relative competitive advantage traits used in the current marketplace and if market volatility since the Great Recession has changed the correlation between profitability and growth of the firm. The leading research question to test this issue is: How key are the intangible factors of an organizational culture and how do they effect the output of a marketplace sustainable competitive advantage in the forms of profitability and growth when altered? The main variables of this study are profitability, growth of the firm, and the theoretical measurement of Competitive Advantage Index. This study reviews companies listed in the current Fortune 1000 utilizing the income statements for 2011-2015. The results of this study show that the most successful competitive advantage traits consist of management, organizational, and strategy capabilities to reconfigure, sense, absorb, and integrate. The second leading competitive advantage traits are organizational learning and competency building, and global aptness and cultural intelligence. The classic business model is still applicable in today's volatile marketplace, but there are certain industrial sectors where profitability and growth of the firm no longer correlate. This lack of correlation between profitability and growth of the firm may indicate a market tipping point, which will invalidate the classic business model.

*Keywords:* competitive advantage, organizational culture, competitive advantage index, profitability, growth of the firm.

## Table of Contents

List of Figures .....	6
List of Tables .....	8
Comparative Analysis of Competitive Advantage, Profitability, and Growth .....	9
Overview .....	9
Statement of the Problem .....	10
Purpose .....	12
Research Questions and Present Hypotheses .....	13
Significance of the Research .....	14
Limitations and Delimitations of the Study .....	15
Summary .....	15
Literature Review.....	16
Introduction: Topic, Purposes, and Methods of the Review .....	16
Research of Scholarly Literature.....	16
Competitive advantage definition and description. ....	16
Organizational culture definition and description.....	23
Utilizing organizational culture to alter competitive advantage. ....	26
Competitive advantage index.....	28
Application for industry.....	29
Proposal for future research.....	33
Summary of Literature Review .....	34
Study Methodology.....	34
Introduction .....	34
Population and Sample.....	35
Variables.....	35
Main Research Questions.....	36
Corollary Hypotheses .....	36
Methods and Data Analysis .....	37
Limitations and Assumptions.....	37
Summary .....	38
Results.....	38
Overview .....	38

Research Purpose, Research Questions and Related Hypotheses .....	38
Statistical techniques used. ....	39
Description of the profile of the sample and selection criteria. ....	40
Industrial Sector Specific Results .....	41
Aerospace and defense.....	41
Apparel.....	45
Business services. ....	48
Chemicals.....	51
Energy.....	54
Engineering and construction. ....	57
Financials.....	60
Food and drug stores.....	60
Food, beverages and tobacco.....	60
Health care.....	63
Hotels, restaurants and leisure.....	66
Household products.....	69
Industrials.....	71
Materials.....	75
Media.....	78
Motor vehicles and parts.....	81
Retailing.....	83
Technology.....	87
Telecommunications.....	90
Transportation.....	93
Wholesalers.....	96
Examination of Research Questions and Testing of Hypotheses.....	99
Main research questions.....	99
Corollary hypotheses.....	103
Summary of Research Findings .....	105
Conclusions and Recommendations .....	105
Recapitulation of Research Findings .....	106
Recapitulation of Literature Review .....	106

Statement of the problem.....	107
Purpose.....	107
Research questions and present hypotheses.....	108
Researcher Conclusions and Recommendations.....	109
Implications for practice .....	108
References.....	112

## List of Figures

Figure 1. The dimensions of competitive advantage .....	17
Figure 2. Theoretical constructs and variables .....	19
Figure 3. The dimensions of cultural identity.....	24
Figure 4. The gap between external market environment and internal organization environment .....	28
Figure 5. Institutional renewal and adaptation conceptual framework.....	30
Figure 6. Profitability and growth of the firm for the Aerospace and Defense Sector. ....	43
Figure 7. Competitive Advantage Index for the Aerospace and Defense Sector. ....	44
Figure 8. Profitability and growth of the firm for the Apparel Sector. ....	46
Figure 9. Competitive Advantage Index for the Apparel Sector. ....	47
Figure 10. Profitability and growth of the firm for the Business Services Sector. ....	49
Figure 11. Competitive Advantage Index for the Business Services Sector. ....	50
Figure 12. Profitability and growth of the firm for the Chemicals Sector.....	52
Figure 13. Competitive Advantage Index for the Chemicals Sector. ....	53
Figure 14. Profitability and growth of the firm for the Energy Sector. ....	55
Figure 15. Competitive Advantage Index for the Energy Sector.....	56
Figure 16. Profitability and growth of the firm for the Engineering and Construction Sector.....	58
Figure 17. Competitive Advantage Index for the Engineering and Construction Sector. ....	59
Figure 18. Profitability and growth of the firm for the Food, Beverages and Tobacco Sector ....	61
Figure 19. Competitive Advantage Index for the Food, Beverages and Tobacco Sector.....	62
Figure 20. Profitability and growth of the firm for the Health Care Sector.....	64
Figure 21. Competitive Advantage Index for the Health Care Sector.....	65

Figure 22. Profitability and growth of the firm for the Hotels, Restaurants and Leisure Sector ..	67
Figure 23. Competitive Advantage Index for the Hotels, Restaurants and Leisure Sector. ....	68
Figure 24. Profitability and growth of the firm for the Household Products Sector. ....	70
Figure 25. Competitive Advantage Index for the Household Products Sector.....	71
Figure 26. Profitability and growth of the firm for the Industrials Sector.....	73
Figure 27. Competitive Advantage Index for the Industrials Sector. ....	74
Figure 28. Profitability and growth of the firm for the Materials Sector.....	76
Figure 29. Competitive Advantage Index for the Materials Sector. ....	77
Figure 30. Profitability and growth of the firm for the Media Sector.....	79
Figure 31. Competitive Advantage Index for the Media Sector. ....	80
Figure 32. Profitability and growth of the firm for the Motor Vehicles and Parts Sector. ....	82
Figure 33. Competitive Advantage Index for the Motor Vehicles and Parts Sector. ....	83
Figure 34. Profitability and growth of the firm for the Retailing Sector. ....	85
Figure 35. Competitive Advantage Index for the Retailing Sector. ....	86
Figure 36. Profitability and growth of the firm for the Technology Sector.....	88
Figure 37. Competitive Advantage Index for the Technology Sector. ....	89
Figure 38. Profitability and growth of the firm for the Telecommunications Sector. ....	91
Figure 39. Competitive Advantage Index for the Telecommunications Sector.....	92
Figure 40. Profitability and growth of the firm for the Transportation Sector. ....	94
Figure 41. Competitive Advantage Index for the Transportation Sector.....	95
Figure 42. Profitability and growth of the firm for the Wholesalers Sector. ....	97
Figure 43. Competitive Advantage Index for the Wholesalers Sector. ....	98

## List of Tables

Table 1. Initial Competitive Advantage Theory Development.....	18
Table 2. Implications and Synthesis of Key Competitive Strategy Theories .....	20
Table 3. The Characteristics of Advantage Generating Resources.....	22
Table 4. Individual and Organization Dimensions that Shape Organizational Culture.....	26
Table 5. Source Information Sample Summary.....	41
Table 6. Identified Competitive Advantage Traits by Industrial Sector .....	101
Table 7. ANOVA Results of Correlation between Profitability and Competitive Advantage by Industrial Sector .....	102
Table 8. Total Dataset ANOVA Results.....	103

## Comparative Analysis of Competitive Advantage, Profitability, and Growth

### Overview

Since the Great Recession of 2008, the level of disruption in the marketplace is increasing. In the classic model of business, profitability and growth of the firm are correlated. The validity of the classic model of business relies on a stable market environment. The ever-increasing volatility of the market since 1980 may be ending the applicability of the classic model of business. A new business model may be required for strategic management in the near future.

This study on competitive advantage and its traits utilizes the metric of Competitive Advantage Index as defined by Alfadda (2010). This study argues that the Competitive Advantage Index is a valid measurement by which potential future profitability and growth of the firm can be predicted. The researcher applied the Competitive Advantage Index to measure new revenue gained per organization compared to the whole of the relative industrial sector.

Competitive advantage and the intangible traits which make a firm more successful than another with similar resources, are not items which can be identified on a balance sheet. With the classic model of business, as a business grew more profitable, the size of the company also grew. Because of market changes such as the increasingly global marketplace and the introduction of technologies which eliminate the need for additional employees, the business of the future may not be required to grow in size in order to increase profitability. In the future, the features which will be the determining factors of success will be in the intangible traits of an organization's competitive advantage.

The level of relevance for the classic model of business will be directly related to the industrial sector type being compared. Competitive advantage traits will vary across the different industrial sectors as industrial sectors have diverse market requirements from their

customers. However, when analyzing the market as a whole, without regard for industrial sector, there will be competitive advantage traits that stand out. These traits will indicate strong market demand trends. Early adopters of a trending competitive advantage trait will be hard to identify without longitudinal comparative data.

### **Statement of the Problem**

Competitive advantage is an important factor in determining sustainable success of the firm. What is considered a competitive advantage and how it is defined is up for debate (Klein, 2002). Competitive advantage is not specific in nature to firms or products. The product attributes desired for the successful entry of a particular market are identified through forecasting. The initial forecasted market outlook is done through strategic management. While strategic management market outlooks may be able to correctly forecast the competitive needs of a future market, the organization's culture may be too slow or unable to match market demand. Some steps, such as adapting team size or structure, may help an organization to react quickly to shifting market demand.

It is common practice for members of an organization to be laid out in functional groups or teams to accomplish a shared task. Some teams are more 'functional' than others at accommodating a task. Different features of the functional teams can be tailored to make them more successful. Where an organization's competitive advantage is defined as its ability to be successful at delivering on certain tasks, can the team size be altered to be tailor fit to the type of task at hand (Klein, 2002)? More specifically, how tangible is the link between team size and the type of competitive advantage that can be optimally delivered?

Lockheed Martin's Skunk Works is an example of an organization utilizing a specific, tailored team to meet a customer demand, which Lockheed could not meet with its traditional

company culture. The Skunk Works became such a successful model that it is now a ubiquitous term relating to an intrapreneurship shelter to protect innovators from the operations of daily business (Rich & Janos, 1994). The Skunk Works began during WWII in 1952 under Chief Engineer Kelly Johnson. Johnson's motto was "Be quick, be quiet, be on time." This business model was drastically different from the standard model for government contractors, which were slow moving and bureaucracy laden. The Skunk Works' ability to meet customer demand for speed to solution, innovative abilities, and maintaining confidentiality requirements allowed the Skunk Works to be an industry leader in the most volatile segment of their industrial market sector.

Although customers may demand change, one size does not fit all—different market segments require unique organizational, cultural solutions. The focus of an organization needs to be on organizational culture, because only through organizational culture does a firm develop its competitive advantages to meet customer need. Furthermore, an organization needs to develop niche market requirements through strategic planning. Certain features of an organization's culture will favor some competitive advantages over others. The true driver of competitive advantage is matching cultural traits to the market demand.

Market segments have changed significantly since the Skunk Works start in 1952; however, the need for organizations to meet customer demand has not. Currently, there is a push for organizations to fit into particular operational models, to shift organizational cultures, and to adapt quality management plans. This push for organizations to be adaptable is caused by increased market volatility. This increased market volatility results from the adoption of new technologies and the speed at which these new innovated solutions are brought to market.

## **Purpose**

The purpose of this study is to examine the competitive advantage traits of an organization and how these traits relate to achieving profitability and growth of the firm. This knowledge may be utilized as a roadmap by strategic managers pushing to either achieve or maintain a particular competitive advantage. Business internal workings and how internal operations are performed determine the final output of any organization. The analysis of the relationships between culture and market advantage performance needs to be further analyzed beyond resource-based competitive advantage theorist Porter's organizational outline and deeper than Denison's single trait analysis.

Market volatility has more than doubled since 1980 (Reeves & Deimler, 2011) and profitability does not directly correlate to market share anymore. These two realities of modern business make the classic model of developing a business strategy—building an implicitly static competitive advantage in the market through either a niche product placement or a more competitive product delivery—potentially obsolete. This classic approach was successful in the past, but companies must learn and be proactive at innovating.

A goal of this study is to show a relationship between organizations which adapt their competitive advantage traits to match consumer market demand and success of those organizations. If a correlation is found between cultural traits and market success, it will show that the classic model of business is no longer applicable in the increasing volatility of the marketplace. The knowledge will help guide strategic managers to explore alternative models for guiding business decisions.

## Research Questions and Present Hypotheses

In this study, the researcher sought to explore questions concerning organizational effectiveness. An organization utilizing non-excluding attributes, such as tailoring internal organization characteristics to match market demand most appropriately, is considered non-market competitive (Klein, 2002). Non-market competition at the firm level is referred to as organizational effectiveness.

The main research question (H1) and the three related research questions, numbered (H2) through (H4), are as follows:

H1: How important are the intangible factors of an organizational culture and how do they affect the output of a marketplace sustainable competitive advantage in the forms of profitability and growth when altered?

H2: How is competitive advantage distributed within a defined industrial sector?

H3: How is competitive advantage distribution similar or different between different industrial sectors?

H4: Is there a correlation between organization growth and profitability, and if so, does it still validate the conventional business model?

From the research questions above, there are three related corollary hypotheses, numbered (H5) through (H7).

H5: Certain competitive advantage traits are more valuable than others and there are trends per industrial sector.

H6: There are trends between industrial sectors displaying early adopters to competitive advantage traits.

H7: There is no longer a predictable correlation between profitability and growth of the firm.

### **Significance of the Research**

Researching the relationship between competitive advantage, profitability, and growth of a firm is important to identify and to understand the correlation of these three factors to organization success. Businesses are always in need of a competitive advantage, and a need to maintain their market sustainability, or they are encouraging increasing risk to their future profitability. When a market need is identified, different competitive advantages will allow a business to be competitive in that market space. The business should tailor itself to the demands of the market so that it is able to satisfy its stakeholders. Traditionally, in the author's opinion, businesses that have not adapted to changing markets have lost or ended their ability to be competitive.

Competitive advantages are developed by an organization in order to maintain, or improve, their place in the market. Tangible or intangible advantages are what differentiate the vendors for a particular product audience. Historically, staffing volumes have been analyzed as a whole organization or for very specific projects. One of the first significant instance of a company creating a separate team for a specific product that contained its own ideals and norms is Lockheed's Skunk Works department (Rich & Janos, 1994).

Current marketplace volatility requires organizations to achieve organizational changes to meet market demands. Organizations do have the ability to change their cultures organically over time based on adaptations to the external environment. However, if an external environment changes faster than the organization, the organization may be at risk of failure (Dengler, 2006). Welch states that there is a looming gap between the need for increasing speed

of solution and the capacity for organizational cultures to adjust to changing market conditions (as cited in Dengler, 2006).

This research is relevant to business and industries where a particular market case needs an identifiable deliverable and the organization is designing itself to fit that need. A slow speed of external market change is no longer a reality, and as a result, developing a rapid pace of culture change is a market adaptation necessity. If this hypothesis is true, organizational management would need to carry out strategic forecasting goals in the form of culture change to create a firm that will be a “best fit” for their market.

### **Limitations and Delimitations of the Study**

No corporate culture survey was done for this study. The scope of this project was to base findings and inferences from already existing literature sources. The available data were employed to produce unique findings which may not be readily identifiable in existing resources. Organizations used in this project were large in nature because of the availability of information about them. A potential weakness of making inferences about industry trends from large organizations is that small, medium, or even startups, can alter a forming trend. Statistically, only inferences can be made from the available data on organizational cultures, because there are little or no published comparisons or rankings similar to financial performance rankings. Ideally, this would be a study of multiple organizations participating in a similar industry over an extended period of time.

### **Summary**

In the introductory section, the researcher discussed the topic of achieving competitive advantage through managing organizational culture of the firm and how the efforts of strategic management are altering to better match the requirements of the modern day increasingly

volatile economy. The research questions and hypotheses were stated, as well as the developed theories from the literature review. Finally, limitations and delimitations of the study were summarized.

In the literature review, the main findings from published works and online sources are highlighted. Next, the research design and methodology are explained, followed by the summary of the research findings. Finally, the thesis ends with the study's main conclusions and recommendations.

## **Literature Review**

### **Introduction: Topic, Purposes, and Methods of the Review**

This chapter features a discussion and review of some of the relevant scholarly literature related to the study. Baseline concepts and variables are outlined. Inferences for the study are drawn throughout the literature review. The topics of competitive advantage, organizational culture, and their application to industry are the core concepts. This literature review explores the intangible resources which determine business competitive success in a relatively balanced playing field.

### **Research of Scholarly Literature**

**Competitive advantage definition and description.** Competitive advantages are the tangible or intangible traits which allow a business to have more success than another. Firms are able to utilize or create competitive advantage in whatever way the organization feels it can best meet or exceed the expectations of the market. Some firms create competitive advantages in unique resources that are not anticipated by the market (Soh, 2005). There are three main dimensions to competitive advantage: the amount of exploitation for market opportunities compared to that of competitors, the level of competitive threat neutralization, and the level of

reduction of cost and/or increased revenue compared to the competition (Sigalas, Economou, & Georgopoulos, 2013). The dimensions of competitive advantage are shown in Figure 1.

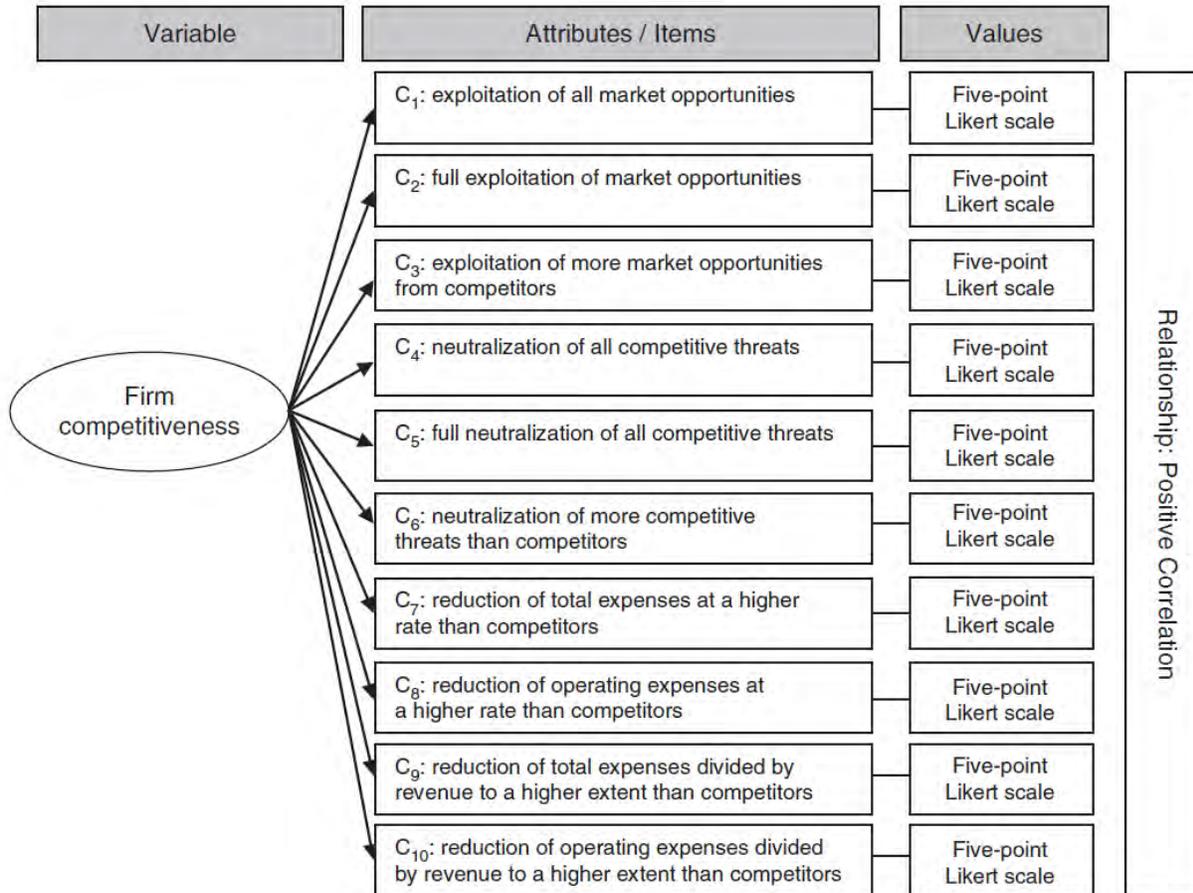


Figure 1. The dimensions of competitive advantage. Adapted from “Developing a Measure of Competitive Advantage,” by C. Sigalas, V.P. Economou, and N.B. Georgopoulos, 2013, *Journal of Strategy and Management*, 6(4), p. 327.

<http://dx.doi.org/10.1108/JSMA-03-2013-0015>

The theory of competitive advantage has been a progressive development. The main development of the competitive advantage theory began in 1980 with the resource-based theorist Porter, who stated that competitive advantage is based on product market position (Alfadda,

2010). From this point, the theory grew to encapsulate the variables of the amount of revenue generation and the amount of resource attributes. The initial theories of competitive advantage are shown in Table 1. These initial theories of competitive advantage were based on the classic model of business which better applied to the economy of the time.

Table 1

*Initial Competitive Advantage Theory Development*

1980	Porter	Market-Based Theorist	Competitive advantage based on product market position.
1984	Wernerfelt	Resource-Based Theorist	Firm develops resources to implement market strategy.
1984	Rumelt	Resource-Based Theorist	Why firms exist focuses efforts on business strengths to generate revenue.
1986	Barney	Resource-Based Theorist	Persistent firm performance based on resource attributes.
1989	Dierickx and Cool		Developed the attribute of using a firm's resources as a unit of analysis.

*Note.* Adapted from "Institutional Renewal and Adaptation (IRA): Creating and Managing Sustainable Competitive Advantage (SCA)," by B. Alfadda, 2010, pp. 22. Retrieved from <http://www.proquest.com/>; "A Correlational Study of the Relationship Between a Firm's Intangible Resources and its Sustainable Competitive Advantage," by M. Soh, 2005, pp. 21-22. Retrieved from <http://proquest.com/>

According to Porter (as cited in Alfadda, 2010), cost, differentiation, and focus are the three fundamental types of competitive advantage. Competitive advantage can be institutionally embedded in an organization as cognitive capital, normative capital, and regulative capital. Core competencies refer to an organization's collective knowledge. Core competencies can be built upon or enhanced.

Competitive advantages for firms are based on bundles of related resources (Soh, 2005). These bundles of related resources, competitive advantages, are specific to the firm. There is generally overlap from one or two main competitive advantage traits into other secondary traits. Competitive advantage traits are intangible resources. The variables relating to intangible resources of competitive advantage will depend on the type of industry, number of employees

the business has, and the market capitalization of the business. Figure 2 is a visual representation of a firm’s intangible resources and its sustainable competitive advantage.

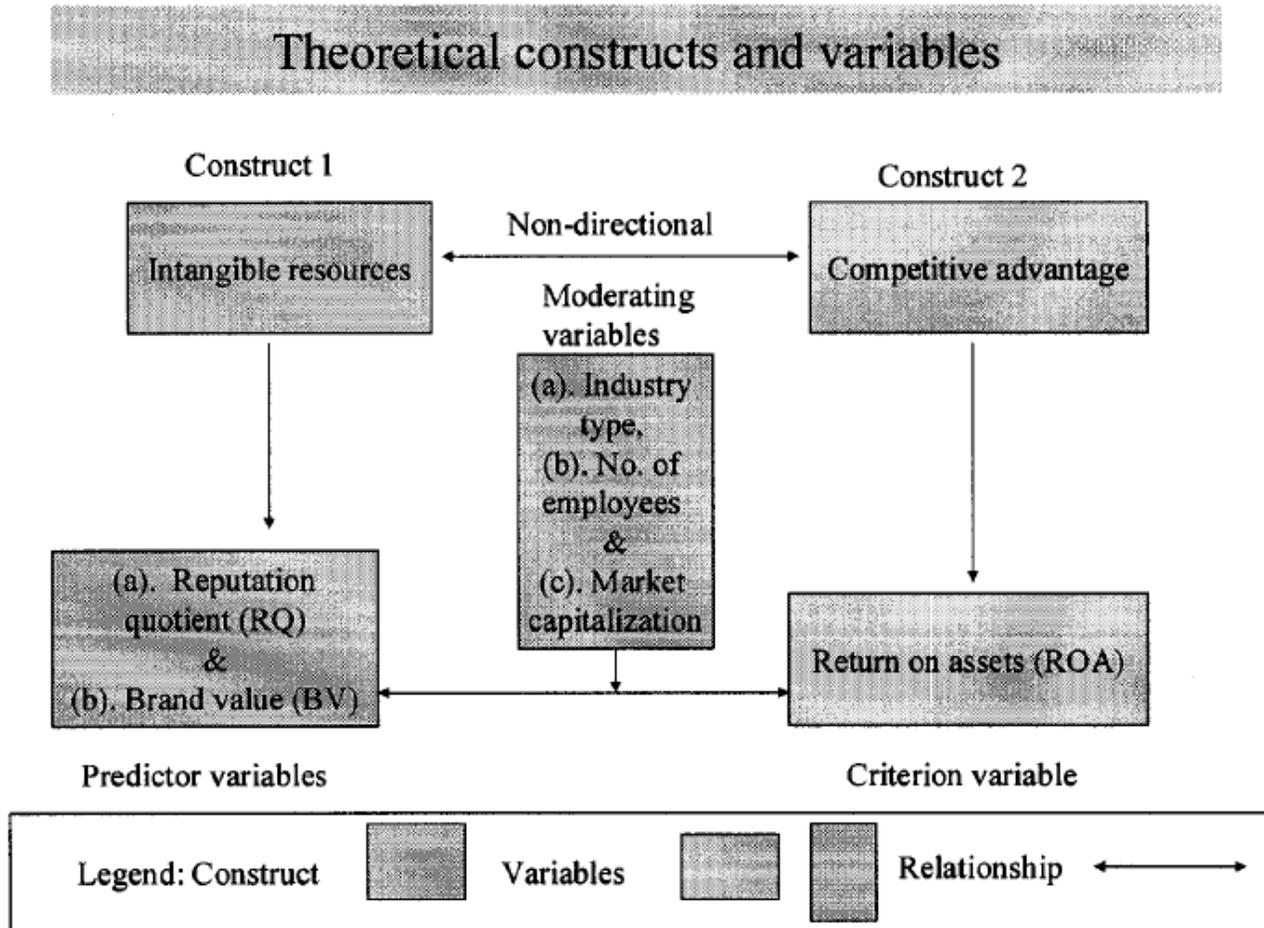


Figure 2. Theoretical constructs and variables. This figure explains the relationship between a firm’s intangible resources and its ability to maintain a competitive advantage. Adapted from “A Correlational Study of the Relationship Between a Firm's Intangible Resources and its Sustainable Competitive Advantage,” by M. Soh, 2005, p. 21. Retrieved from <http://proquest.com/>

Resources for a business can be almost anything (Soh, 2005). While resources can be almost anything, they must also be rare or not be able to be obtained by a large number of firms. Barney (as cited in Soh, 2005) states resources that are valuable but not scarce can only be

sources of competitive parity. Barriers to resource mobility are what make resources rare and inhibit imitation (Ambrosini as cited in Soh, 2005). Table 2 shows seven theories of competitive advantage strategy.

Table 2

*Implications and Synthesis of Key Competitive Strategy Theories*

Theory	Competitive advantage / high performance enablers
Resource-based view	<b>Innovation</b> in resources and capabilities (valuable, rare, and inimitable resources)
Market-based view	<b>Innovation</b> in market strategies (cost, differentiation, segmentation)
Institutional theory	<b>Social legitimacy</b> and institutional context of internal culture as well as broader external influences ( <b>flexibility of cultural values</b> )
Identity-based view	Manage cognitive process ( <b>organizational learning</b> )
Competency-based view	Build organizational competency ( <b>organizational competency building</b> )
The Dynamic Capabilities Framework	Managerial and organizational processes, asset position, and strategic alternatives ( <b>management, organizational, and strategy development to reconfigure, sense, absorb, and integrate</b> )
The eclectic (OLI) paradigm	A firm's ability to conduct foreign activities and foreign direct investments ( <b>global aptness &amp; cultural intelligence</b> )

*Note.* Adapted from "Institutional Renewal and Adaptation (IRA): Creating and Managing Sustainable Competitive Advantage (SCA)," by B. Alfadda, 2010, p.36. Retrieved from <http://www.proquest.com/>

The chosen competitive advantage traits to be followed for this study are shown in Table 2 and are as follows:

- Innovation in resources, capabilities, and markets.
- Social legitimacy.
- Flexibility of cultural values.
- Organizational learning and competency building.
- Management, organizational, and strategy capabilities to reconfigure, sense, absorb, and integrate.
- Global aptness and cultural intelligence.

According to the Resource-Based View (RBV), the strategic assets of the organization determine the competitive advantage and organization profitability (Wernerfelt as cited in Michalisin, Smith, & Kline, 1997). In order for a resource to become a strategic asset to the organization, it must be simultaneously valuable, rare, imperfectly imitable, and non-substitutable (Barney as cited in Michalisin, Smith, & Kline, 1997). An organization correctly exercising strategic assets should earn superior profits. An underlying factor in the RBV is the limited competition before a resource can be an advantage and control of competition after a resource is an advantage (Peteraf as cited in Michalisin, Smith & Kline, 1997). Sustainability is a function of a resource's inimitability. Inimitability is a function of rareness and lack of strategic substitutes. Distinctions are drawn between assets and capabilities. Just because an organization has an asset does not mean that the capability exists to utilize the asset. Table 3 shows characteristics of resources, which three theorists believed were necessary for firms to develop and maintain competitive advantages.

Table 3

*The Characteristics of Advantage Generating Resources*

Barney	1995
<ul style="list-style-type: none"> <li>• Value</li> <li>• Rareness</li> <li>• Inimitability</li> <li>• Non-substitutability</li> </ul>	
Grant	1991
<ul style="list-style-type: none"> <li>• Inimitability</li> <li>• Durability</li> <li>• Appropriability</li> <li>• Substitutability</li> <li>• Competitive Superiority</li> </ul>	
Amit and Schoemaker	1993
<ul style="list-style-type: none"> <li>• Complementary</li> <li>• Scarcity</li> <li>• Low Tradability</li> <li>• Inimitability</li> <li>• Limited Substitutability</li> <li>• Appropriability</li> <li>• Durability</li> <li>• Overlap with Strategic Industry Factors</li> </ul>	

*Note.* Adapted from “A Correlational Study of the Relationship Between a Firm's Intangible Resources and its Sustainable Competitive Advantage,” by M. Soh, 2005, pp. 23, 33. Retrieved from <http://proquest.com/>; “In Search of Strategic Assets,” by M. D. Michalisin, R. D. Smith, and D. M. Kline, 1997, *International Journal of Organizational Analysis*, 5(4), p. 360-362. <http://dx.doi.org/10.1108/eb028874>

The contribution of competitive advantage to a firm's revenue must be calculated.

According to Klein (2002), “Glaxo's competitive advantage can be measured by looking at the ratio of added value to the firm's gross or net output” (p. 320). The calculation for finding revenue input for strategically pursuing competitive advantage can then be used to mitigate risk when changing strategic direction and allocating funds. Equation (1) shows Klein's method of calculation:

$$\text{Competitive Advantage} = \frac{\text{Amount of Added Value}}{\text{Firm's Gross or Net Output}} \quad (1)$$

**Organizational culture definition and description.** Organizational culture is a qualitative area of business. The intangible traits of organizational culture are the factors which are key in determining the competitiveness of a firm in the leveled playing field of a global economy. Collins (as cited in Soh, 2005) states that the best employees tend to work harder to hire employees who fit the culture of the company, and Bennett and Bell (as cited in Soh, 2005) argue for managers to hire for attitude and train for skills.

While internal organizational culture may be nearly all empirical, the external reputations of businesses can be ranked by using the reputation quotient of a brand or business (Soh, 2005). Reputation quotient is how people feel about a certain company (Soh, 2005). Factors relating to company rankings include emotional appeal, products and services, financial performance, vision and leadership, workplace environment, and social responsibility.

An organizational culture is a function of strategic emphasis and environmental needs (Denison, 1990; Daft as cited in Michalisin, Smith & Kline, 1997). It has been found that strong organizational culture in itself does not ensure the success of an organization. Organizational culture may be leveraged to match market demand but unless the organization fulfills its product niche, it will not be profitable.

According to Trefry (2006), “Large complex organizations rarely exhibit homogeneous behavioral norms and belief systems” (p. 566). There is a distinct difference between the ‘Real Culture (or culture in use)’ versus ‘Constructed Culture (or espoused)’. Moreover, there are substantial differences between functional and divisional subcultures. Members of an organization learn from both explicit and implicit rules regarding types of behaviors to be

avoided and behaviors that will be rewarded. Figure 3 shows individual traits of organizational culture and how they develop into cultural values.

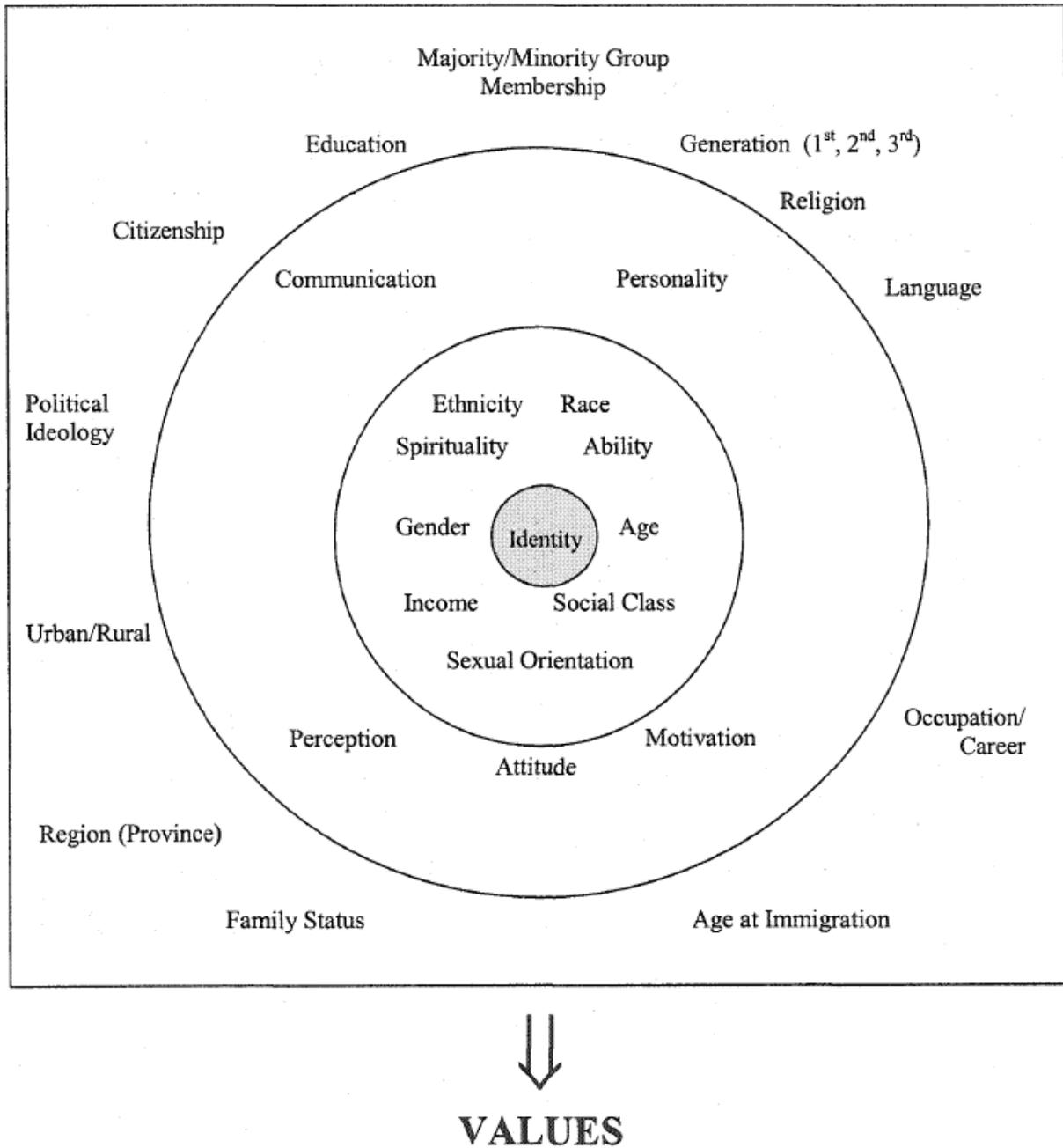


Figure 3. The dimensions of cultural identity. Adapted from *A Healthy Workplace: The Role of Organizational Culture*, by E. M. Lagerstrom, 2005, p. 13. Retrieved from <http://www.proquest.com/>

The top five employee perceptions about a healthy work environment include trust in the employer for fair treatment, respect from the employer, safe working conditions, good communication, and work-life balance (Lagerstrom, 2005). What brings the different factors of workplace culture together is the level of inclusiveness (Trefry, 2006). Organizations have the ability to learn internally from utilizing the multiple frames of reference. Similar to cultural diversity, organizational diversity must be enabled and empowered in order to be effective. The dimensions of the workplace organizational culture and how they relate from the individual level up to the organizational level are shown in Table 4.

Table 4

*Individual and Organizational Dimensions that Shape Organizational Culture*

<b>ORGANIZATIONAL CULTURE</b>		
<b>Individual</b>	←————→	<b>Organizational</b>
<b>Individual Needs/ Values</b>	<b>Work Climate</b>	<b>Nature of the Job</b>
Include individual’s need for: <ul style="list-style-type: none"> <li>• Respect and appreciation</li> <li>• fairness,</li> <li>• belonging,</li> <li>• flexibility,</li> <li>• sense of control,</li> <li>• work-life balance,</li> <li>• meaningful work; job satisfaction (intrinsic reward),</li> <li>• pay and benefits (extrinsic reward),</li> <li>• career development</li> <li>• use of skills</li> </ul>	Includes: <ul style="list-style-type: none"> <li>• culture of forgiveness,</li> <li>• trust</li> <li>• communication,</li> <li>• workload,</li> <li>• work-related stress,</li> <li>• recognition and reward practices,</li> <li>• interpersonal relationships,</li> <li>• supportive environment; social support,</li> <li>• communication, openness,</li> <li>• harassment &amp; discrimination</li> <li>• employment relationships</li> <li>• turnover,</li> <li>• workplace morale</li> </ul>	Includes: <ul style="list-style-type: none"> <li>• design of work stations,</li> <li>• the physical conditions of work,</li> <li>• safety,</li> <li>• job security,</li> <li>• shift or time schedules</li> <li>• customer orientation,</li> <li>• use of information technology,</li> <li>• union membership</li> </ul>

*Note.* Adapted from *A Healthy Workplace: The Role of Organizational Culture*, by E. M. Lagerstrom, 2005, p.25. Retrieved from <http://proquest.com>

**Utilizing organizational culture to alter competitive advantage.** An effective team utilizing Customer Relationship Management (CRM) focuses on winning the patronage of customers to build long lasting relationships (Ballantyne, 2005). The length of relationship is determined by the product market. Ballantyne (2005) claims that the only lasting (organizational) competence is characterized by continuous learning. Arguably, Total Quality

Management (TQM) is similar in that it focuses on finding a good organizational competency fit, which can be easily upset in volatile market sectors. CRM and TQM focus on a relationship of process(es), which create mutual benefits, such as cost reduction that encourages the longevity of the relationship. Both CRM and TQM should be considered for mature, low volatility market sectors (Ballantyne, 2005).

Strong organizational cultures place employees in a prevailing frame of reference, limiting the usefulness of a SWOT analysis (Trefry, 2006). This narrowed view of the industrial marketplace can be a serious fault of strong organizational cultures. External organizational analysis can become constricted and incomplete of key points needed to adjust internal vision. Figure 4 shows how internal and external operating environments of a business interact.

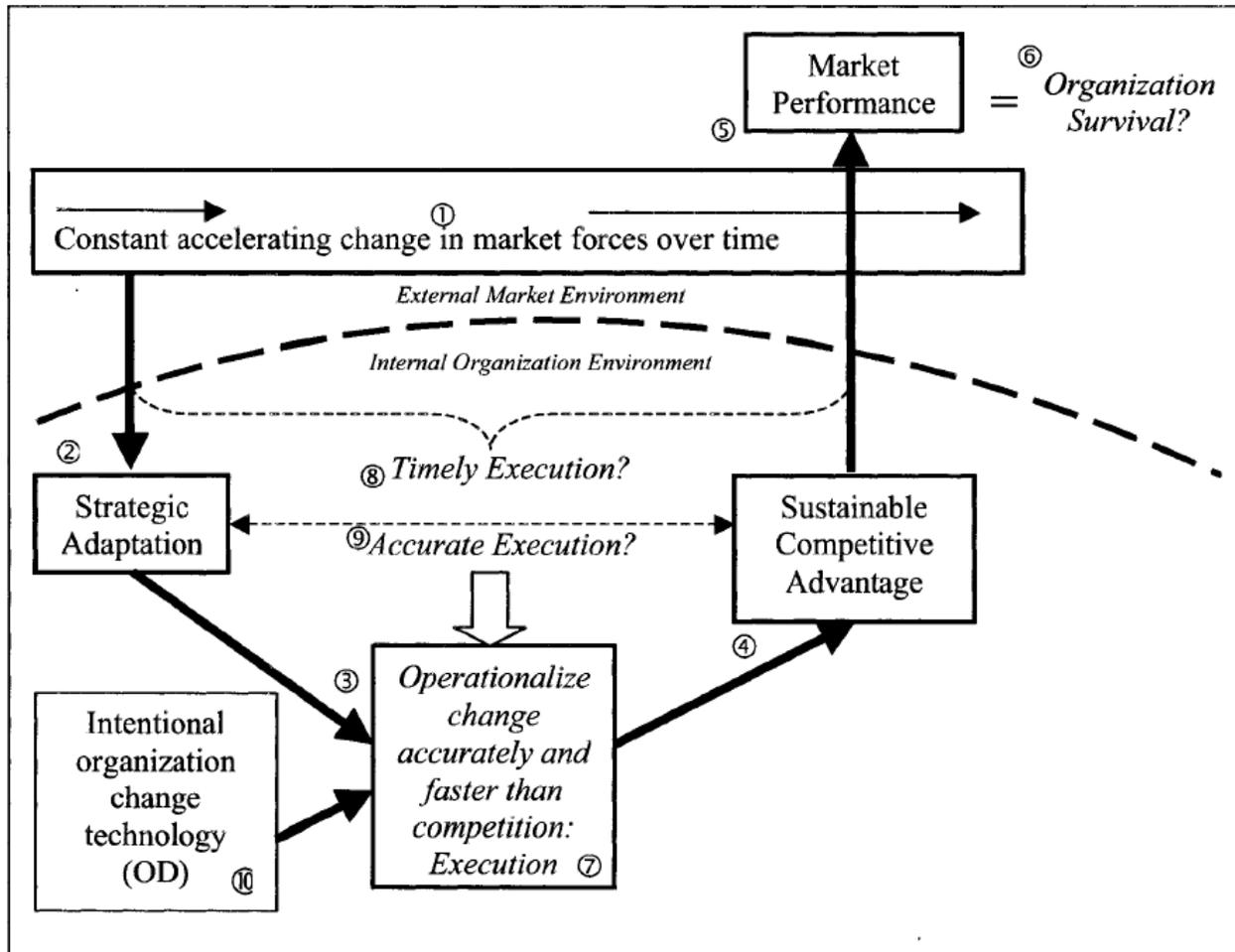


Figure 4. The gap between external market environment and internal organization environment. Adapted from *Fast-Acting OD Intervention for Expedited Organization Culture Change: A Quantitative Evaluation of a Field Experiment in a Large Utility Undergoing an Intentionally Violent Transformational Change*, by R. Dengler, 2006, p. 3. Retrieved from <http://www.proquest.com/>

**Competitive advantage index.** The competitive advantage index proposed by Alfadda (2010) is a theoretical metric for analyzing sustainable competitive advantage across organizations in a similar industry based upon changes in market share over an extended period of time. Sustainable competitive advantage implies that an organization has the ability to outperform others over the long term. A sustained competitive advantage over time is promoted

and built through an organizational culture of institutional renewal and adaption. The promoted internal culture of developed traits is what perpetuates into the market successfully and becomes captured market share. Alfadda proposes the use of Equations (2) and (3) to calculate the competitive advantage of a firm:

Competitive Advantage Index (CAI) of a firm =

$$\text{Firm's annual revenue growth rate} - \text{Relevant industry growth rate.} \quad (2)$$

*Note:* Values in Equation (2) are in revenue growth percentage at or above average industry profitability.

And:

Competitive Advantage Intex (CAI) of a firm =

$$\text{Market Share for year (x)} - \text{Market Share for year (x-1).} \quad (3)$$

**Application for industry.** According to Reeves and Deimler (2011), the challenge for change in the current market is real. Strategy makers are encouraged to look at the mavericks, identify and address the uncertainties, put an initiative on every risk, examine multiple alternatives, and increase the rate at which change is made. Organizations need to be ready to adapt to market changes. The relationship between organizational adaption and competitive advantage theories is shown in Figure 5.

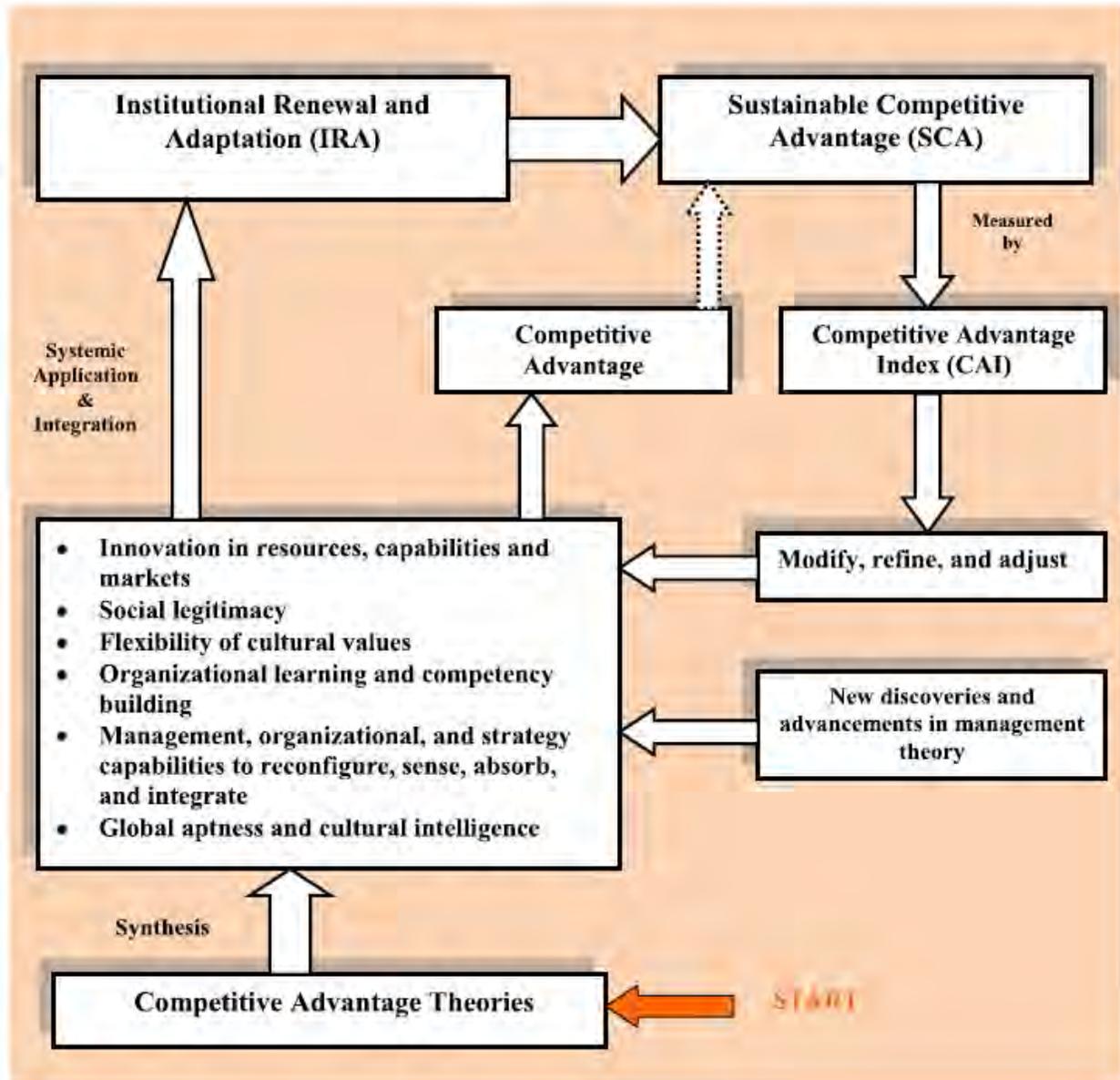


Figure 5. Institutional renewal and adaptation conceptual framework. Adapted from *Institutional Renewal and Adaptation (IRA): Creating and Managing Sustainable Competitive Advantage (SCA)*, by B. Alfadda, 2010, p.68. Retrieved from <http://proquest.com/>

Many organizations struggle through modification of their strategic direction, but slight adjustments led by executive staff may prove inefficient to meet desired market performance (Dengler, 2006). Beer predicts that if an organization cannot develop the tools and approaches to

meet short term market demand, then the failure of the organization is imminent (as cited in Dengler, 2006). Therefore, the key to any organizational modification is speed.

When building a team, it is important that the assembled group will rise above the clutter of competition and maintain its resistance to competitors trying to ambush their progress (Fahy, Farrelly, & Quester, 2004). What defines an effective team is their ability to exceed and define what is clutter.

An organization's cultural identity is always evolving as its members modify their beliefs, mental models, and values (Lagerstrom, 2005). Where an organization's cultural identity is the constructed or real culture of corresponding values, conflicting values are the individual's internal conflict with the constructed or real culture. Where burnout or attrition is a risk, highly valuable employees need to be aligned with an organizational culture that will correctly align personal workplace cultural identity with that of the person-environment fit.

Dengler (2006) observes,

For, in order for an organization to produce Beer's capacities of 'fit'—the match with its environment—and 'fitness'—the capacity for adaptive change—the organization must have the capability to influence the operationalization process to address accuracy, sustainability, and timeliness of performance. (p. 29)

When changes are made to an existing organizational culture, only a few individuals will adopt the innovation in sequential time periods. The slow, and sometimes nonexistent, adoption of the driven cultural innovation means that an organization loses critical time adapting to changing market conditions. The standard model for the rate of innovative cultural adoption can work for mature industries participating with products that emulate the standard empirical distribution of the product lifecycle. In industries where product markets do not emulate the

standard empirical curve, profitability favors those that are quickest to adapt to the market needs. In either scenario, an organization must understand the product markets that they participate in. Once a strategic market focus is defined, a specific group with an appropriate organizational culture and accompanying competitive advantages should be chartered. An organization's speed to solution to meet consumer demand represents their "gap to ideal" (Dengler, 2006). The "gap to ideal" is the amount of time, and associated profits, lost between when an organization determines a strategy and the lag before the strategy is fully implemented.

Within any organization, some employees are so entrenched in their ways that culture change methodology will have little effect (Dengler, 2006). Resistance to change by a percentage of employees is consistent with traditional organizational culture theory. Situations such as these demonstrate the need for chartered rotating teams. It is important to have groups that are chartered to meet particular organizational goals and that these chartered groups are disassembled at the conclusion of a project, once objectives have been achieved. Disassembling groups at the conclusion of a project helps eliminate entrenchment and enables a nimble organization. Each specific product market requires a unique organizational culture in order to maximize the balance between meeting consumer demand and achieving profitability. In this author's opinion, structure and control-oriented workplace culture is more appropriate for mature industries requiring high levels of documentation. However, in cases where complex and creatively productive work is required, a highly structured workplace culture would stifle employee performance.

Once the charter's goal is complete, the group disbands, reorganizes, and outlines a revised charter and group for a new project. The charter or "rules of engagement" can be shown as an example from Skunk Works Kelly Johnson's Operating Rules other than just motto (Rich

& Janos, 1994, p.51). The development of a “Tiger Team” or DARPA, would be another example of a specific group with a charter defining their scope. The key factors are specific focus and finite project lifespan. Rotation of formalized teams is paramount for the quick adaption to occur. Rotation will allow for area specialists to do what they do best right away, instead of redeveloping skills, and will also allow for cross training of other individuals along the way.

The degree to which a firm has a competitive advantage within a market will determine its success and prosperity in that market. Lockheed Martin’s Skunk Works is a premier example of an organization utilizing a specific, tailored team to meet a customer demand, which Lockheed could not meet with its traditional company culture. The Skunk Works became such a successful model that it is now a ubiquitous term relating to an intrapreneurship shelter to protect innovators from the operations of daily business (Rich & Janos, 1994). Businesses are not given their advantages, but have developed traits, e.g. skills, knowledge and capabilities as a unit within their organizations, and have made these part of their organizational culture.

**Proposal for future research.** If the approach to competitive advantage is to be a holistic process, involving a firm to be competitive at conception through the user experience of the product, then determining organization type based on its size should be considered a critical step of product development.

Adaptive manufacturers are working to push profitable activities outside the company in a fashion that does not benefit competitors (Reeves & Deimler, 2011). This breaks the classic management supervisory style of relying on strong control mechanisms. To enable a system without direct control mechanisms, a reputable trust needs to be developed between the participants in the system.

Organization employee size does not seem to affect the company's interaction/moderating effect (Soh, 2005). A key looking forward for businesses will be the correlation between growth of the firm and profitability. Touch labor and physical location employment positions are continuing to dwindle with the implementation of new technologies. The removal of human labor, with the increasing demand for speed to solution in the marketplace, is what will need to be tracked in order to find the next model for business. As the classic business model defines business success through correlation of profitability and growth of the firm, the future model of business may be a correlation between competitive advantage and profitability.

### **Summary of Literature Review**

The literature review features a definition of competitive advantage and a discussion of the intangible traits leading to sustaining a competitive advantage. Organizational culture was discussed and how the many inputs to an organizational culture lead to a different experience for the individual and the firm as a whole. It was noted that the difficult to duplicate factors of organizational culture can be adjusted and tuned to create competitive advantage. The theoretical metric of Competitive Advantage Index was defined. Competitive advantages intangible traits in relation to their use in general industry were discussed. A proposal to further examine the correlation of profitability, growth of the firm, and competitive advantage over time was made to better understand changes in the increasingly volatile marketplace.

## **Study Methodology**

### **Introduction**

The following section outlines the research methodology and design for this study. Research variables are identified. Research questions with their corollary hypotheses are stated.

Methods and data are analyzed. Limitations and assumptions are outlined. The subsequent section provides concluding results for the study and interprets the findings.

### **Population and Sample**

The target population for this study was publicly traded companies in the United States of America as ranked by the *Fortune Magazine*. The population for the study was the companies listed and ranked in the Fortune 1000. This population was chosen because of the amount of data available to the public in both detail and spanning over a defined five-year timeframe. Financial income statements from 2011 to 2015 were acquired for each organization from Morningstar.com. Articles for analysis of organization market behavior were sourced from The Motley Fool, which is a financial trade discussion website.

### **Variables**

The researcher chose to use Alfadda's (2010) theoretical model of the Competitive Advantage Index (CAI) as the primary indicator of a firm's competitive advantage in this study. Essential values necessary to calculate the CAI of a firm are that firm's annual revenue growth rate and the relative industry revenue growth rate. These variables were derived from the income statements of the companies from the Fortune 1000 list.

Additional variables were pulled from the income statements to provide a comparison between the Competitive Advantage Index and profitability and growth of the firm. Profitability is defined as yearly change in net income. Growth of the firm is defined as yearly change in gross profit.

In order to provide a framework for analysis, the researcher looked to Alfadda's (2010) key performance enablers of competitive advantage. According to Alfadda, key performance enablers of competitive advantage include innovation; social legitimacy; flexibility of cultural

values; organizational learning and competency building; management, organizational, and strategy capabilities to reconfigure, sense, absorb, integrate, and innovate; and global aptness and cultural intelligence. Using graphical analysis of a relative industry's CAI, the firm, or firms, with the greatest competitive advantage were identified. An individual organization's activities were then analyzed through a review of articles from The Motley Fool website. The developed literature review enabled the researcher to identify which CAI enabler(s) the organization utilized in order to achieve 'best in class' competitive advantage in its industry sector.

### **Main Research Questions**

The main research question (H1) and the three related research questions, numbered (H2) through (H4), are as follows:

H1: How important are the intangible factors of an organizational culture and how do they affect the output of a marketplace sustainable competitive advantage in the forms of profitability and growth when altered?

H2: How is competitive advantage distributed within a defined industrial sector?

H3: How is competitive advantage distribution similar or different between different industrial sectors?

H4: Is there a correlation between organization growth and profitability, and if so, does it still validate the conventional business model?

### **Corollary Hypotheses**

From the research questions above, there are three related corollary hypotheses, numbered (H5) through (H7).

H5: Certain competitive advantage traits are more valuable than others and there are trends per industrial sector.

H6: There are trends between industrial sectors displaying early adopters to competitive advantage traits.

H7: There is no longer a predictable correlation between profitability and growth of the firm.

### **Methods and Data Analysis**

Competitive advantage can be specific to industrial area; therefore, the study population was organized by both Fortune 1000 rank and by industrial area. *Fortune* identified a total of 21 different industrial sectors, which the researcher applied to the companies in this study. Individual firm data were then collected and the variables for profitability, growth of the firm, revenue growth, and competitive advantage index were calculated. Four years of data were then averaged. The results are displayed graphically. The statistical comparison between variables was done by analysis of variance (ANOVA). The results are displayed in a matrix. Utilizing the competitive advantage index comparison, businesses breaking the standard trend were investigated for competitive advantage traits contributing to their success. Competitive advantage traits were then recorded in a comparison matrix.

### **Limitations and Assumptions**

This study relies on the viability of the theoretical framework of the Competitive Advantage Index (CAI) as defined by Alfadda (2010). Without this type of statistical measure from available public data, a study such as this would require an enormous scope to appropriately poll and survey industrial sectors. Industrial sector market growth is defined from the sample in the Fortune 1000. It is known that the specified market sectors are larger than what the Fortune 1000 defines. Data used in the study must be in the form of a similar income statement in order to be comparable.

## **Summary**

In the study methodology section, the researcher discussed the research and analysis outline for the project. The project population and sample were outlined, and data analysis and limitations of the study were summarized. Research findings are presented in the next section. The final section discusses the study's main conclusions and recommendations.

## **Results**

### **Overview**

The results section of the paper covers the process of obtaining answers to the main and corollary hypotheses. Leading up to interpretation of the findings, the individual concluding results are analyzed and discussed. Finalized results from the hypotheses are interpreted and recommendations are made based on the findings. The author concludes the section with remarks regarding the present and future implications of the study.

### **Research Purpose, Research Questions and Related Hypotheses**

The purpose of this research is to determine the relationship between competitive advantage and profitability and growth of the firm. A lack of correlation between profitability and growth of the firm would prove whether or not the conventional business model is still valid in today's volatile marketplace. If the conventional business model no longer holds, then industry needs new tools for determining success of the firm. This research analyzes the viability of six competitive advantage traits and their distribution of use by leaders within relative industrial sectors. This analysis should provide a framework for understanding market trends for sustainable business growth. To test these predictions, the main research question (H1) and the three related research questions, numbered (H2) through (H4), are as follows:

H1: How important are the intangible factors of an organizational culture and how do they affect the output of a marketplace sustainable competitive advantage in the forms of profitability and growth when altered?

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From the research questions above, there are three related corollary hypotheses, numbered (H5) through (H7).

H5: Certain competitive advantage traits are more valuable than others and there are trends per industrial sector.

H6: There are trends between industrial sectors displaying early adopters to competitive advantage traits.

H7: There is no longer a predictable correlation between profitability and growth of the firm.

**Statistical techniques used.** This study utilized two primary statistical techniques for analysis – ANOVA and the Competitive Advantage Index.

- Analysis of Variance (ANOVA: Single Factor) was used to test the significance of the linear relationship of separate variables. The variables of profitability, growth of the firm, and Competitive Advantage Index (CAI) were all compared independently and together.

- Competitive Advantage Index (CAI) is a theoretical model used to develop a numerical value to summarize a firm's competitive advantage. CAI was calculated in this study using the growth of the firm's value averaged over the sample time period and then compared to the relative industry sector's growth during the same time frame (Alfadda, 2010).

**Description of the profile of the sample and selection criteria.** Two sets of data for the sample were obtained from the following sources.

1. The Fortune 1000 list (2017) of the top 1000 companies in the U.S. by revenues. The companies are ranked by their respective financial years. The companies were organized into 21 different relative industrial sectors as identified by the Fortune 1000. The total Fortune 1000 list was utilized in the study to allow the largest sample size possible for the 21 identified relative industrial sectors.
2. Morningstar.com (2017) was used to gather the correlating income statements for the listed companies in the Fortune 1000. These are the income statements for publicly traded companies only and the data were presented as the company presented it. Income statements could only be utilized if the areas of net income, gross profit, and revenue were explicitly listed.

Table 5 shows a summary of information on the industrial sectors chosen for this research, including population size, sample size, etc.

Table 5

*Source Information Sample Summary*

Fortune 1000 List Source Information					
Industrial Sector	Population Size	Number of Invalid Entries	Sample Size Used	Sample Size Used (Must be >30%)	Maximum Sample Size Resolution (Accuracy >15%)
Aerospace & Defense	20	7	13	65%	8%
Apparel	15	7	8	53%	13%
Business Services	51	18	33	65%	3%
Chemicals	32	12	20	63%	5%
Energy	122	16	106	87%	1%
Engineering & Construction	26	9	17	65%	6%
Financials	137	133	4	3%	25%
Food and Drug Stores	15	10	5	33%	20%
Food, Beverages & Tobacco	43	15	28	65%	4%
Health Care	75	26	49	65%	2%
Hotels, Restaurants & Leisure	25	6	19	76%	5%
Household Products	28	12	16	57%	6%
Industrials	46	15	31	67%	3%
Materials	43	10	33	77%	3%
Media	25	10	15	60%	7%
Motor Vehicles & Parts	24	5	19	79%	5%
Retailing	80	55	25	31%	4%
Technology	102	50	52	51%	2%
Telecommunications	15	2	13	87%	8%
Transportation	36	3	33	92%	3%
Wholesalers	40	18	22	55%	5%
Total	1000	439	561	56%	0%

Note. This table shows the industrial sector breakup of the Fortune 1000 List analyzed in this study.

### Industrial Sector Specific Results

**Aerospace and defense.** Boeing is dominating the field in competitive advantage and market share of the Aerospace and Defense industrial market sector (see Figure 6 and Figure 7). Boeing's defense business is 40% larger than Airbus (Smith R., 2016b). Boeing recently received a contract for Apache helicopters from the UAE. Because of the speed at which Boeing is able to produce the Apache helicopter, their bottom line will get an immediate boost. In the area of space launches, Boeing's partnership with Lockheed Martin, United Launch Alliance, is utilizing added payload capacity to carry CubeSats into orbit (Smith, 2016a). The area of

CubeSats and other small inexpensive satellites is experiencing a renaissance of cost reduction.

Within the aerospace and defense industry, organizational strategy and global aptness were identified as key competitive advantages. Organizational strategy was identified because of

Boeing's ability to be an industry leader through multiple product markets and partnerships.

Global aptness was determined because of Boeing's ability to meet customer needs overseas and dominate the market share internationally.

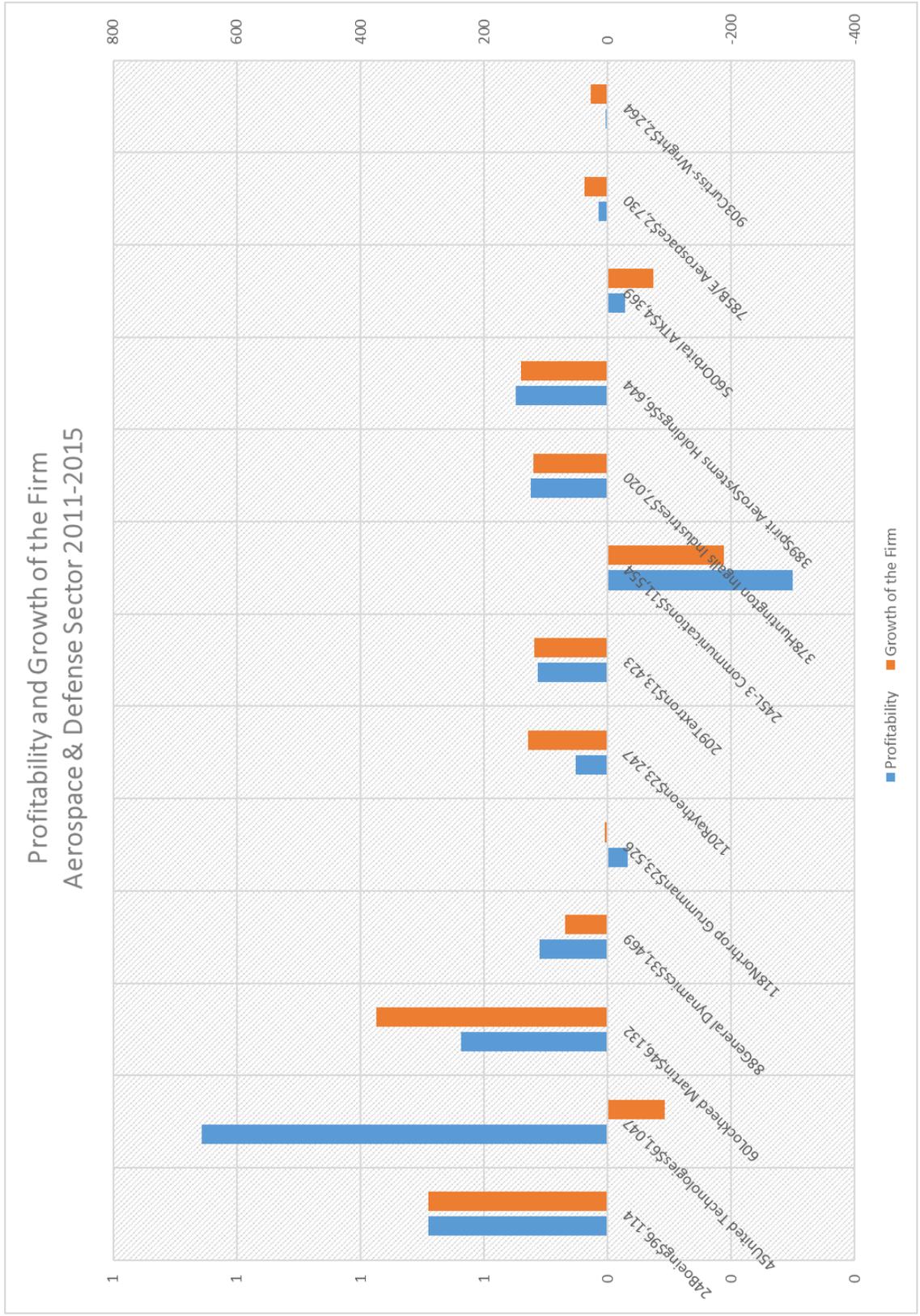


Figure 6. Profitability and growth of the firm for the Aerospace and Defense Sector.

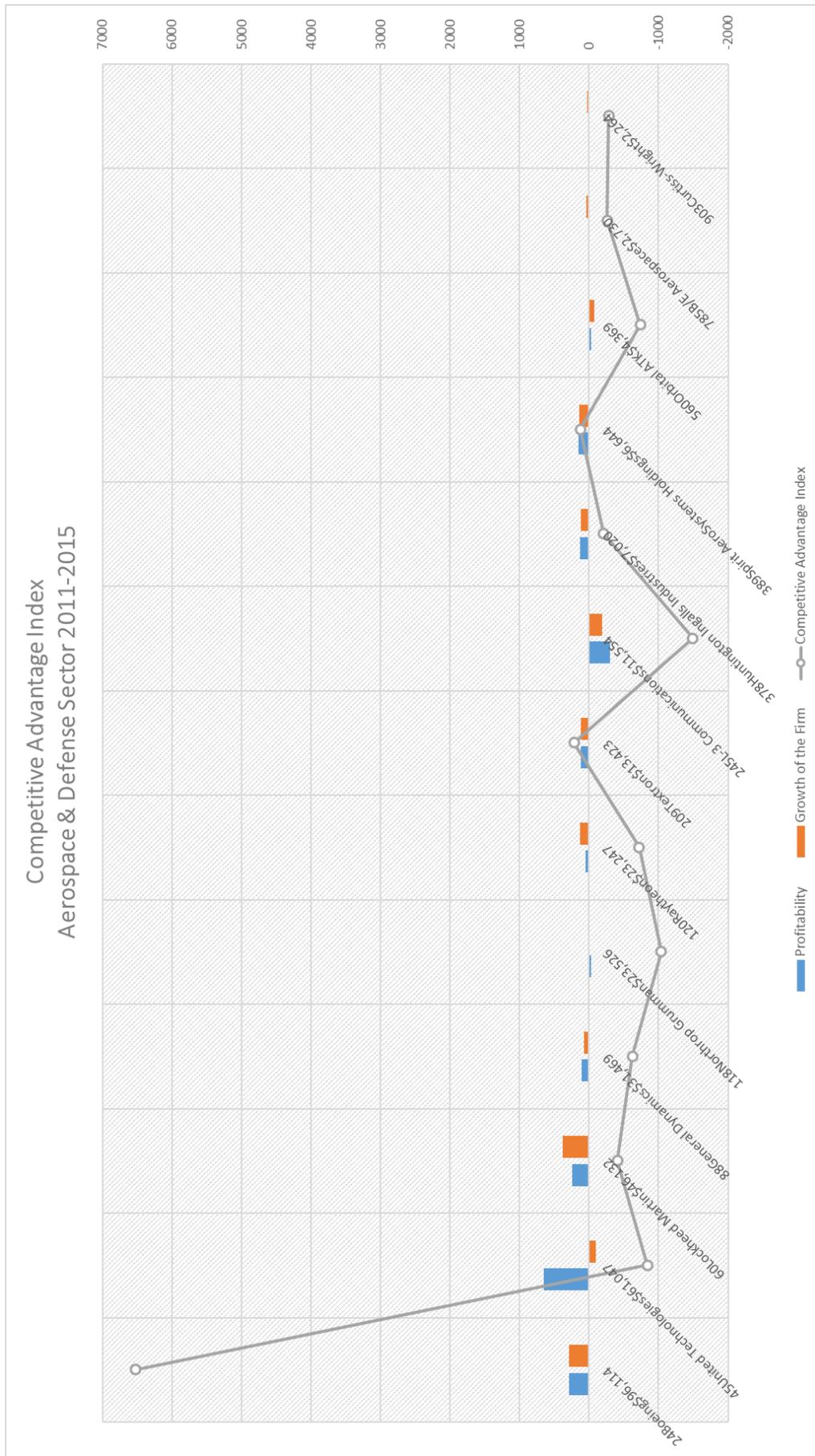


Figure 7. Competitive Advantage Index for the Aerospace and Defense Sector.

**Apparel.** The company's VF and Under Armour are leading the apparel industry in competitive advantage (see Figure 8 and Figure 9). VF is the parent company to clothing brands The North Face, Vans, and Timberland (Marder, 2013). Under Armour is doing better than ever financially as the popularity of exercise continues to grow in the United States. VF's action sports division is their largest division and continues to grow with the exercise trend. The primary growth for both companies is in the form of amateur athletes and casual wear for those who want to look the part of being athletic (McNew, 2016). The greatest trend growth has been in youth casual sportswear like branded hoodies and t-shirts. Social legitimacy and cultural intelligence were identified as the winning competitive advantages for the apparel sector. Social legitimacy was selected because of the United States' willingness to identify with the solution to the rising obesity crisis. Cultural intelligence was chosen because of VF and Under Armour identifying people's willingness to adopt athletic casual wear more than actual fitness wear.

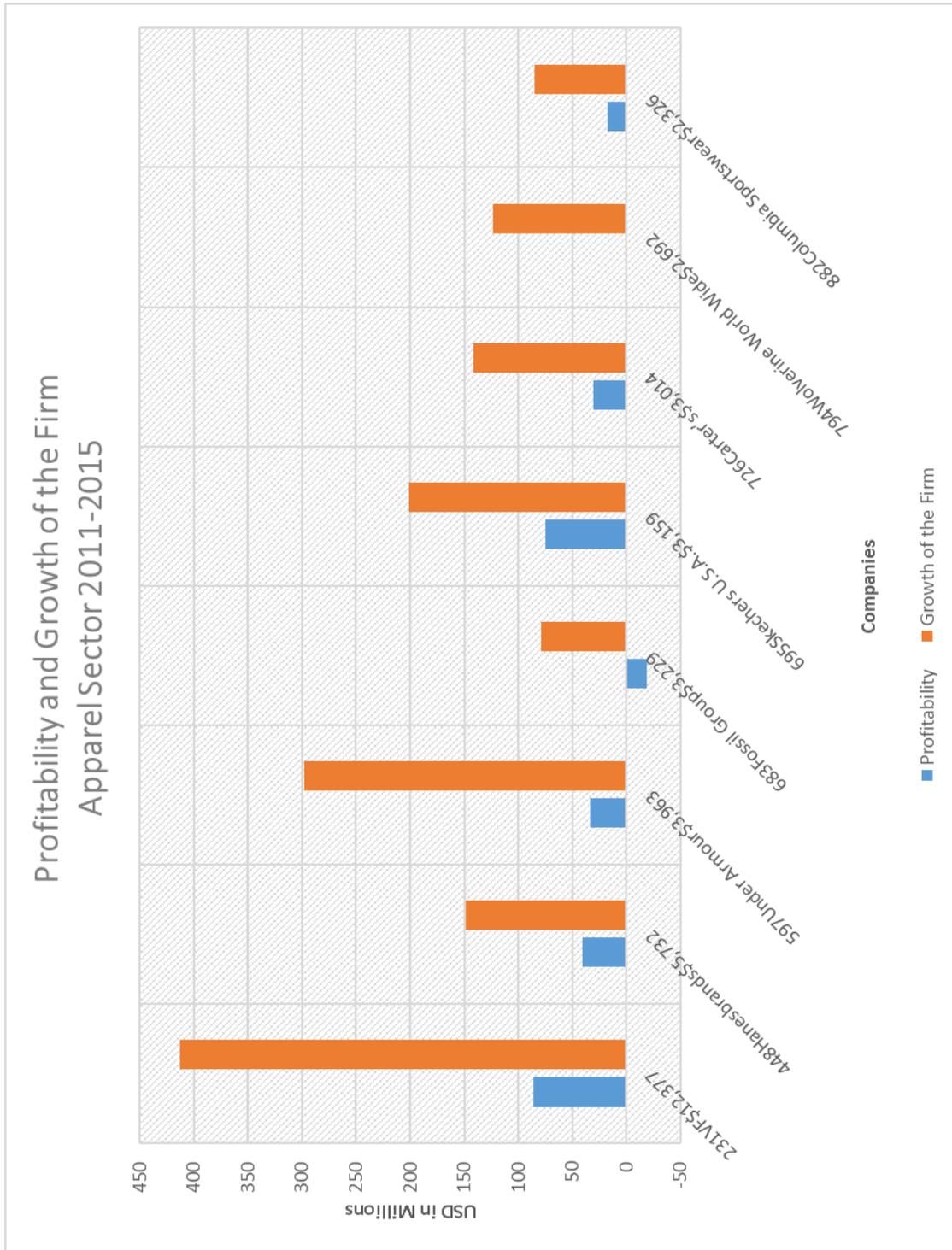


Figure 8. Profitability and growth of the firm for the Apparel Sector.

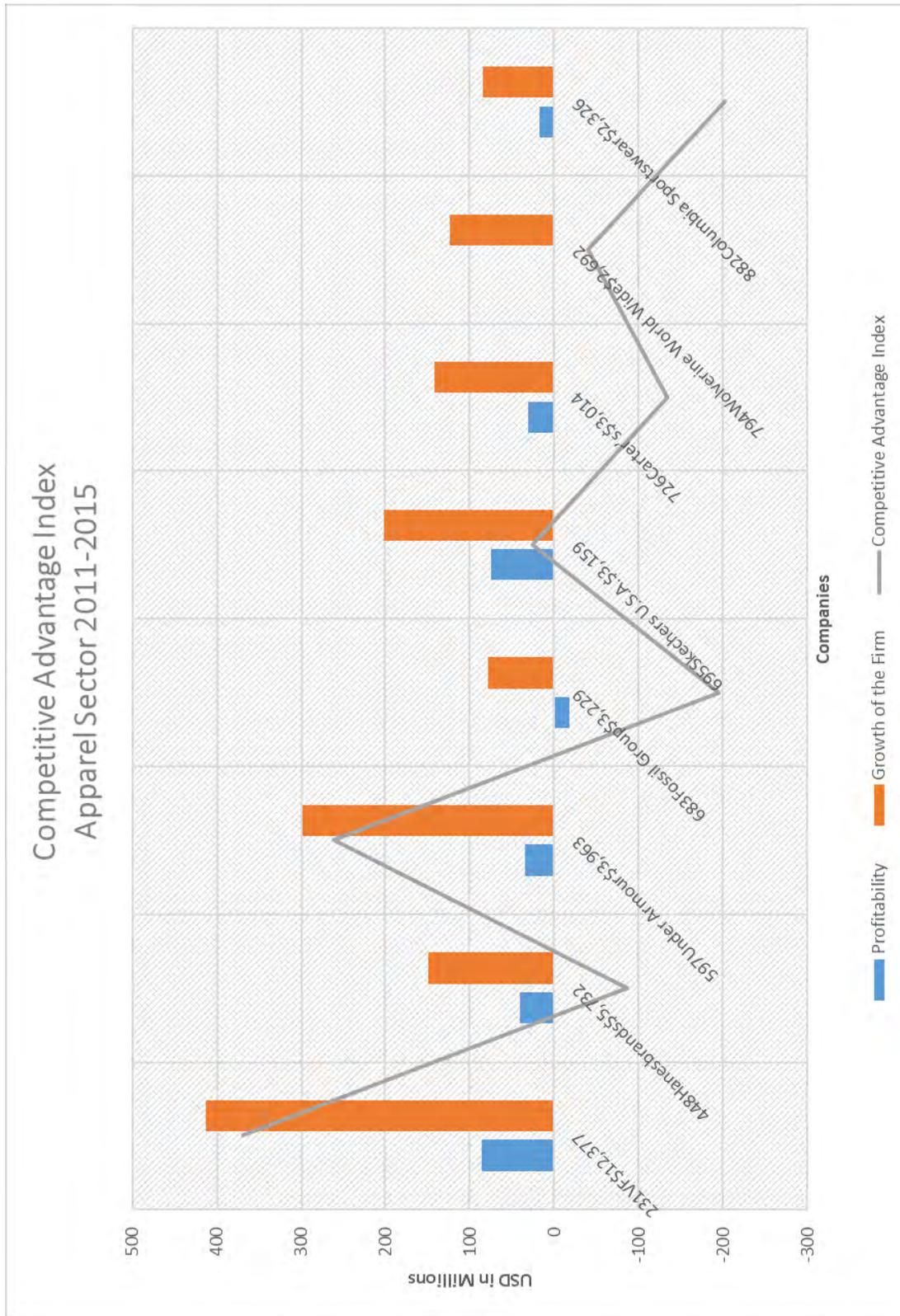


Figure 9. Competitive Advantage Index for the Apparel Sector.

**Business services.** United Rentals is the most competitive firm in the business services sector (see Figure 10 and Figure 11). The heavy equipment rental industry is highly fragmented, which is a key reason the consolidated United Rentals model of business works so well (Fee, 2014). The commercial construction industry is on the rise as well, which contributes to the added growth. United Rentals was identified as implementing management strategy and cultural intelligence as competitive advantages. Management strategy was selected because of the original eight owners pushing for a consolidated approach in a typically fragmented industry. Cultural intelligence was identified because of United Rentals adapting to “big construction’s” needs and providing a “one stop shop” for their customers.

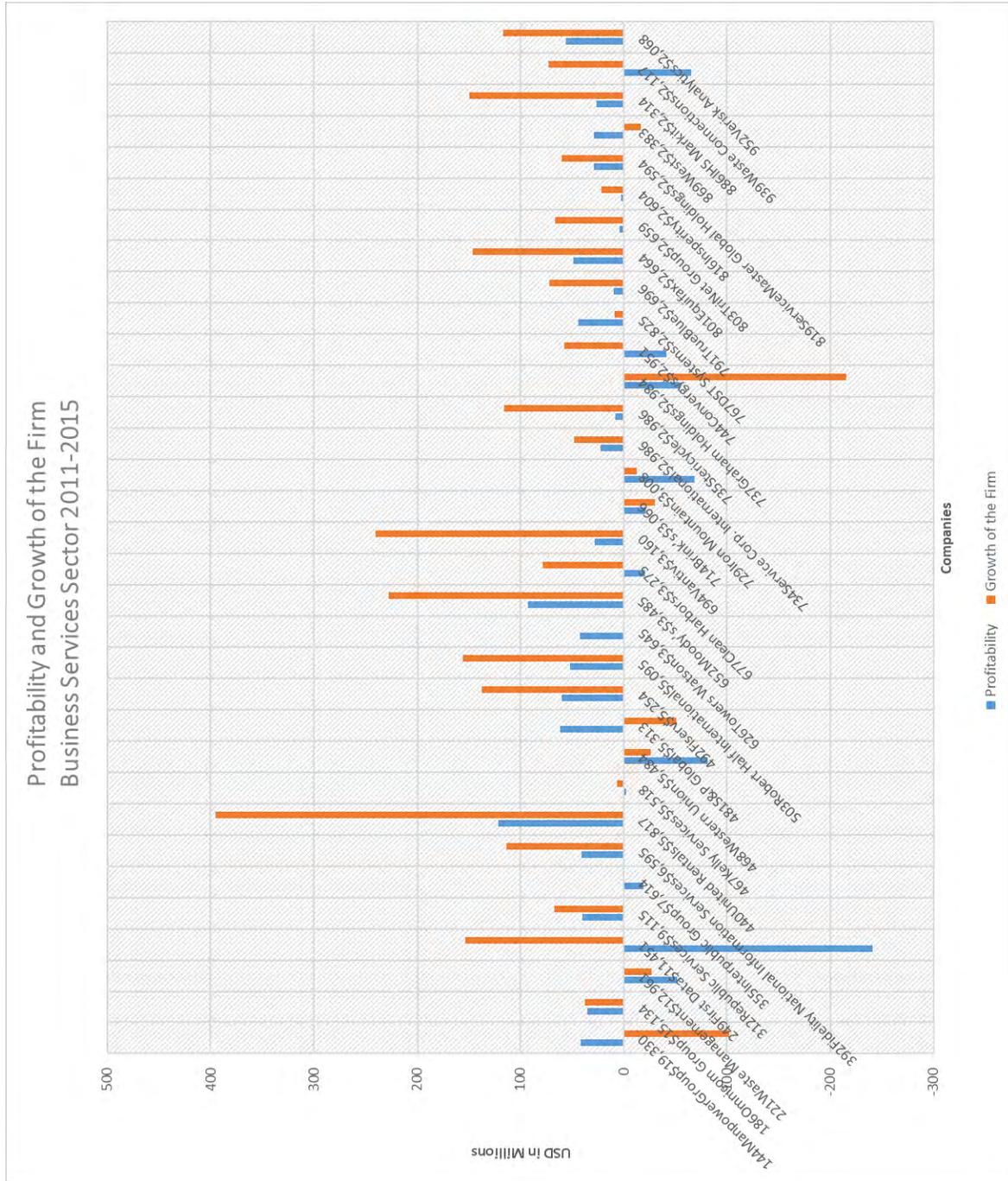


Figure 10. Profitability and growth of the firm for the Business Services Sector.

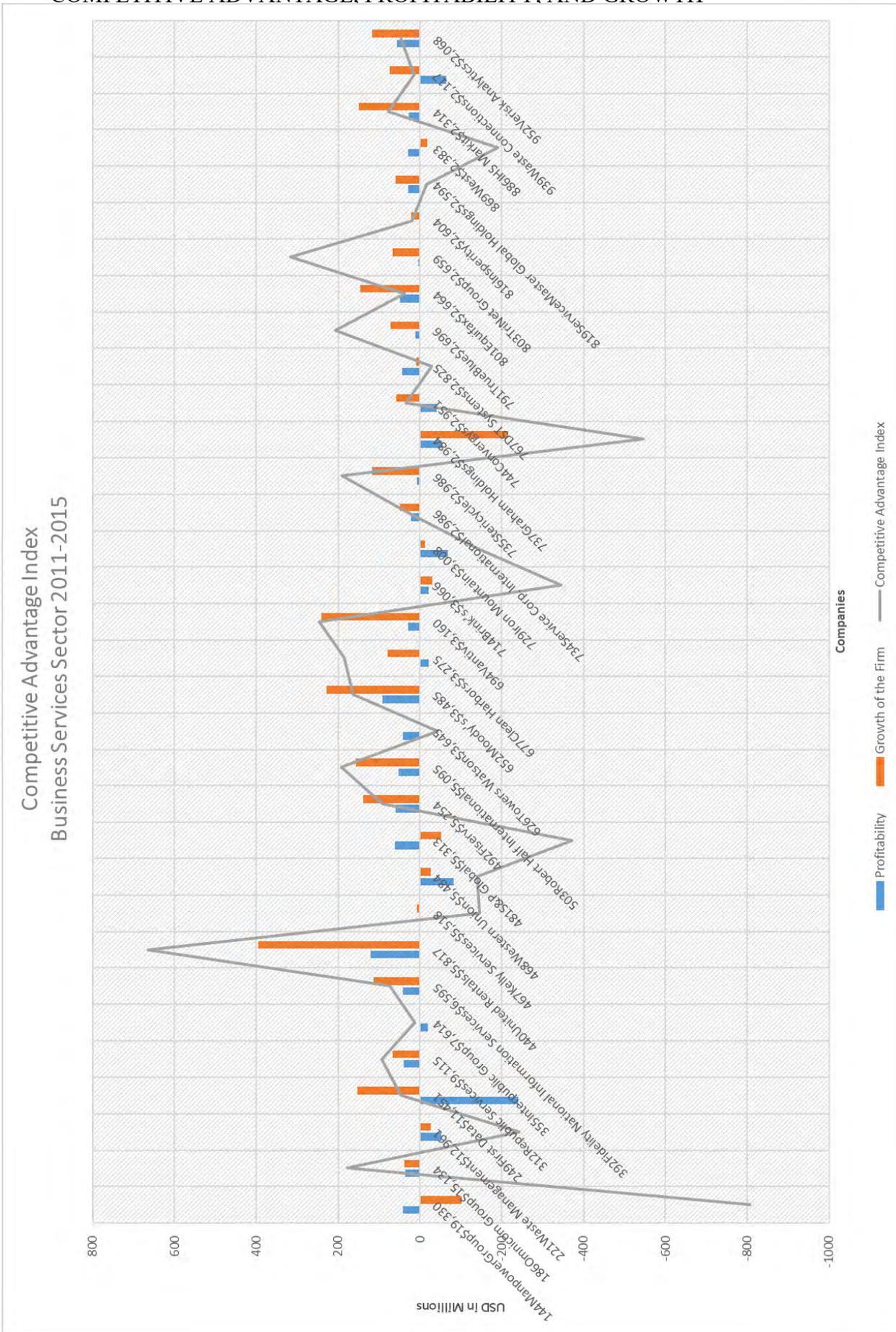


Figure 11. Competitive Advantage Index for the Business Services Sector.

**Chemicals.** Ecolabs is leading the chemical sector in competitive advantage (see Figure 12 and Figure 13). Ecolabs's advantage comes from targeting niche industries with large growth potential, such as in developing regions which need assistance with wastewater (Planes, 2013). A big area for growth being pursued by Ecolabs is the Indian wastewater treatment market. Because of Ecolabs's ability to identify and respond with market demand globally, global aptness was chosen as a competitive advantage. Ecolabs operates in the mining and resource exploration industry as well, which produces wastewater which needs treatment. The treatment of this environmental waste shows a competitive advantage trait of social legitimacy. Finally, with innovation as a competitive advantage, Ecolabs is introducing a new kitchen cleaner for the restaurant industry.

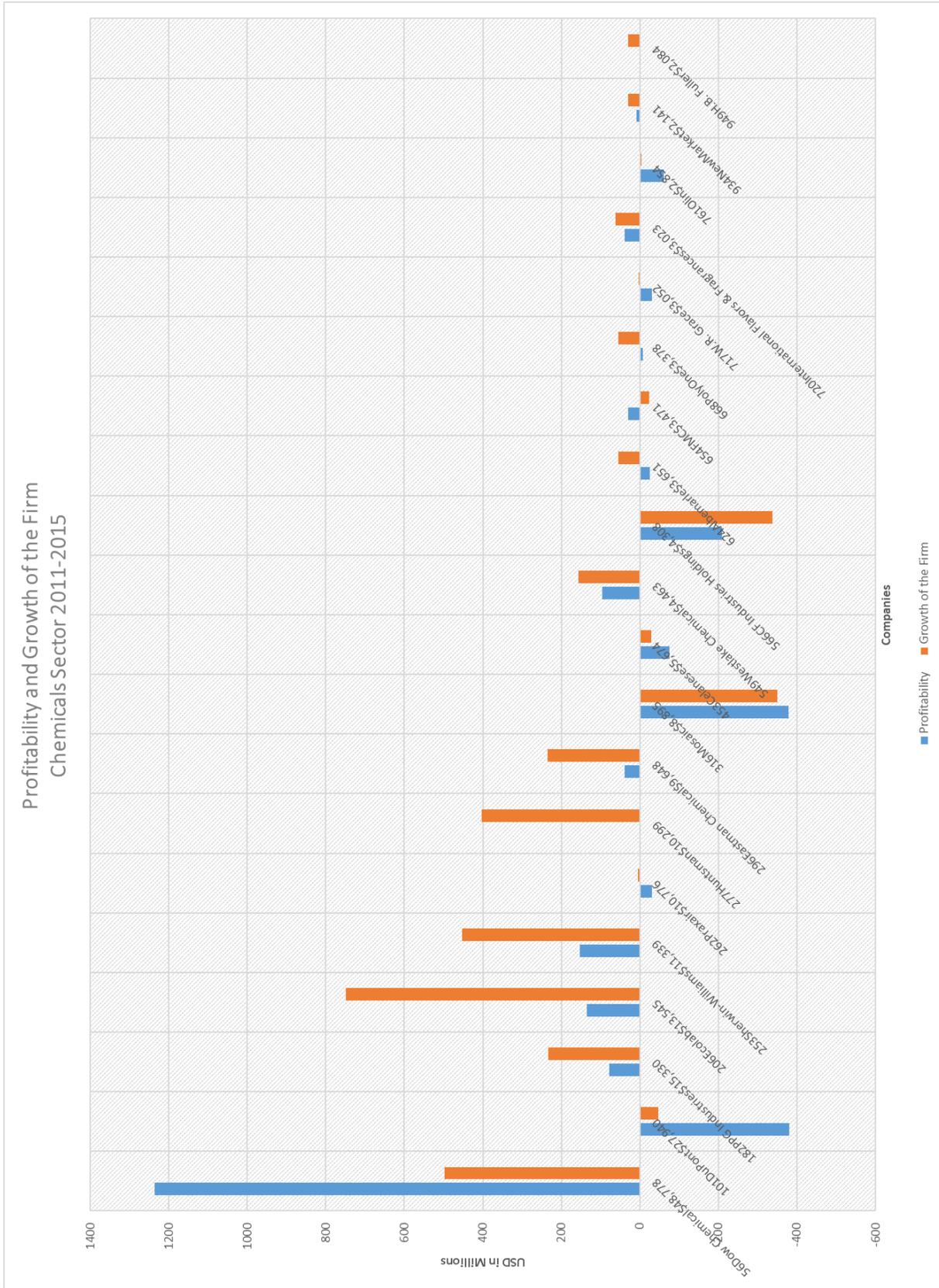


Figure 12. Profitability and growth of the firm for the Chemicals Sector.

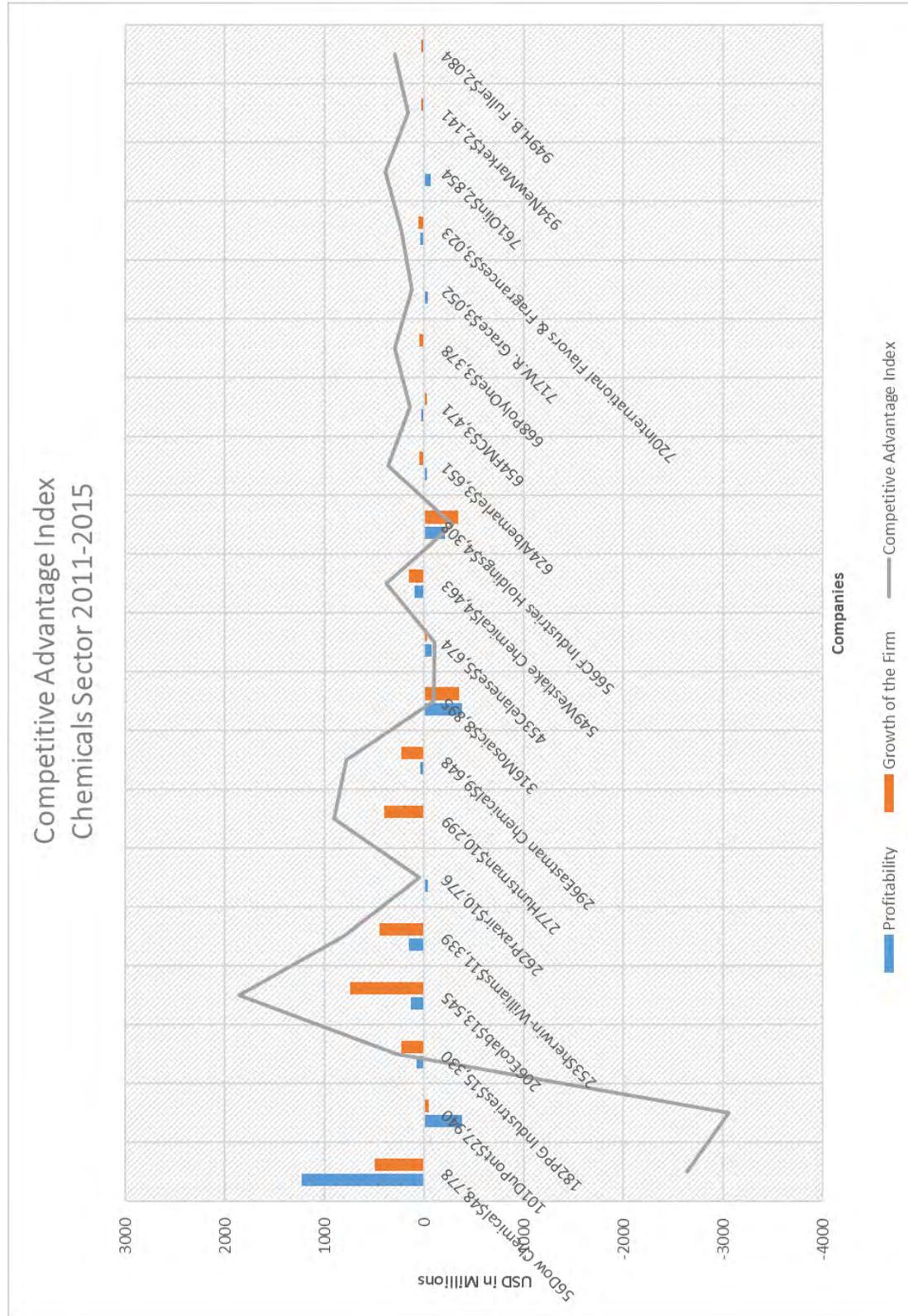


Figure 13. Competitive Advantage Index for the Chemicals Sector.

**Energy.** Marathon Petroleum is leading the energy sector in competitive advantage (see Figure 14 and Figure 15). Marathon Petroleum has seen large internal cost savings in the form of synergy within the organization (Crowe, 2015, October 30). The company is changing all of its Hess-branded stations to the Speedway brand. The management strategy changes saved Marathon Petroleum an estimated \$75 million annually and gave the organization a significant competitive advantage (Crowe, 2015, October 30). Another internal consolidation is between MPLX and MarkWest Energy Partners. Alternatively, Marathon Petroleum's management also decided to cancel its \$2.2 billion Residual Oil Upgrader Expansion project (Crowe, 2015, October 30). This project was cancelled because of better options in the current oil and gas market. The energy sector is defined by a competitive advantage in management strategy because of internal organizational changes streamlining the consumer experience.

### Profitability and Growth of the Firm Energy Sector 2011-2015



Figure 14. Profitability and growth of the firm for the Energy Sector.

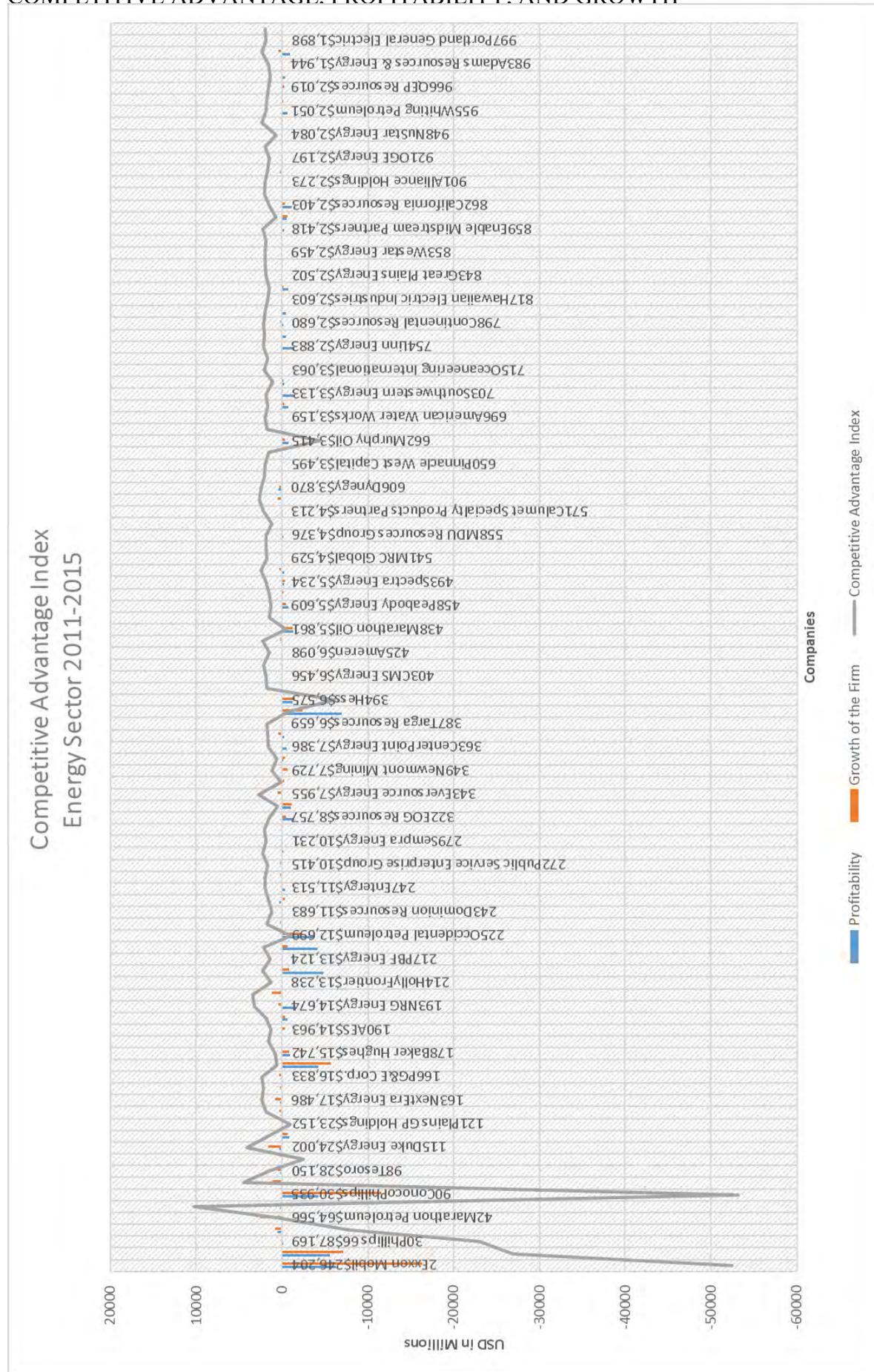


Figure 15. Competitive Advantage Index for the Energy Sector.

**Engineering and construction.** Lennar, the nation's second largest homebuilder, is leading the engineering and construction sector in competitive advantage (Frankel, 2015, June 18). See Figure 16 and Figure 17. Lennar has been able to recover faster compared to its competition after the housing collapse. The recovery rate is determined by Lennar's ability to grow profitability. A main strategy that assisted in Lennar's recovery was diversifying into land acquisitions purchased from distressed land owners dealing during the recession. Since then, Lennar has changed its strategy to "buy and build quickly" (Frankel, 2015, June 18). Two innovative strategies are putting Lennar products above its competition. First, by uniformly upgrading all housing built, a higher end product can be offered at a more competitive price. Second, Lennar is producing multigenerational homes for either relatives or children with aging adults. The multigenerational homes now make up 25% of all of Lennar's business (Frankel, 2015, June 18). The two areas that stand out as Lennar's competitive advantages are flexibility of cultural values and management, organizational, and strategy capabilities to reconfigure, sense, absorb and integrate. Flexibility of cultural values was chosen because of Lennar's ability to adapt from the market need to build multigenerational homes instead of solely single family homes. Management strategy was chosen because of Lennar's management seeing a shift in the industry and responding by making strategic changes to the organization's approach to the market.



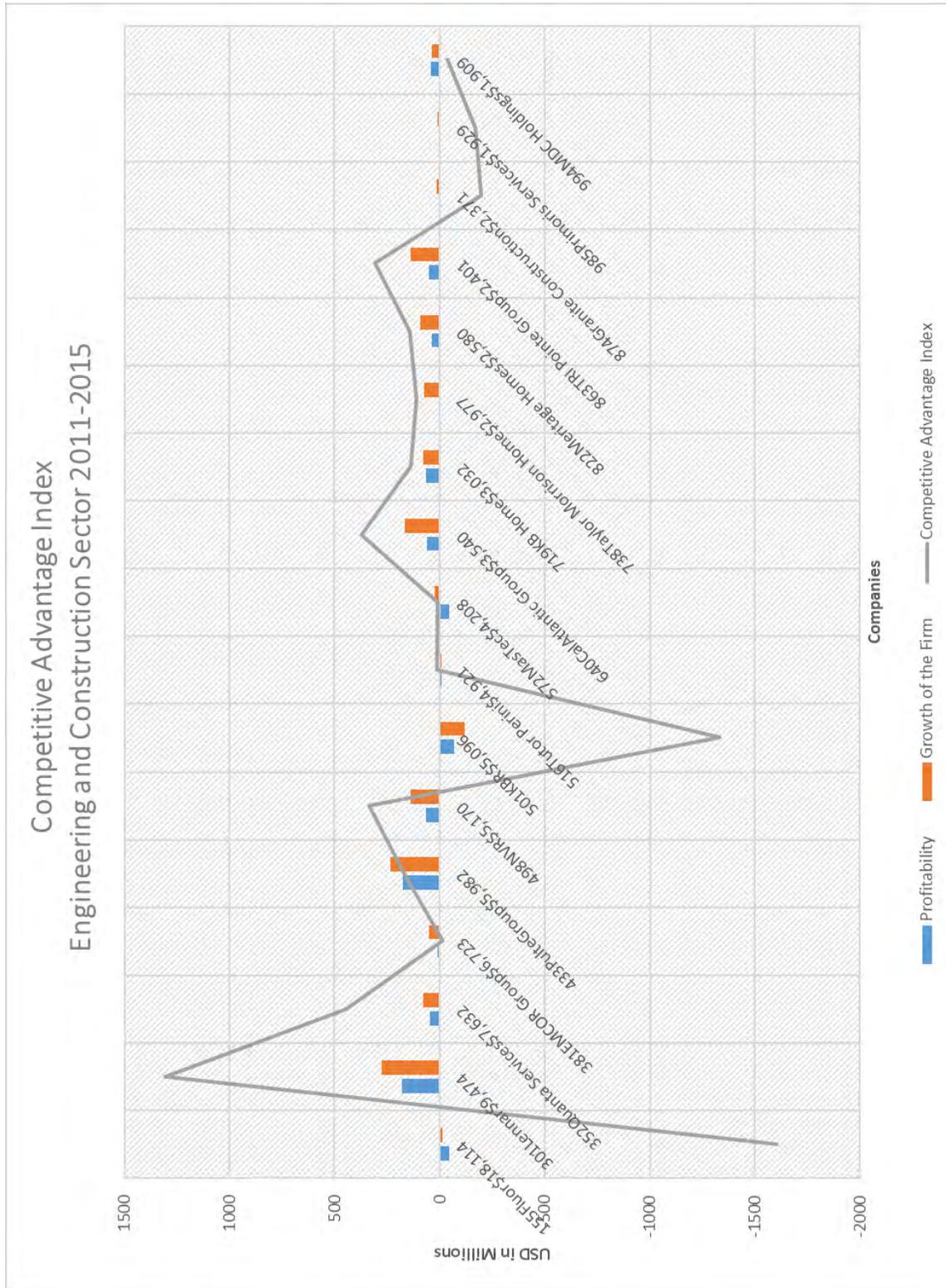


Figure 17. Competitive Advantage Index for the Engineering and Construction Sector.

**Financials.** Because of a small size and several invalid entries on income statements for firms within the financials sector, an analysis could not be made regarding trends in competitive advantage, profitability, and growth of the firms in this industrial sector.

**Food and drug stores.** Similar to the financials sector, the sample size in the food and drug stores sector was limited and statistically significant results could not be generated. Additionally, income statements in this industrial sector were not consistent across and direct comparisons could not be made.

**Food, beverages and tobacco.** Leucadia National, a conglomerate created by Warren Buffett, is leading the food, beverages, and tobacco sectors in competitive advantage (Ditz, 2014, July 25). See Figure 18 and Figure 19. Acting similar to financial conglomerate Berkshire Hathaway, Leucadia National owns subsidiaries in many industries. One of its major holdings is a 79% share in National Beef Packing (Ditz, 2014, July 25). This is significant because of the majority beef in the United States being produced by four major beef processing facilities, of which National Beef Packing is one. Currently, the US beef market is weak, but looking forward, prospects are optimistic if overseas bans on US beef are removed. Leucadia's long-term goal is to maximize exports of natural gas from its recent purchase of Oregon LNG (Ditz, 2014, July 25). The US Department of Energy has approved a future annual export limit of 2.04 billion dollars of natural gas (Ditz, 2014, July 25). Leucadia National's competitive advantage seems to be derived from their management strategy and global aptness. Leucadia National's ability to position itself in diverse and profitable markets has made it a leader in this sector. Leucadia National's global aptness is positioning the company to make future gains from its understanding of global markets.

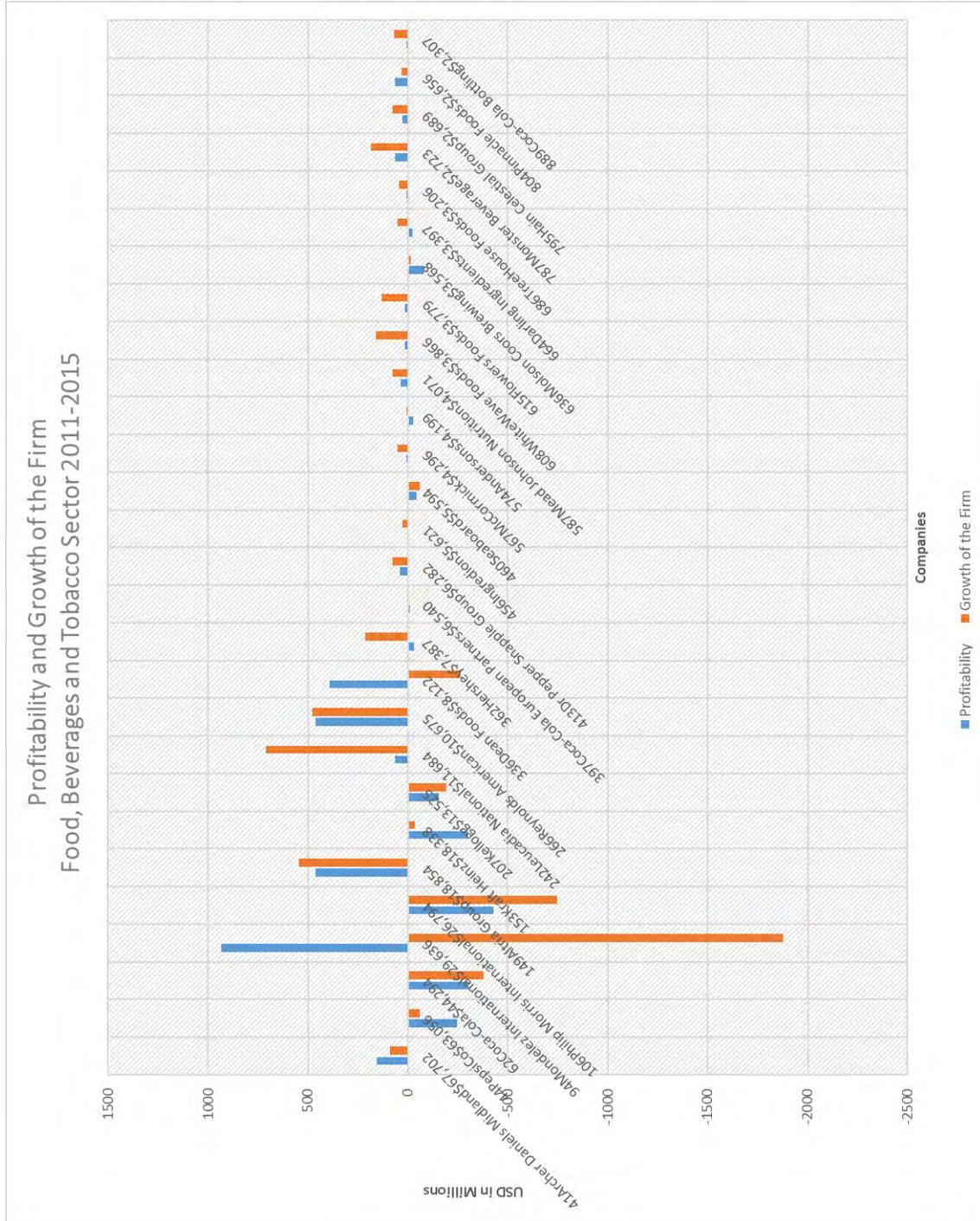


Figure 18. Profitability and growth of the firm for the Food, Beverages and Tobacco Sector.



**Health care.** Gilead Sciences, a biotech pharmaceutical company, is leading the health care sector in competitive advantage (Williams, 2015, December 7). See Figure 20 and Figure 21. Pushing Gilead to the lead is its hepatitis C solutions for patients with a 90% cure rate, with little to no side effects (Williams, 2015, December 7). The HCV solution contributes to 60% of Gilead's sales (Williams, 2015, December 7). Upcoming innovative treatments from Gilead include inhibiting fibrotic diseases, treatments for blood cancers, and further HCV solutions to cover all six genotypes of the virus (Williams, 2015, December 7). Because of Gilead's innovative products and growth from past product knowledge, the competitive advantages identified are innovation and organizational learning and competency building.

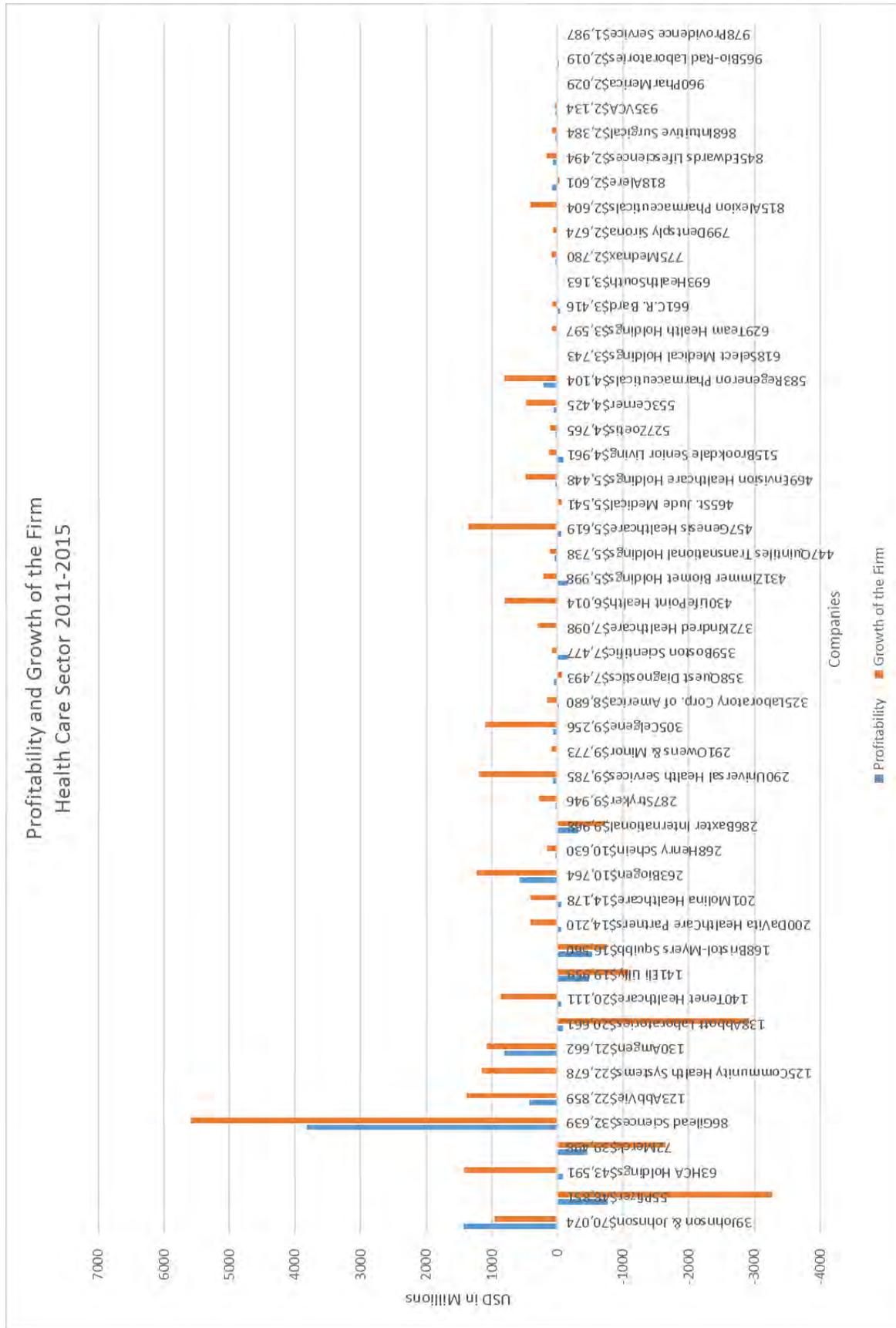


Figure 20. Profitability and growth of the firm for the Health Care Sector.

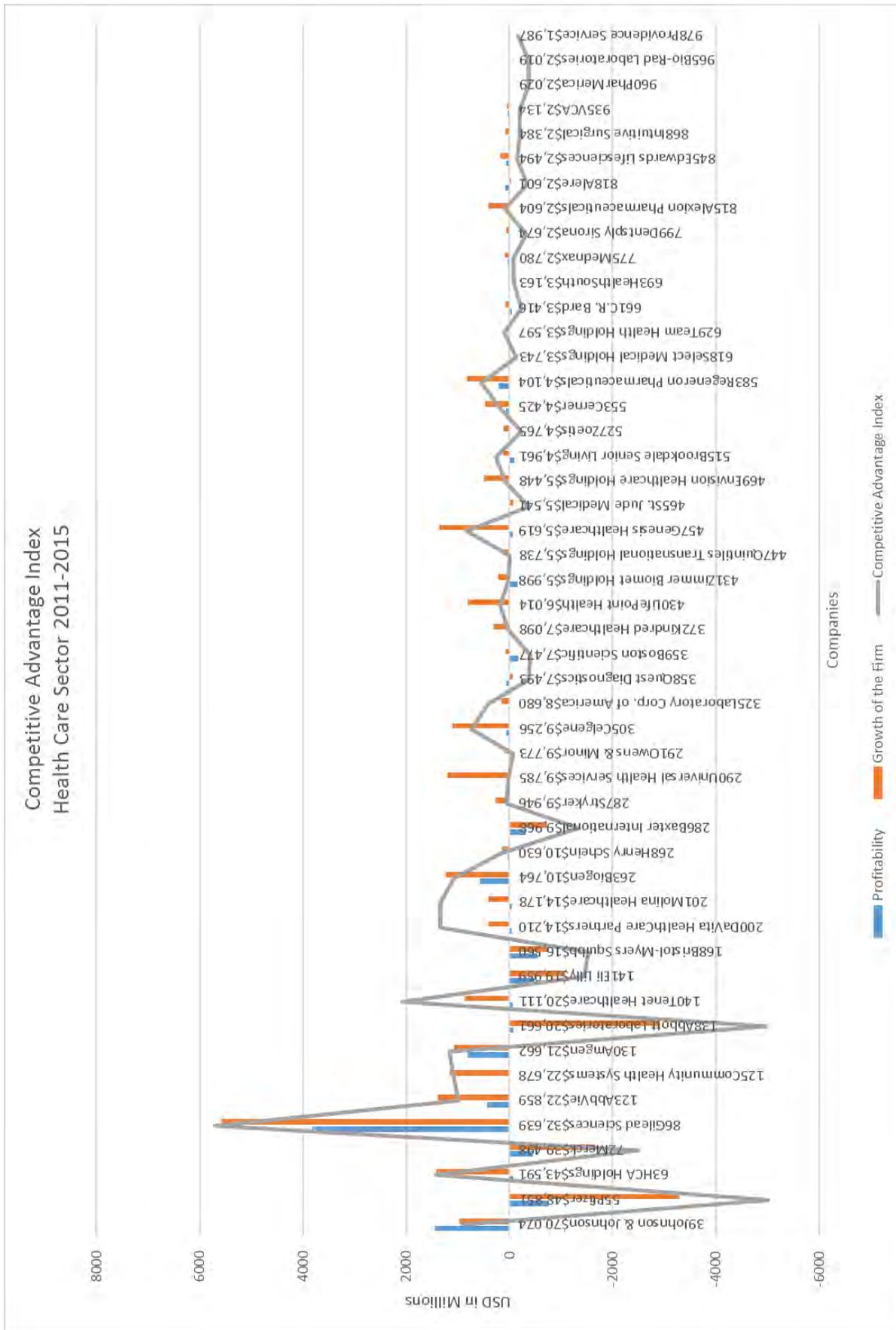


Figure 21. Competitive Advantage Index for the Health Care Sector.

**Hotels, restaurants and leisure.** Hilton Worldwide Holdings maintains the greatest competitive advantage for the hotels, restaurants and leisure sector (Hanley, 2014, February 9). See Figure 22 and Figure 23. Hilton has a couple of unique features as a sector leader. First, Hilton Worldwide Holdings was not on the public market for six years after being bought out by The Blackstone Group. The Blackstone Group restructured Hilton Worldwide Holdings with a more international approach. The change to Hilton's approach was successful and the company showed growth for multiple years. Secondly, Hilton has a debt laden balance sheet (Hanley, 2014, February 9). It is most likely this second factor which holds Hilton back from having an even greater competitive advantage over the competition. Future growth for the company includes 185,000 rooms, of which over 60% are in international markets (Hanley, 2014, February 9). Hilton Worldwide Holdings was found to have competitive advantage factors in the areas of management strategy and global aptness. Management strategy was chosen because of the restructuring of the company to place it in a more competitive position for the industry. Global aptness was chosen because of the company's ability to identify and tap into foreign markets.

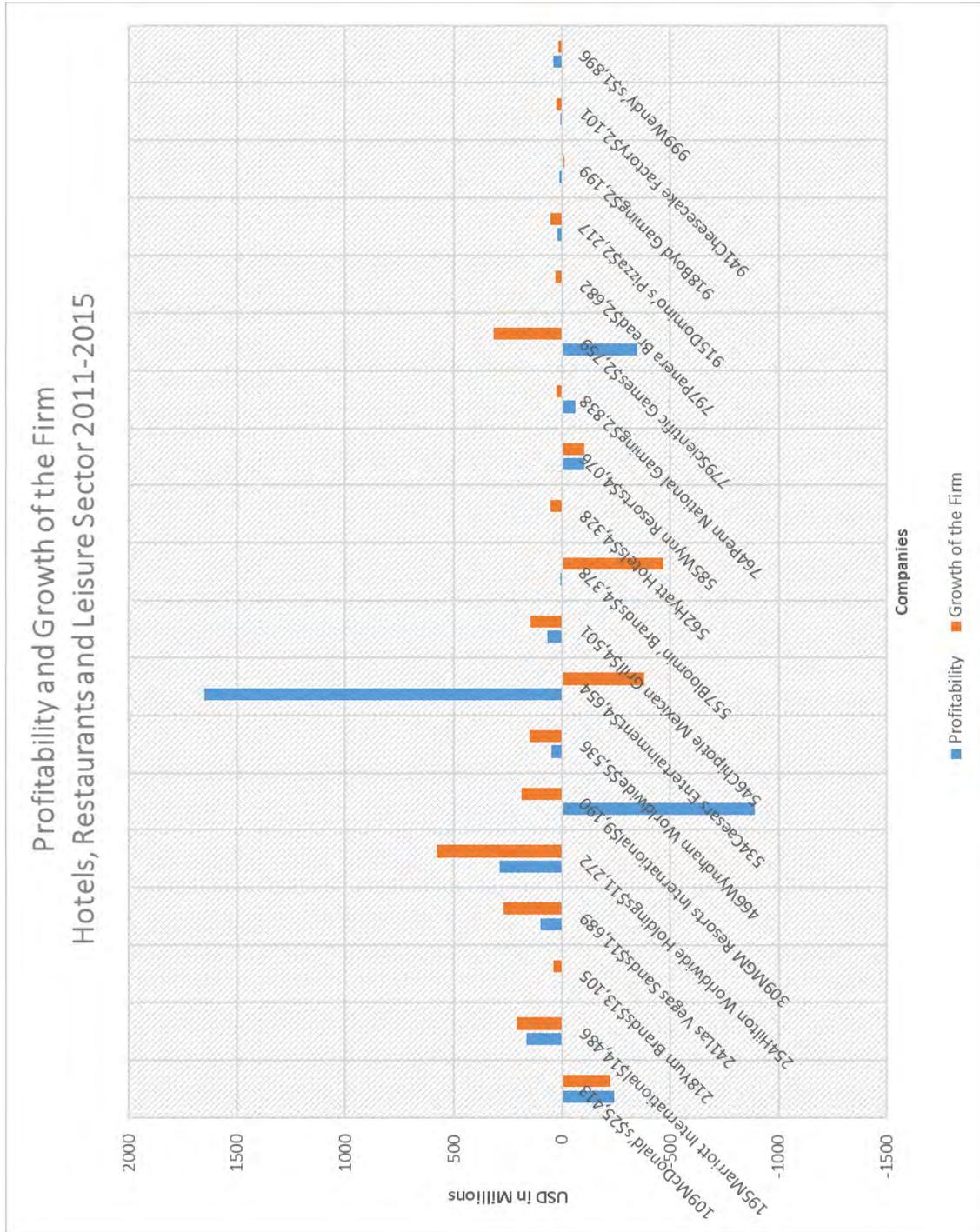


Figure 22. Profitability and growth of the firm for the Hotels, Restaurants and Leisure Sector.

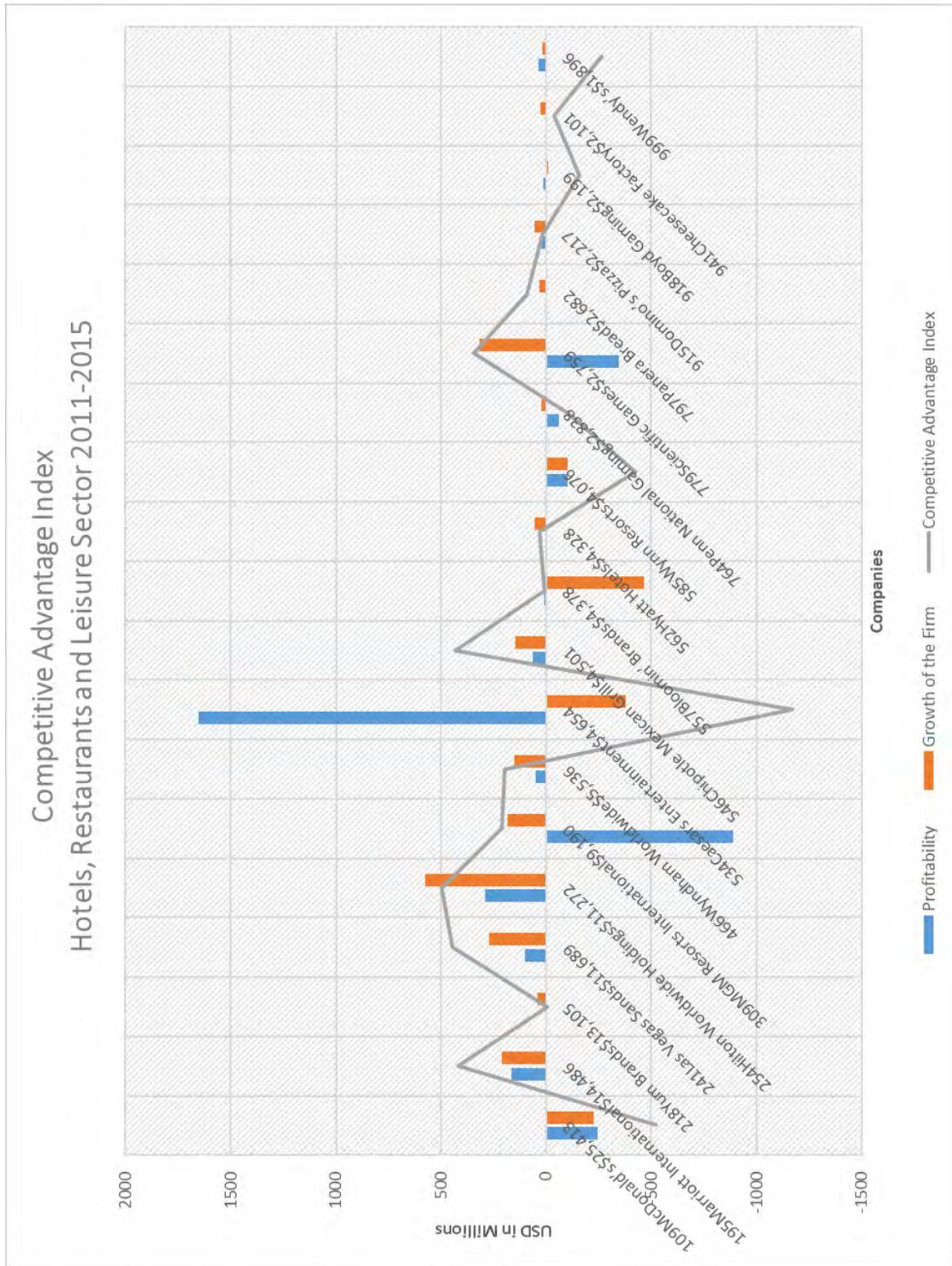


Figure 23. Competitive Advantage Index for the Hotels, Restaurants and Leisure Sector.

**Household products.** Mohawk Industries, a company specializing in floor-coverings, is the sector leader for household products (Bowman, 2013, August 2). See Figure 24 and Figure 25. Two main reasons for Mohawk Industries' success are an improving housing market and recent acquisitions (Bowman, 2013, August 2). Mohawk recently acquired Pergo, Marazzi, and Spano, which caused a 34.4% jump in sales in 2013 (Bowman, 2013, August 2). Organic sales are also improving at about 6% in quarter in 2013. Improvements in the housing market include higher average home prices, increased number of new homes being completed, and faster turnaround time for new home constructions between permitting and project completion (Speights, 2012, June 25). Management strategy is likely the main competitive advantage being utilized by Mohawk Industries. Management's decision to purchase new acquisitions and their ability to read the market sector supports this analysis.

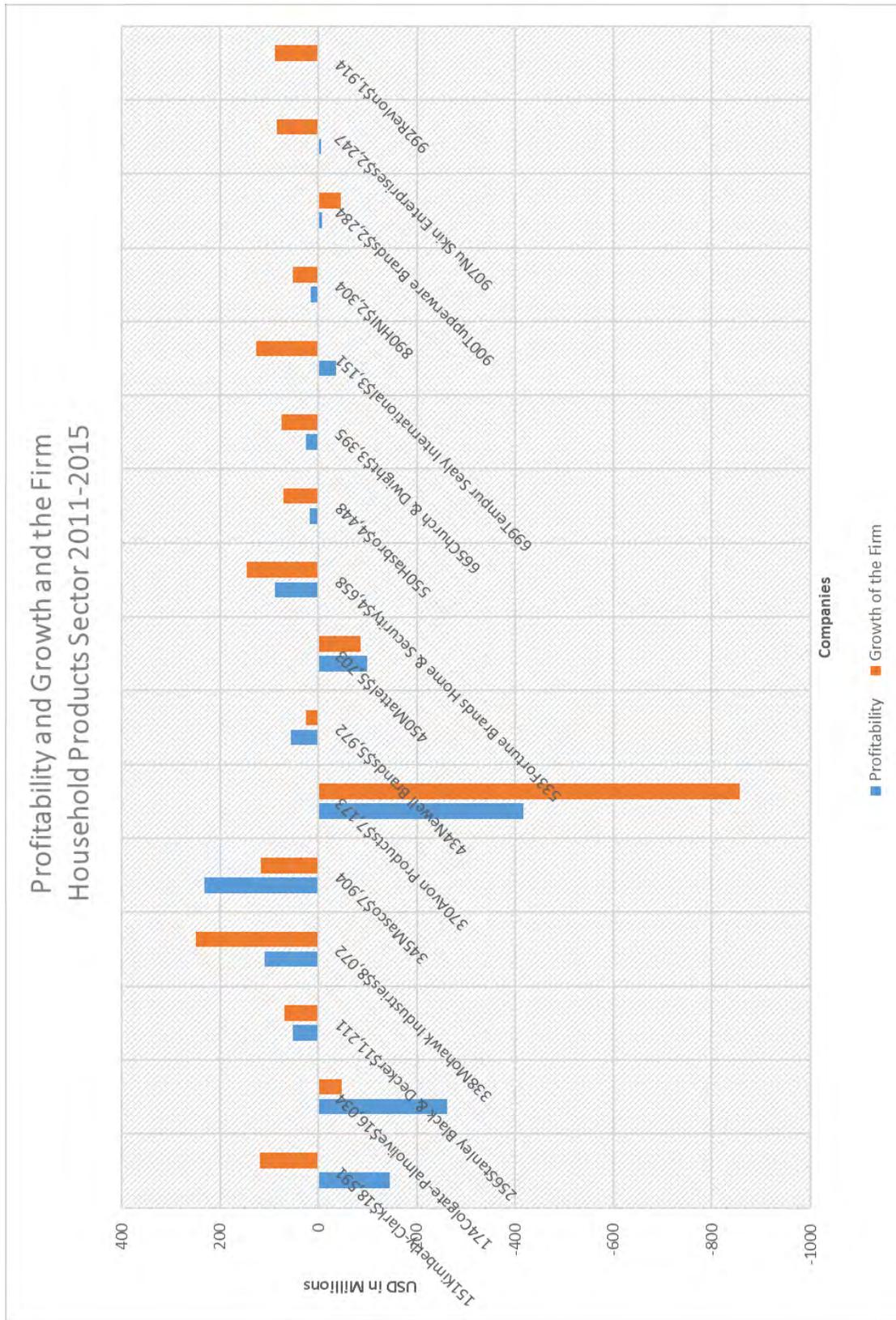


Figure 24. Profitability and growth of the firm for the Household Products Sector.

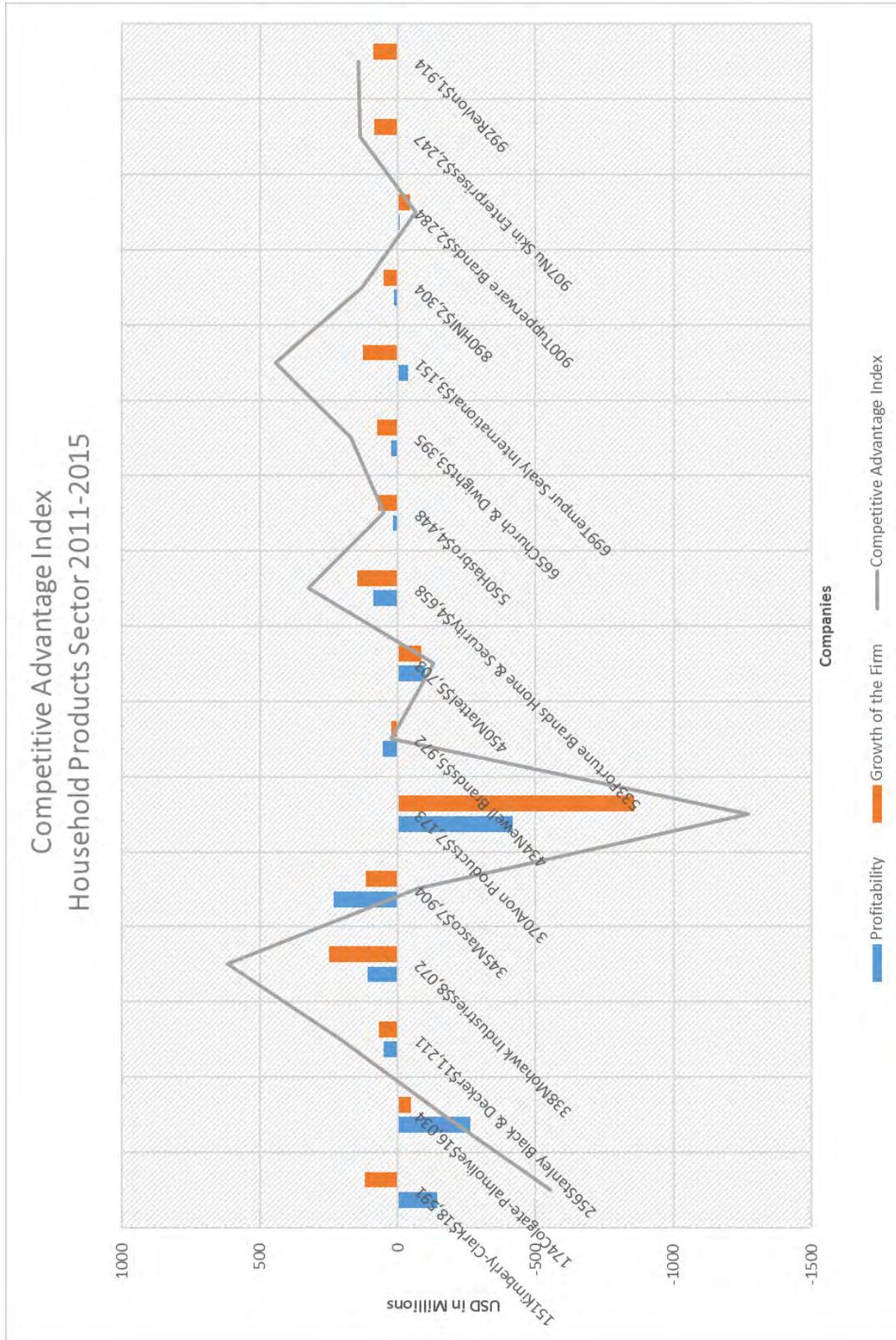


Figure 25. Competitive Advantage Index for the Household Products Sector.

**Industrials.** Colfax, a pump and valve maker, is leading the industrial sector and has the greatest competitive advantage (see Figure 26 and 27). In 2011, Colfax moved to acquire Charter (Chatterjee, 2011, September 27). Charter owns Howden, which covers air and gas handling, and ESAB, which works with welding, cutting and automation (Chatterjee, 2011, September 27). Howden is a great addition, which will improve Colfax's pump and valve business. ESAB will give Colfax a solid foundation to compete in the fabrication industry. Competency building and management strategy were determined to be the competitive advantages that Colfax leverages best. The research identified competency building as one of the key competitive advantages held by Colfax because of its making acquisitions to transfer knowledge and to improve its standing in the pump and valve market. The acquisitions, which were made to better position the organization for future growth and stability, indicate that management strategy is also a strength of Colfax.

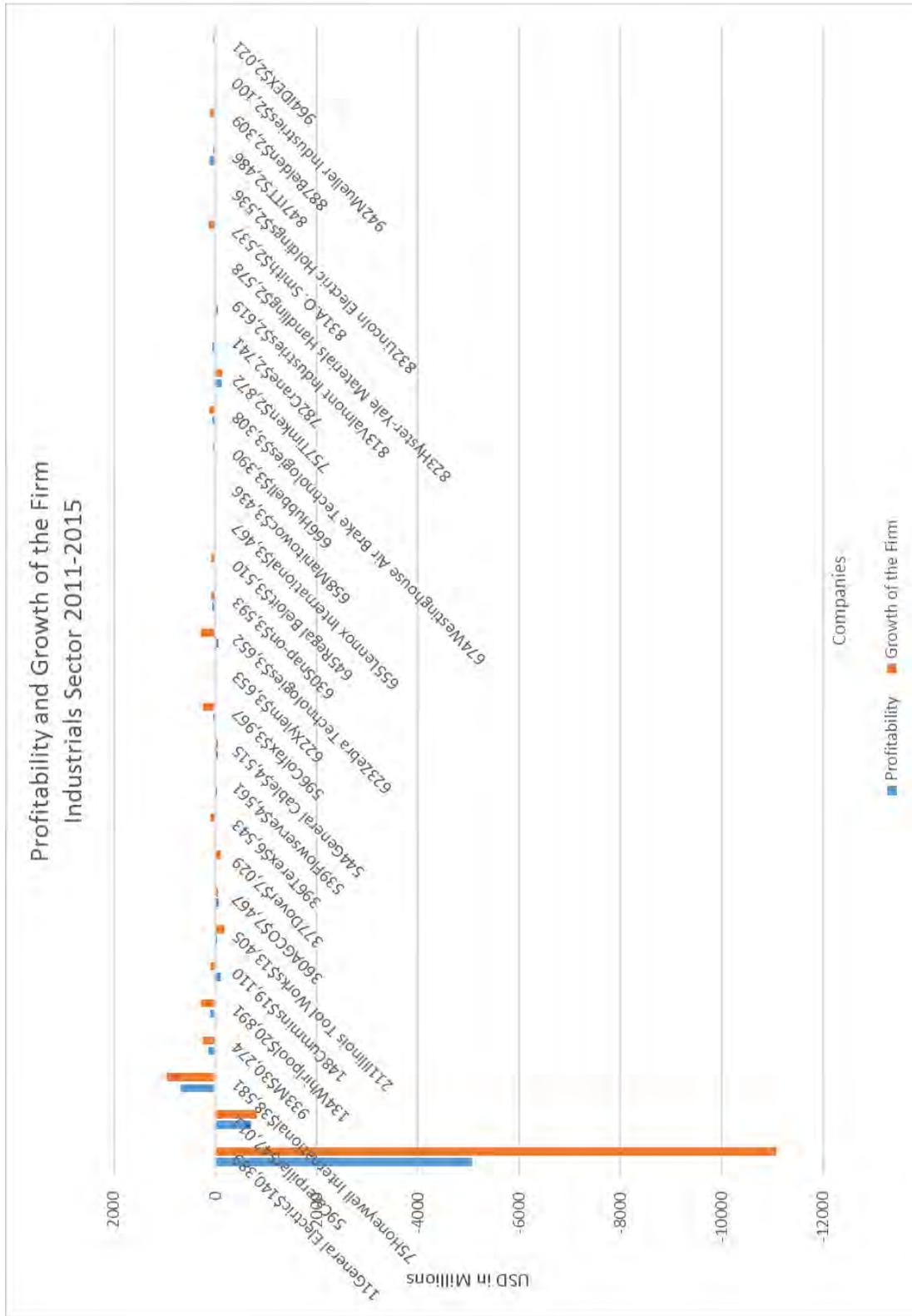


Figure 26. Profitability and growth of the firm for the Industrials Sector.

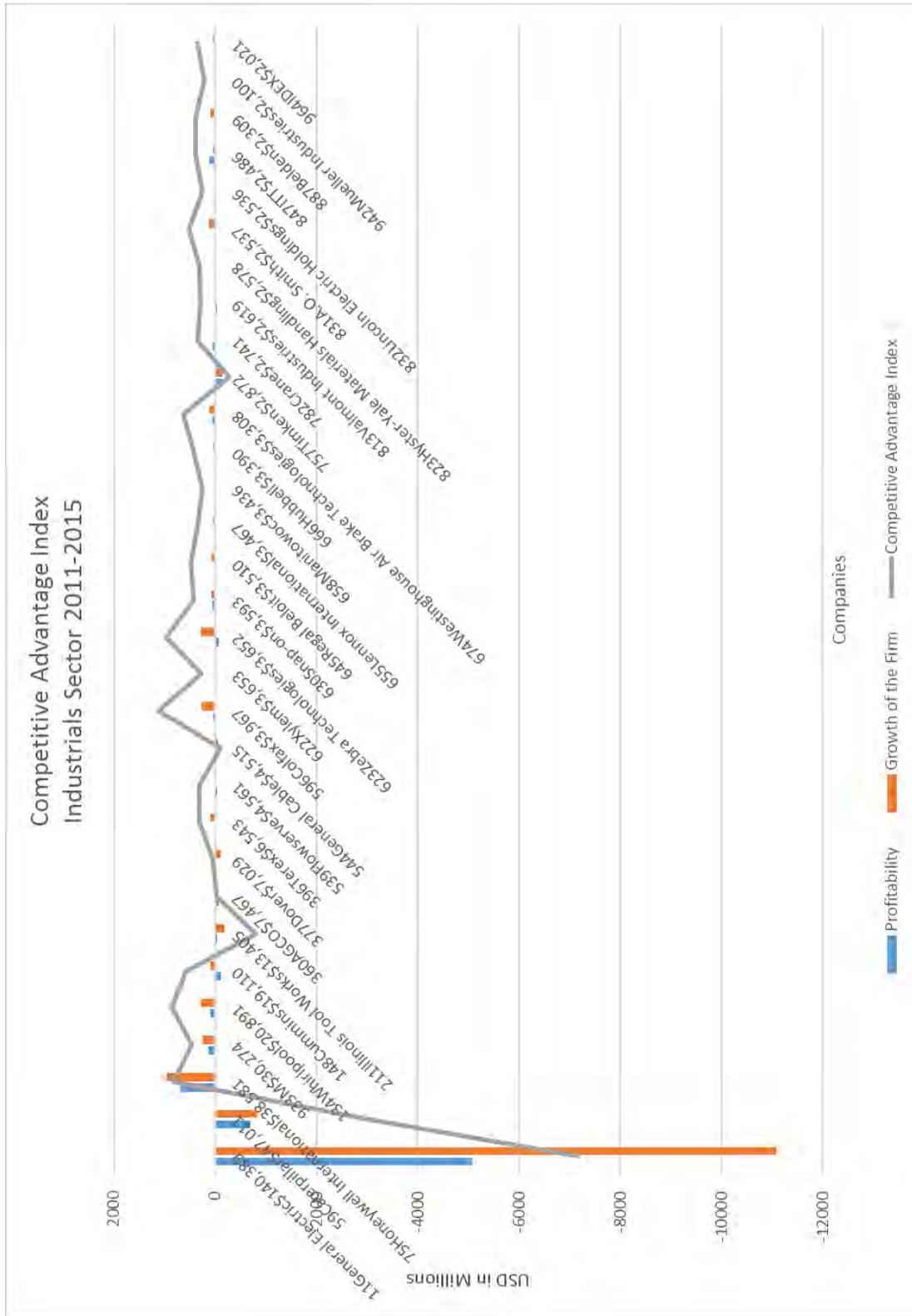


Figure 27. Competitive Advantage Index for the Industrials Sector.

**Materials.** Packaging Corporation of America, a producer of high-quality packaging solutions, is the competitive advantage leader for the materials sector (Saglimbeni, 2013, April 22). See Figure 28 and Figure 29. Packaging Corp. is the fastest growing company in the materials sector because of economic demand (Saglimbeni, 2013, April 22). The current industrial market requires more packaging because of more goods being shipped by individual consumers and businesses (Saglimbeni, 2013, April 22). Packaging Corp. has also recently acquired its closest rival Boise to increase the organization's overall capacity. The acquisition positioned Packaging Corp. to be the fourth largest company in the industry (Saglimbeni, 2013, April 22). Packaging Corp. was identified to have competency building and management strategy as competitive advantages. The recent acquisition was a solid move to become an industry leader through removing competition while reading the market for future areas of growth. The acquisition also positioned Packaging Corp. to grow to effectively meet market demand with additional production capabilities and a new competency area.

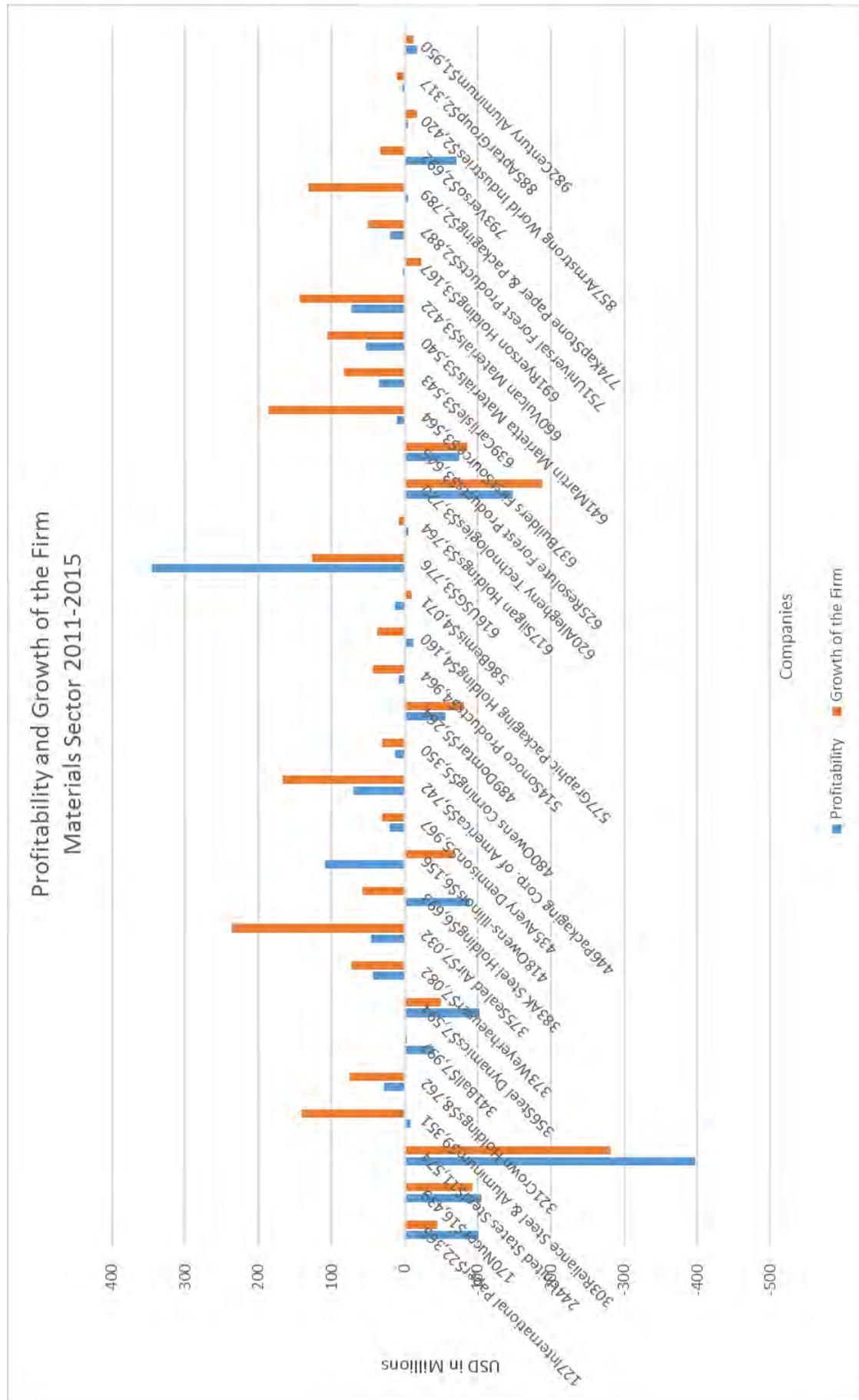


Figure 28. Profitability and growth of the firm for the Materials Sector.

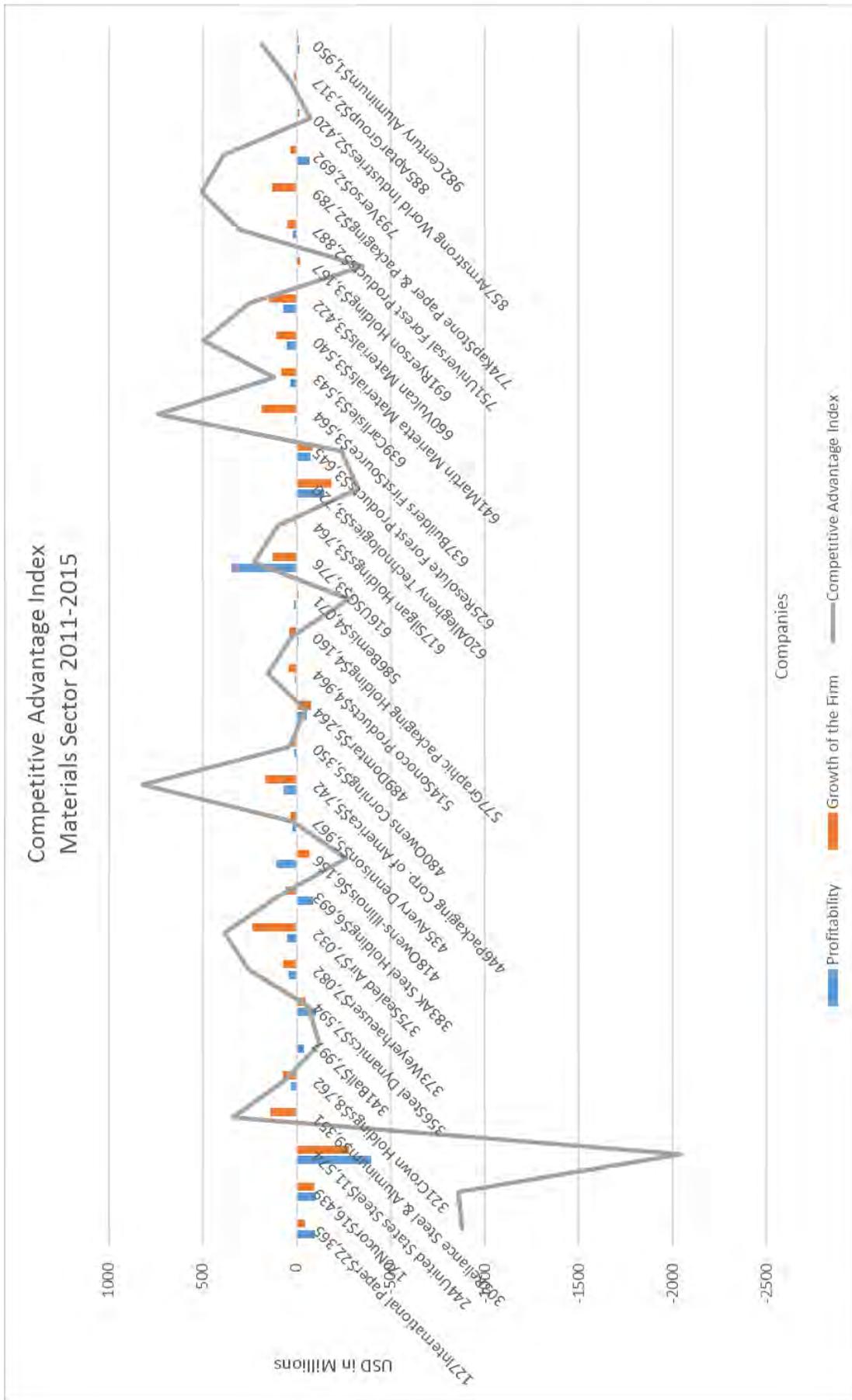


Figure 29. Competitive Advantage Index for the Materials Sector.

**Media.** Discovery Communications and Live Nation Entertainment are leading the media sector and have the greatest competitive advantage. Discovery Communications is achieving industry leading revenue growth (Saglimbeni, 2014, April 22). See Figure 30 and Figure 31. Most of this growth is connected to the hit show *The Deadliest Catch* (Saglimbeni, 2014, April 22). Learning from the show's success, Discovery Communications has produced other similar shows, such as *Gold Rush* and *Naked and Afraid*. This genre expansion has been inexpensive and has maintained Discovery Communications' positioning in the market.

Live Nation Entertainment, a live entertainment organization operating in live music events, ticketing services, sponsorship and advertising sales, and artist management and services, is expanding its gross profit margins through internal competency expansion (Malin, 2015, July 20). Although the overall number of fans going to live events is slowly dropping, Live National Entertainment can increase the profit from each fan through multiple integrated purchases. A typical fan buys tickets from a ticket platform, like Ticketmaster, sees advertising sold by the company, and purchases merchandise. The integration of multiple purchases per user garners Live Nation Entertainment an additional 14.4% profit above its functional profit margin (Malin, 2015, July 20). The competitive advantage factor which is most effective in the media sector is competency building, which is indicated by Discovery Communications and Live Nation Entertainment's ability to effectively build internal products to enhance the customer experience and to maintain their customer base.

Profitability and Growth in the Firm  
Media Sector 2011-2015

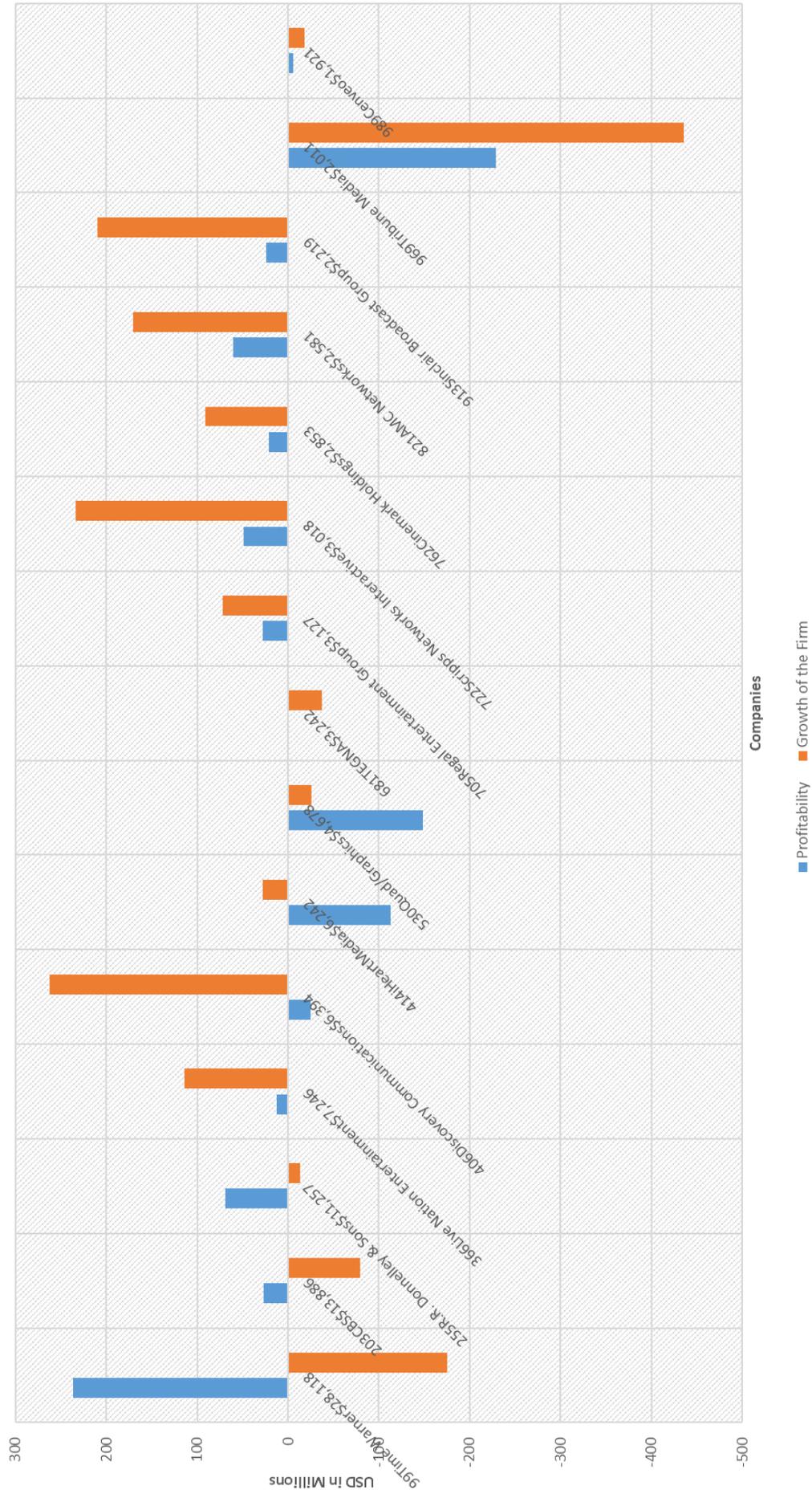


Figure 30. Profitability and growth of the firm for the Media Sector.

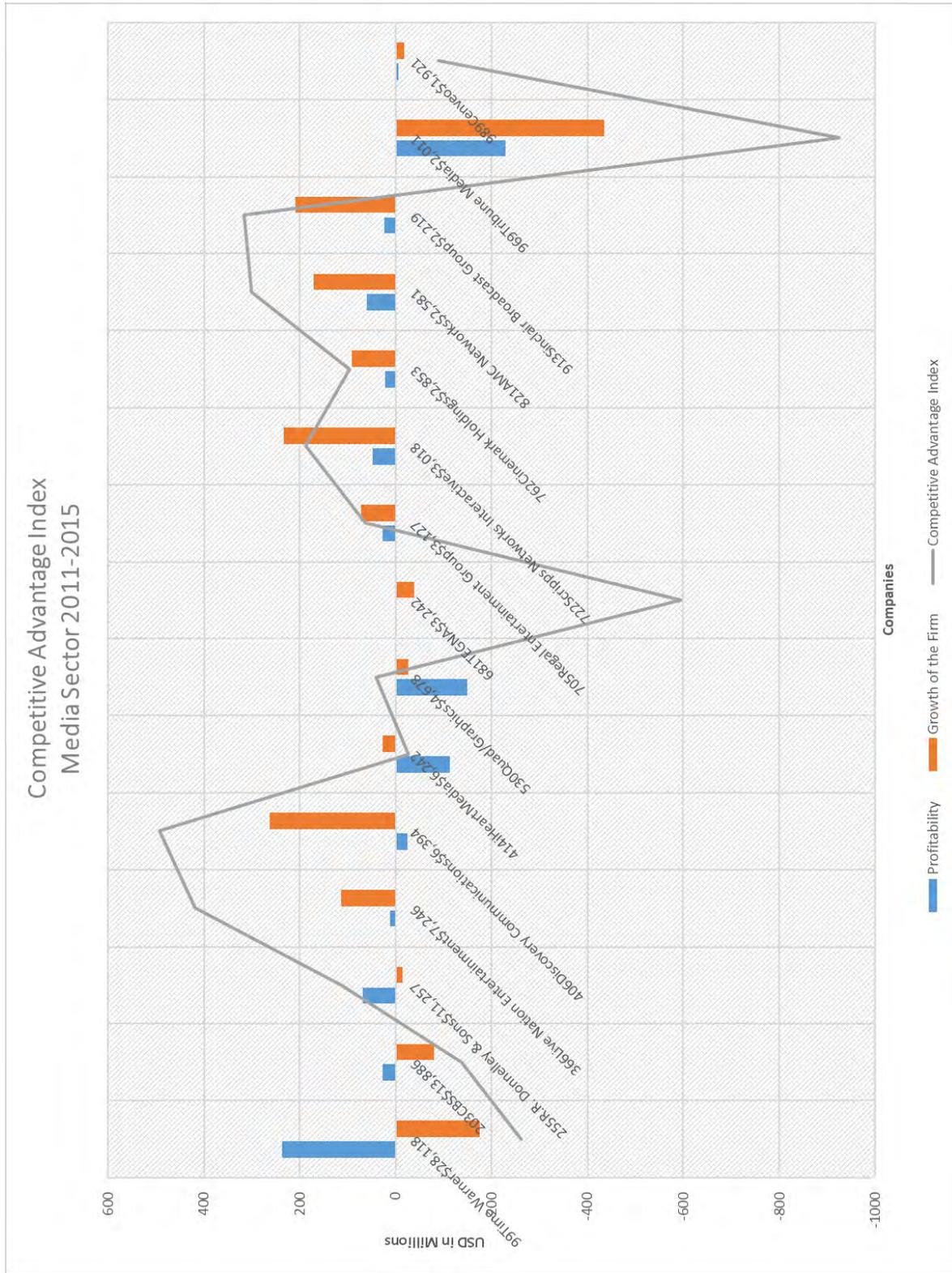


Figure 31. Competitive Advantage Index for the Media Sector.

**Motor vehicles and parts.** Ford Motors is the competitive advantage leader for the motor vehicles and parts sector (see Figure 32 and Figure 33). Ford is seeing major growth in the United States because of a changeover to an aluminum-body F-150 (Levine-Weinberg, 2015b, December 6). The switch from a steel to aluminum body disrupted Ford's sales during 2015, but they recovered by the end of the year with more retail than fleet sales 150 (Levine-Weinberg, 2015b, December 6). It was initially thought that Ford would have to increase its incentives to see a F-150 sales recovery, but Ford maintained steady sales growth. Ford is also seeing sales growth in China because of their crossover SUVs (Rosevear, 2015, December 7). Ford pursued the Chinese market by sending over 15 new vehicle makes in 2015 and offering a China exclusive Lincoln Continental. Ford has the competitive advantage traits of innovation and global aptness. Innovation is one of Ford's competitive advantage traits because of the development and market entry of an aluminum bodied automobile. Global aptness is a competitive advantage trait because of the market entry and retail growth of the Chinese automotive market.

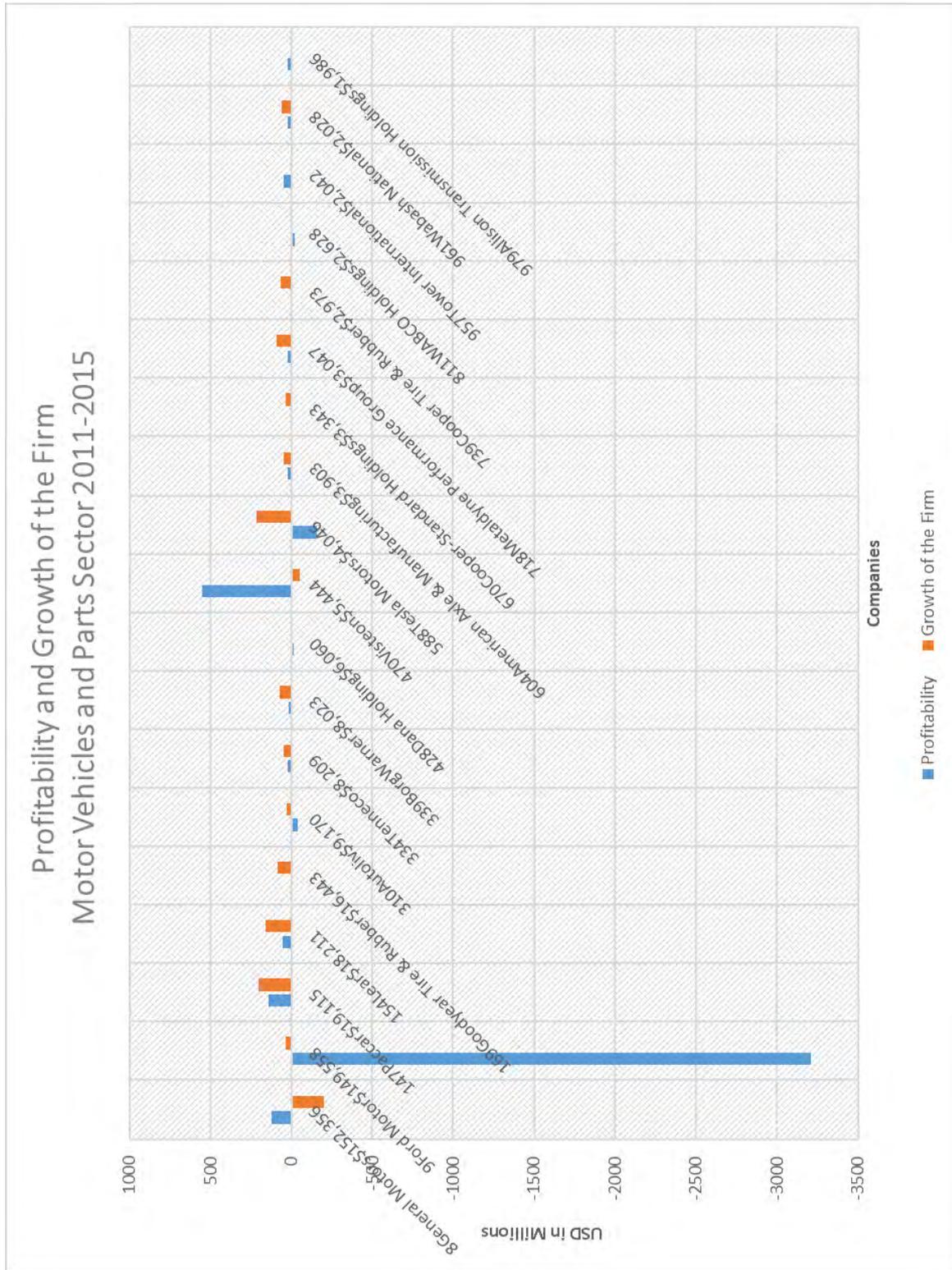


Figure 32. Profitability and growth of the firm for the Motor Vehicles and Parts Sector.

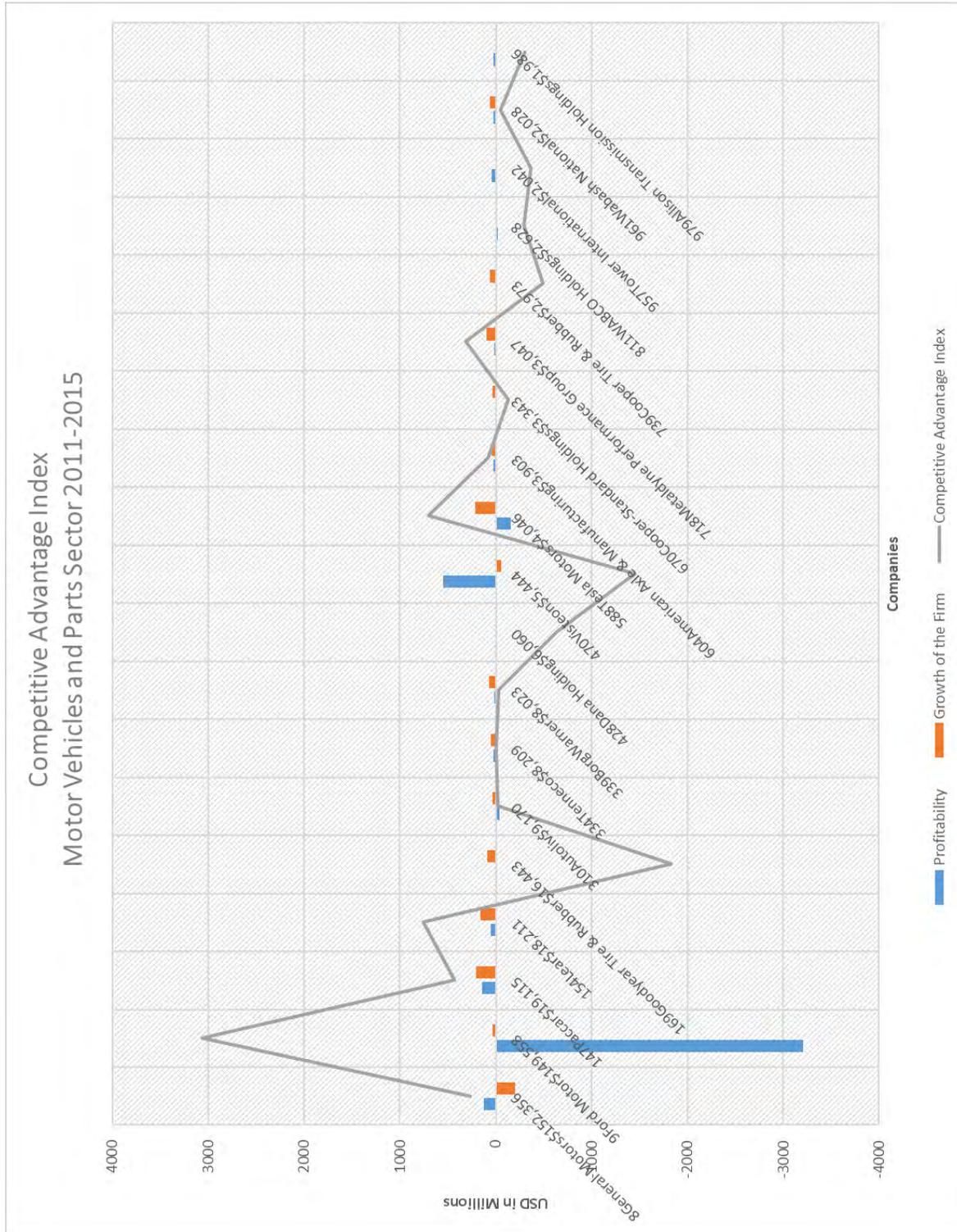


Figure 33. Competitive Advantage Index for the Motor Vehicles and Parts Sector.

**Retailing.** Penske Automotive Group is the company with the strongest competitive advantage in the retailing sector (see Figure 34 and Figure 35). Penske Automotive Group is a new- and used-car dealer with strong sales in both the U.S. and the U.K. (Duprey, 2013, July 17). The economy from 2013 through 2016 was slow going for sales globally (Smith, 2016c, October 27). In the slow global economy, a big factor holding back Penske Automotive Group from better revenue, was the weak exchange rate with the U.K. (Smith, 2016c, October 27). Penske Automotive Group's top competitive advantage trait is global aptness for the ability to maintain sales overseas in a slow market.

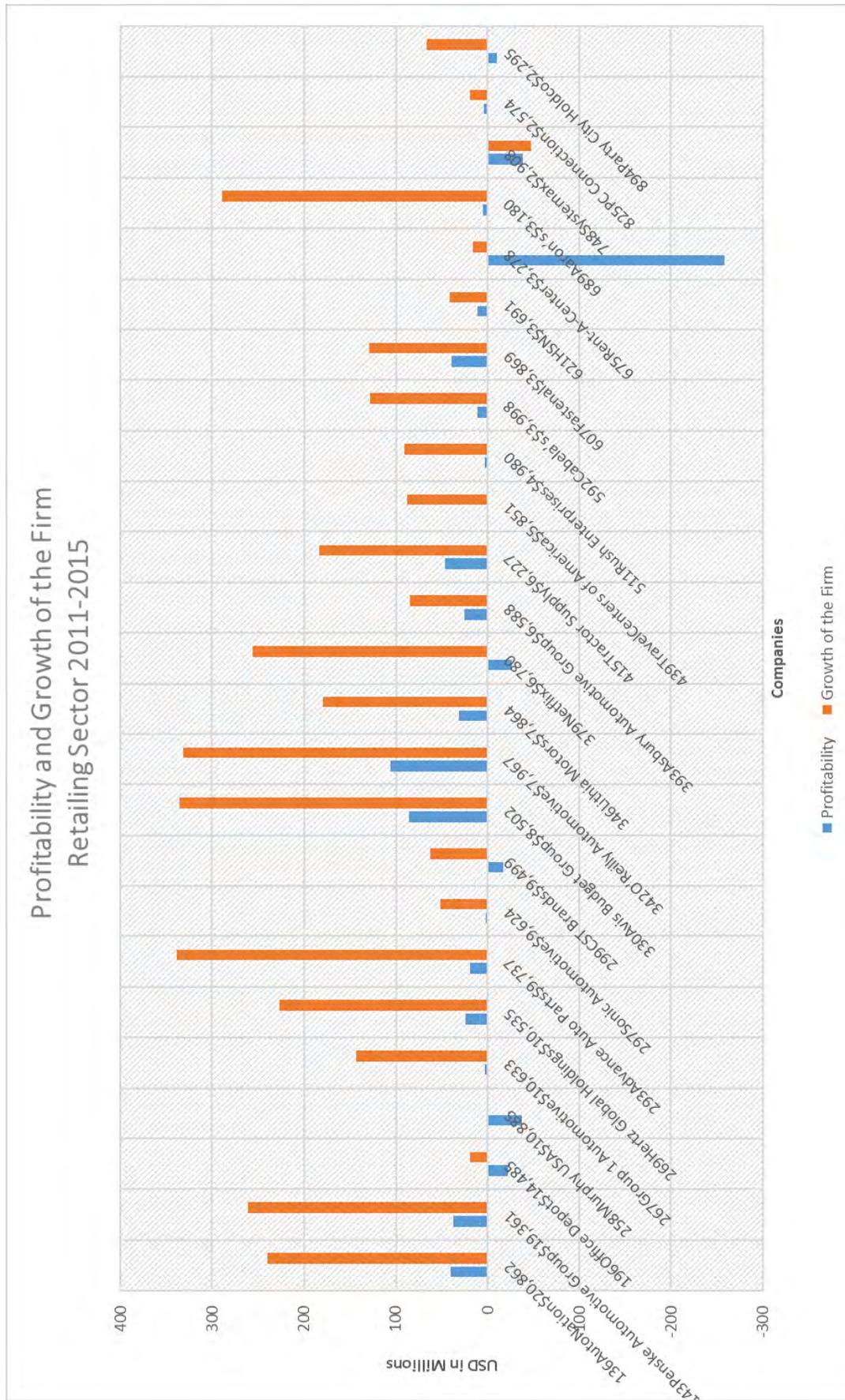


Figure 34. Profitability and growth of the firm for the Retailing Sector.

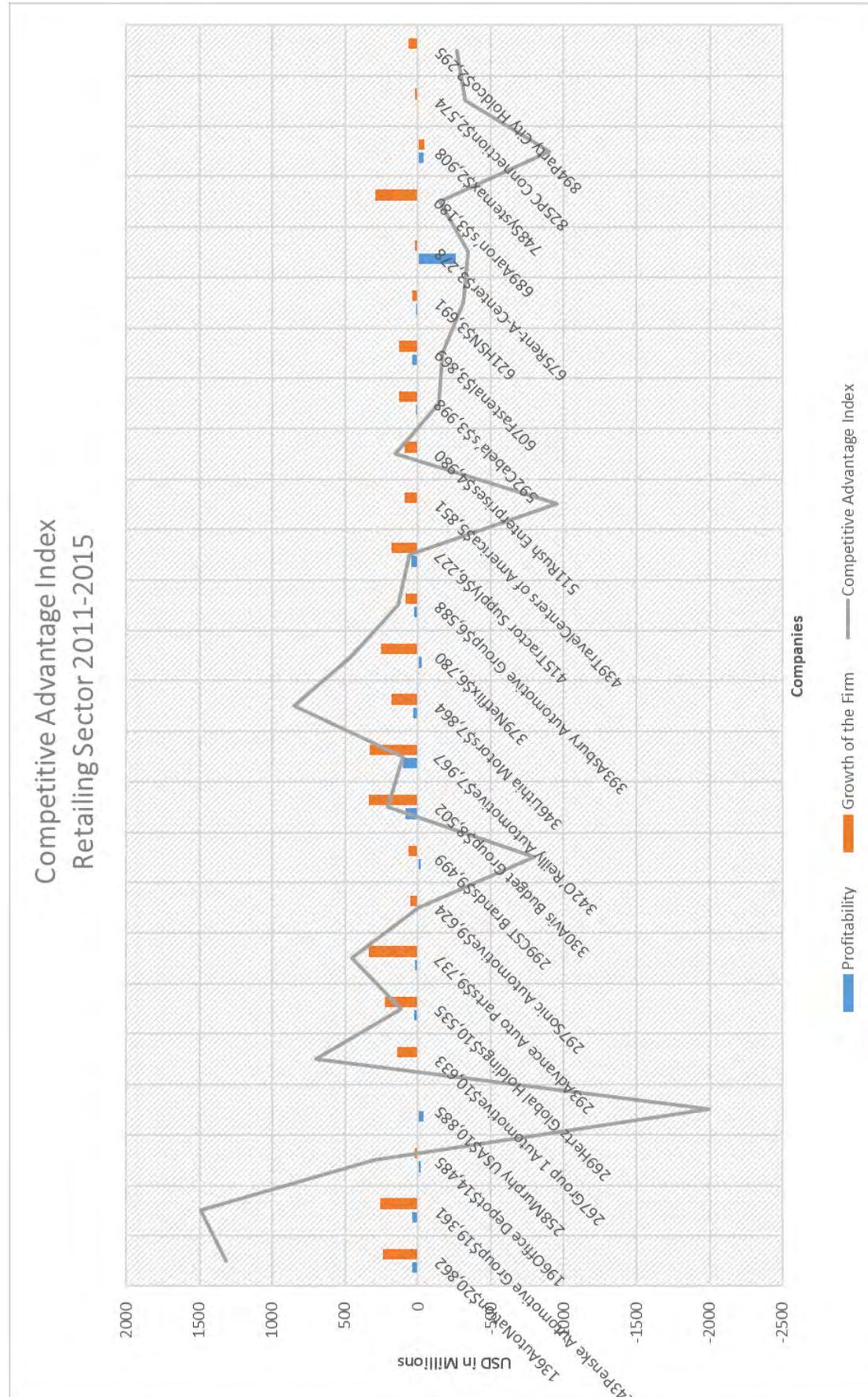


Figure 35. Competitive Advantage Index for the Retailing Sector.

**Technology.** Amazon is the competitive advantage leader in the technology sector (see Figure 36 and Figure 37). Amazon created competitive advantage for itself in several ways: Amazon Web Services, Amazon Prime memberships, and utilization of Fulfilment by Amazon (Levy, 2015, December 23). Amazon Web Services has been growing at a rate of 49% for years and profit margins have been maintained despite price cuts to remain competitive (Levy, 2015, December 23). Prime Day was created to celebrate the company's 20<sup>th</sup> anniversary in 2014 and bring Christmas to all Amazon Prime members in July. After the introduction of Prime Day, the number of Amazon Prime memberships greatly increased (Levy, 2015, December 23). Also, the success of Prime Day shipments for third-party sellers greatly increased Amazon's logistics group, Fulfilment by Amazon. Because of these developments, Amazon is being identified with the competitive advantages of innovation and organizational learning and competency building.

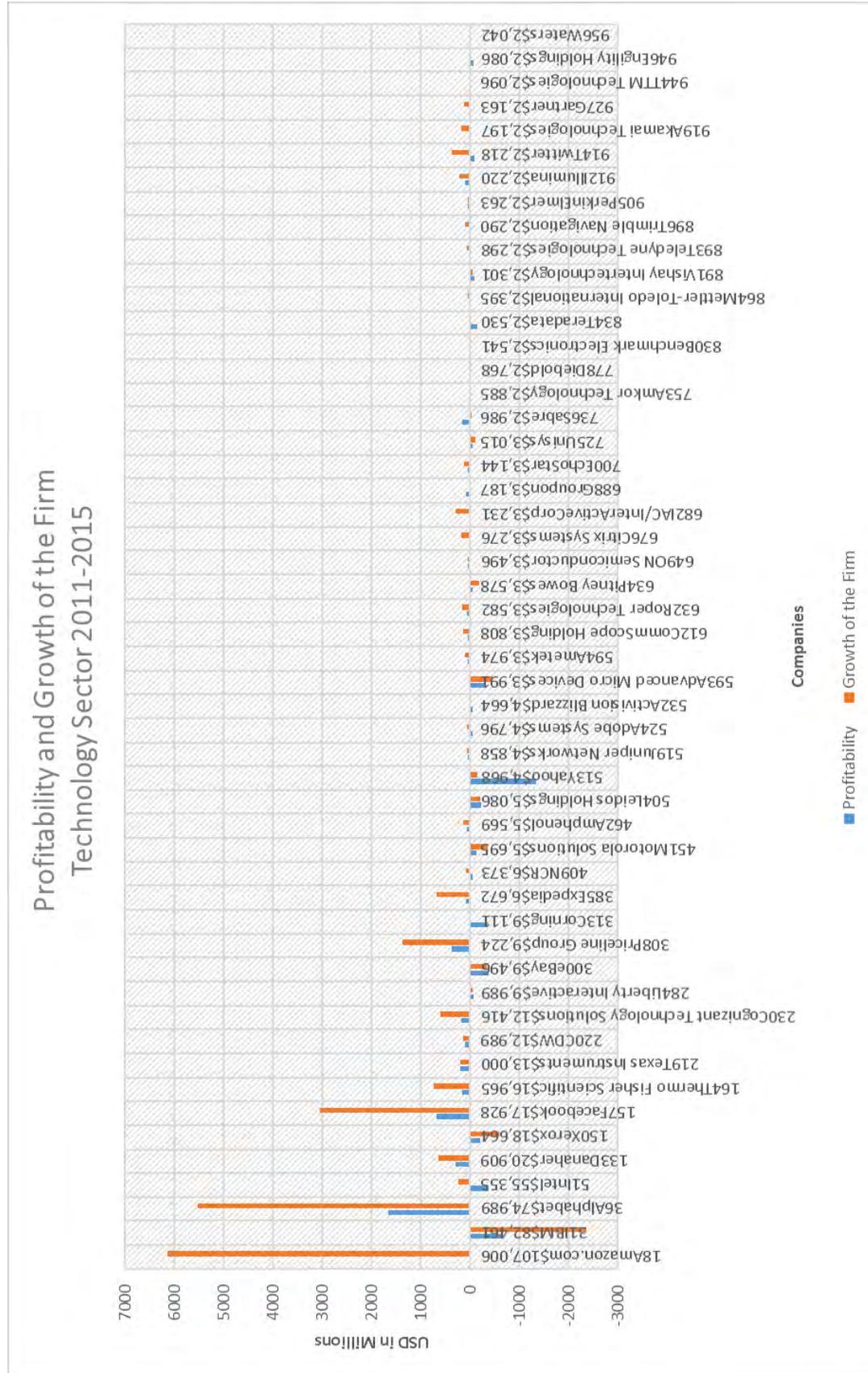


Figure 36. Profitability and growth of the firm for the Technology Sector.

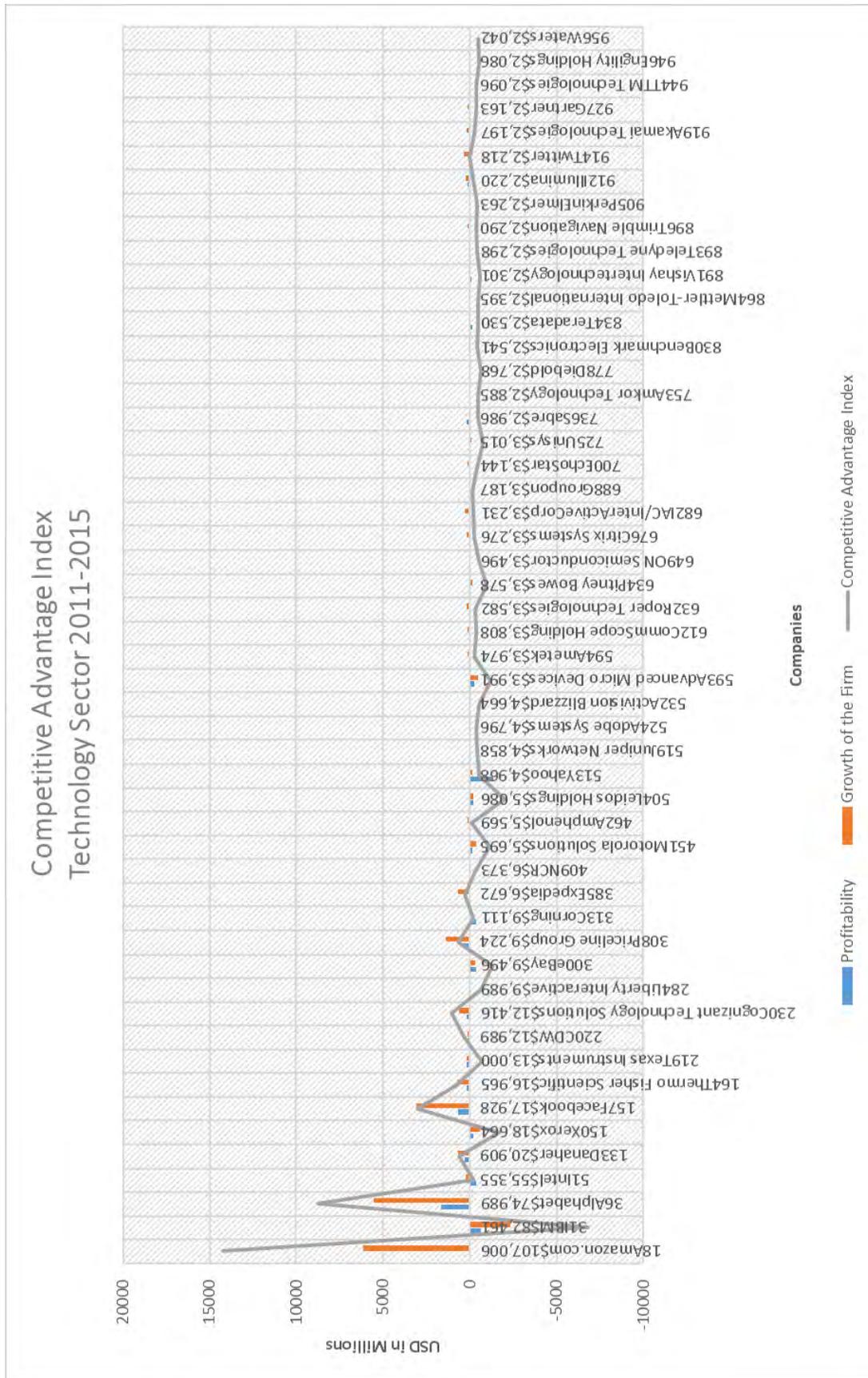


Figure 37. Competitive Advantage Index for the Technology Sector.

**Telecommunications.** Verizon is leading the pack in competitive advantage for the telecommunications sector (see Figure 38 and Figure 39). When it comes to having an advantage, having the best product is a good place to start. Verizon Communications' network is the top-performing network in the nation and it is unlikely that the competition will be able to beat them anytime soon (Neiger, 2015, August 22). This does not come without a cost, though, as Verizon is investing heavily in its infrastructure to ensure its network dominance. Verizon is also taking an aggressive stance when it comes to customer retention and upselling products (Kline, 2015, June 1). Verizon currently is monitoring "billions of data points a day from 7 million Verizon FiOS customers" (Kline, 2015, June 1, para. 6). Using this information from data mining, customer service agents can accurately assess customer resizing packages and sell new services. Verizon Communications leverages organizational learning and competency building and organizational strategy capabilities to maintain its competitive advantage.

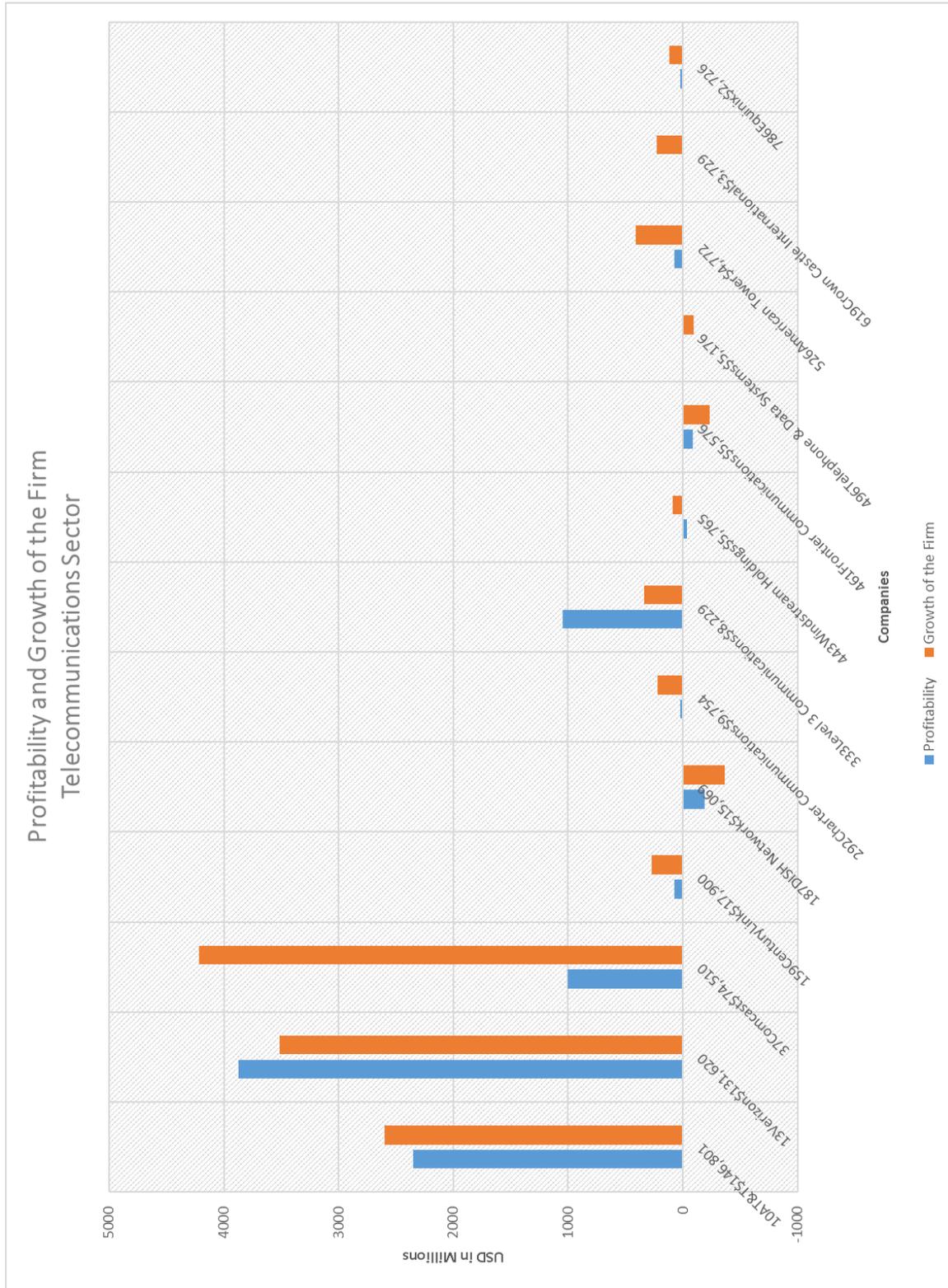


Figure 38. Profitability and growth of the firm for the Telecommunications Sector.

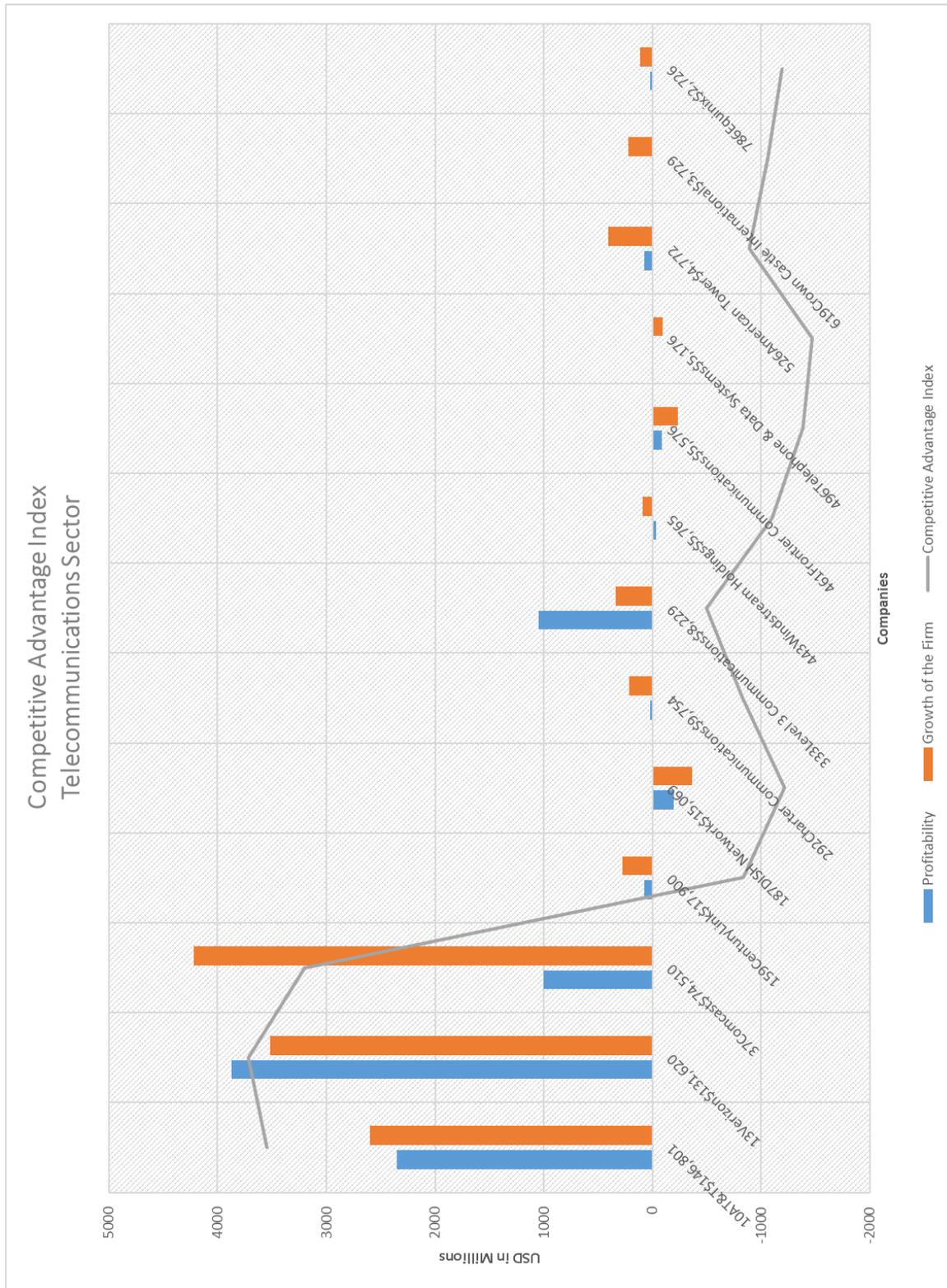


Figure 39. Competitive Advantage Index for the Telecommunications Sector.

**Transportation.** American Airlines Group is leading the transportation sector in competitive advantage (see Figure 40 and Figure 41). American Airlines connected itineraries with Alaska Air to improve the domestic routes on the northwest coast (Levine-Weinberg, 2015c, August 6). This collaboration was designed to improve gaps in each company's route network because of pressure from competitor Delta Air Lines (Levine-Weinberg, 2015c, August 6). American Airlines is making changes to meet market demand and to please its loyal customer base, as well (Levine-Weinberg, 2015a, October 30). Most of American Airlines customers are loyal, high-fare customers, who fly more than once a year, so the company treats the main cabin as the commodity product (Levine-Weinberg, 2015a, October 30). Not to be out done by lower-fare airlines, American Airlines is starting ultra-low-fare price matching to ensure coach seats are filled. For these reasons, American Airlines is identified with the competitive advantages of organizational learning and competency building and management strategy capabilities.



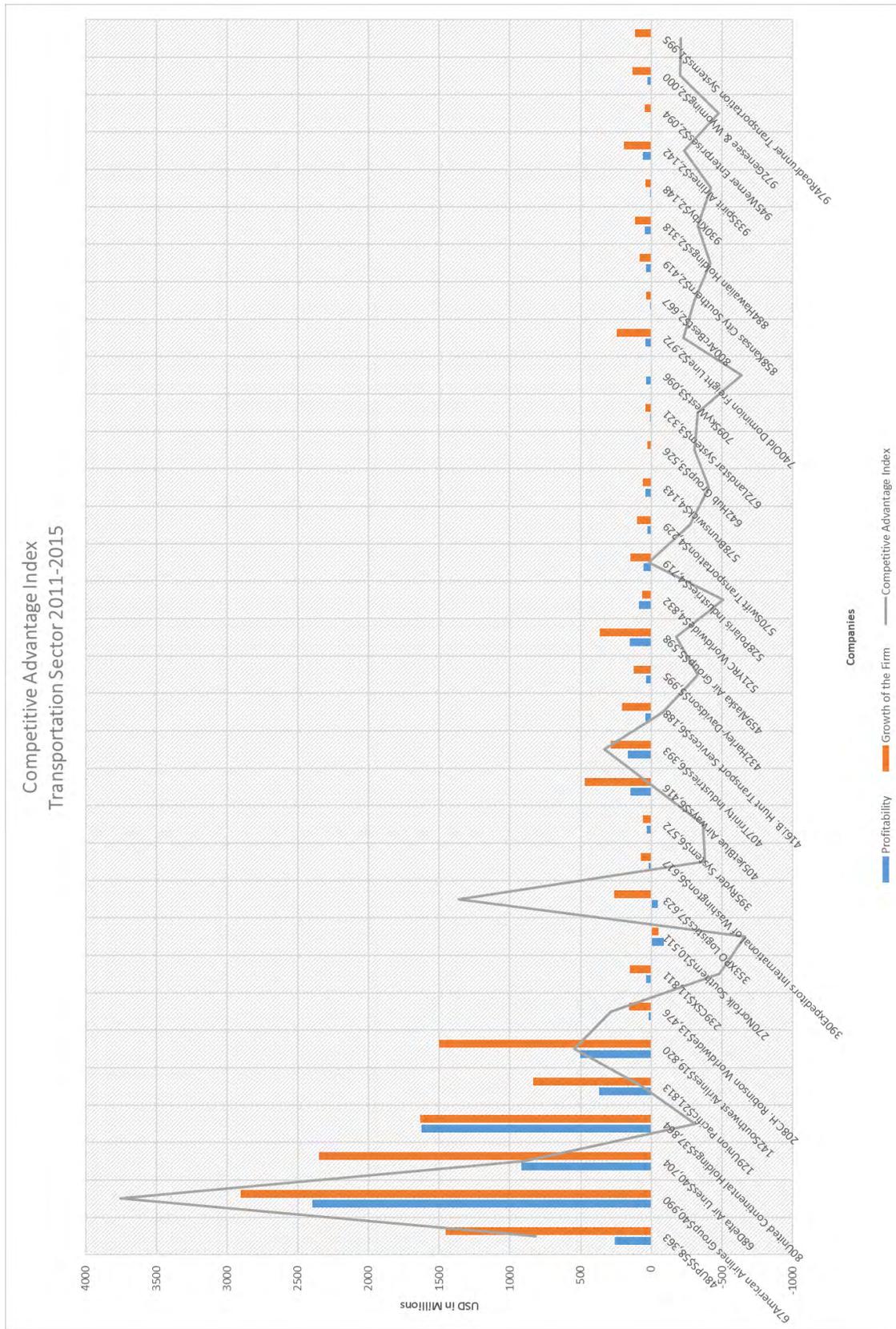


Figure 41. Competitive Advantage Index for the Transportation Sector.

**Wholesalers.** SpartanNash, a supermarket chain, gas station convenience store chain, and grocery distributor leads the wholesalers group in competitive advantage (see Figure 42 and Figure 43). Spartan runs its grocery business out of Indiana and Michigan (Smith, 2012, August 6). A benefit to Spartan's business has been the 2009 increase of food stamps which supported 15% of the U.S. population (Marasco, 2013, November 7). The food stamp increase from the recession has since been repealed, but Spartan was ready with a strategic plan to remodel its stores to attract a higher-income demographic. Spartan is associated with the competitive advantages of organizational learning and competency building and management strategy capabilities.

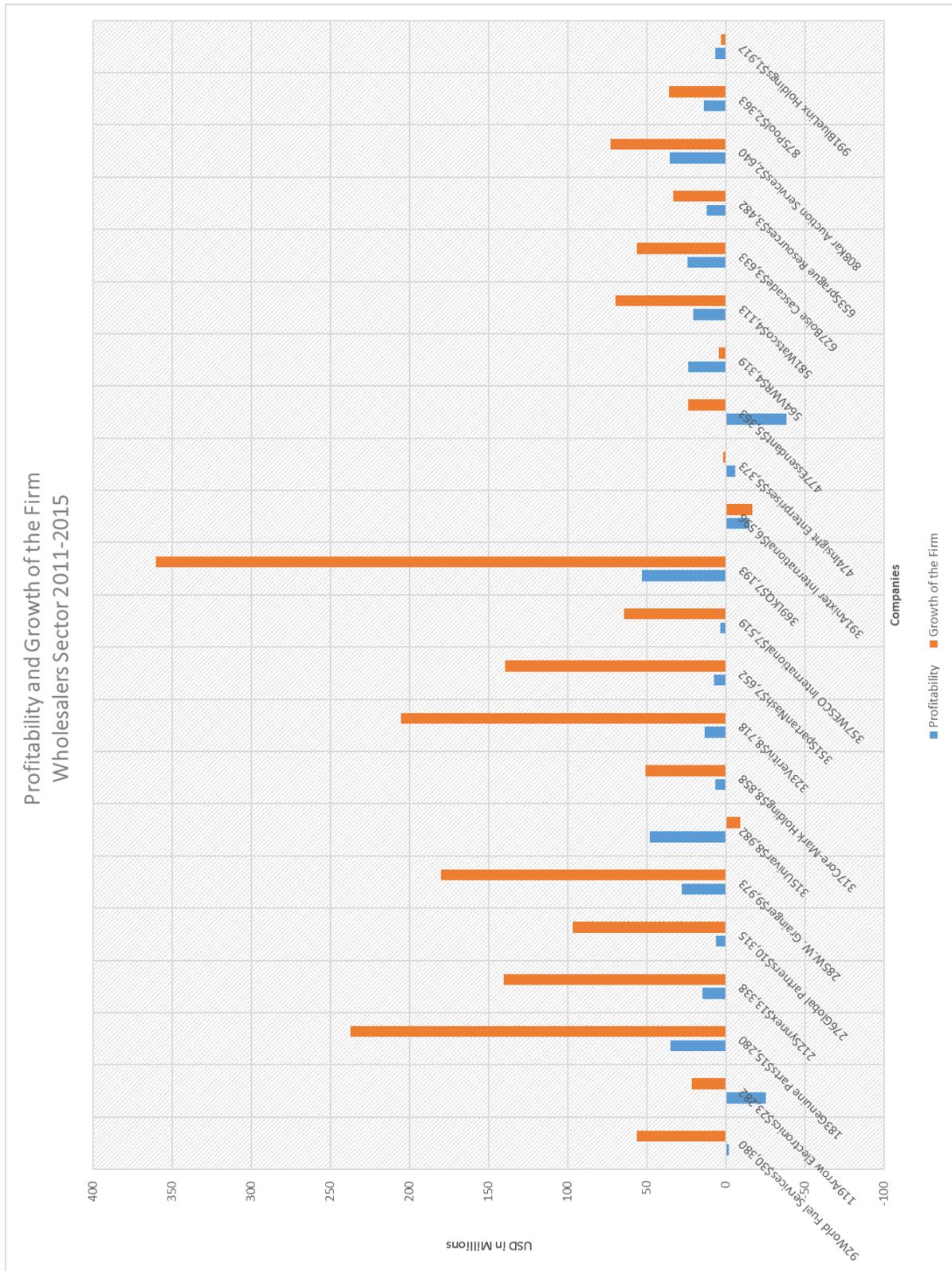


Figure 42. Profitability and growth of the firm for the Wholesalers Sector.

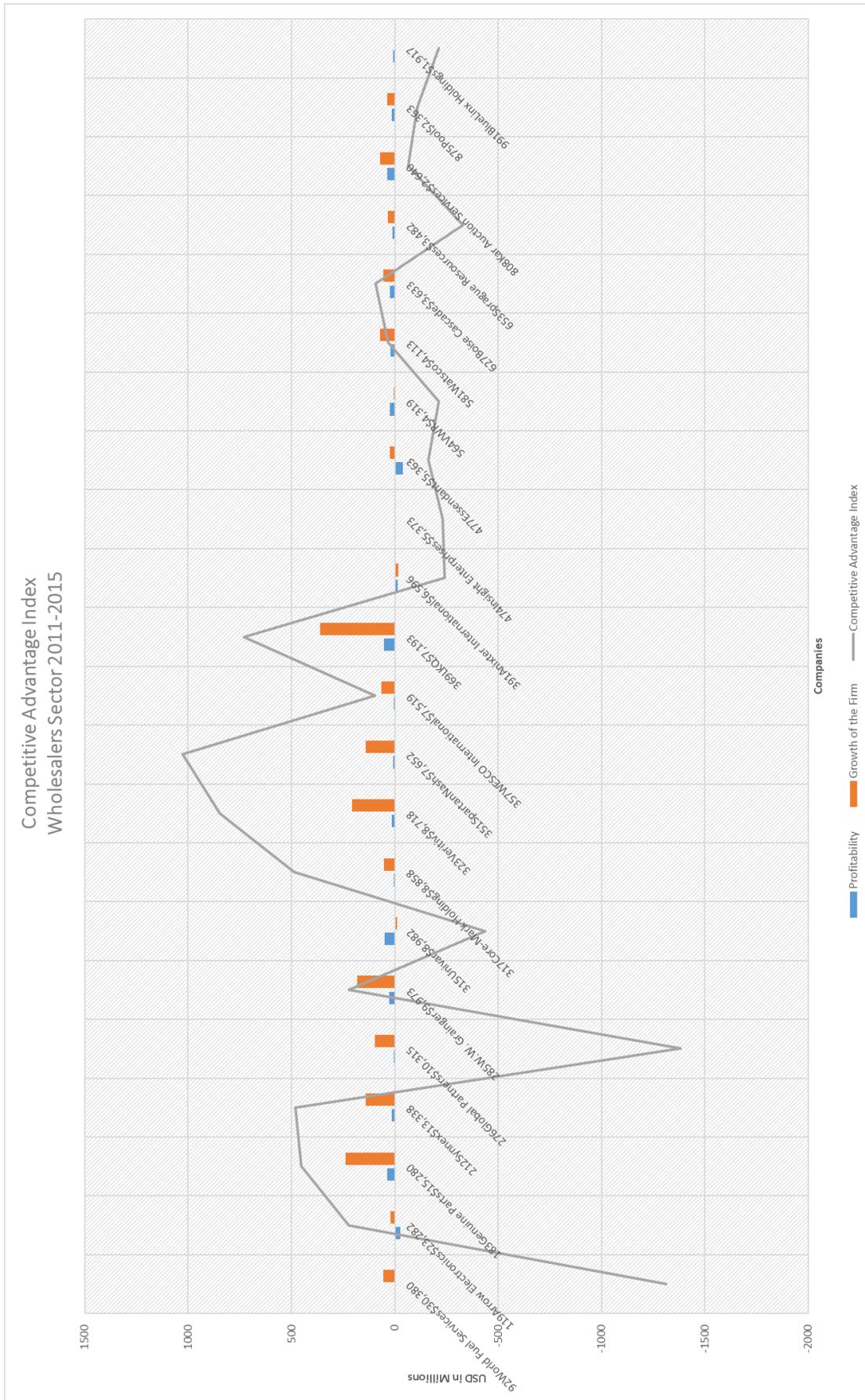


Figure 43. Competitive Advantage Index for the Wholesalers Sector.

## Examination of Research Questions and Testing of Hypotheses

**Main research questions.** The main research question (H1) and the three related research questions, numbered (H2) through (H4), are as follows:

*H1: How important are the intangible factors of an organizational culture and how do they affect the output of a marketplace sustainable competitive advantage in the forms of profitability and growth when altered?*

The intangible factors of competitive advantage are very important for determining a company's overall market holding and potential for future growth. The importance of intangible factors upon marketplace performance is most noticeable in organizations that are trending up or down in market share growth. Companies can be identified as being profitable or growing by their income statements, but the Competitive Advantage Index (CAI) identifies current and potential future growth patterns over the entire relevant industrial sector. If the identified factors of competitive advantage were removed from the identified 'best in class,' nearly all the relative industry revenue growth would be removed. Since there is no industrial sector with little or no defined change in the Competitive Advantage Index (CAI), the researcher concludes that the ranking of revenue growth within a relative industrial sector will be determined by the speed at which an organization meets consumer demand compared to the offering of a competing firm.

*H2: How is competitive advantage distributed within a defined industrial sector?*

The distribution of competitive advantage varies from sector to sector, but there are common patterns that emerged in this research. There are two main patterns which occur. One pattern is a small group of one or more leaders which dominate most of the competitive advantage for the sector. This trend indicates that most of the revenue growth for the industrial sector is constantly being absorbed by the business or businesses with the greatest competitive

advantage. This trend also indicates the competition in this sector is far behind or unable to duplicate the intangible identified trait of competitive advantage. This first trend should indicate that these businesses with far reaching competitive advantages will have sustainable and consistent growth for years to come.

The second pattern involves a small group of leaders being closely followed by their competitors. In this second pattern, the leaders are leveling out and their competition is beginning to catch up. This trend indicates a good portion of the revenue growth for the industrial sector is constantly being absorbed by the business or businesses with the greatest competitive advantage. This trend also indicates the competition in this sector is closing in on the sector leaders or is finding newly identified intangible traits of competitive advantage. This second trend should indicate that the businesses with marginally better competitive advantages may have difficulty sustaining their competitive advantages and there may be a new sector leader in the near future.

***H3: How is competitive advantage distribution similar or different between different industrial sectors?***

As seen in Table 6, there is a full distribution of competitive advantage traits between the relevant industrial sectors, but there are predominate traits in today's marketplace. Management, organizational, and strategy capabilities to reconfigure, sense, absorb and integrate as a competitive advantage trait was the most commonly utilized. The second most utilized competitive advantage traits were organizational learning and competency building and global aptness and cultural intelligence. These initial traits were identified as the most tangible of the competitive advantage traits, since they include the finding of new markets, new management practices, or learning a new discipline. Innovation was found to be the third most utilized

competitive advantage trait. Innovation, while utilized far less than the first or second ranking competitive advantage traits, gave the businesses the furthest lead above their competitors. Social legitimacy and flexibility of cultural values were the least used competitive advantage traits.

Table 6

*Identified Competitive Advantage Traits by Industrial Sector*

Competitive Advantage Traits						
Industrial Sector	Innovation	Social Legitimacy	Flexibility of Cultural Values	Organizational Learning & Competency Building	Management, organizational, and strategy capabilities to reconfigure, sense, absorb and integrate	Global aptness and cultural intelligence
Aerospace & Defense					X	X
Apparel		X				X
Business Services					X	X
Chemicals	X	X				X
Energy					X	
Engineering & Construction			X		X	
Financials	-	-	-	-	-	-
Food and Drug Stores	-	-	-	-	-	-
Food, Beverages & Tobacco					X	X
Health Care	X			X		
Hotels, Restaurants & Leisure					X	X
Household Products					X	
Industrials				X	X	
Materials				X	X	
Media				X		
Motor Vehicles & Parts	X					X
Retailing						X
Technology	X			X		
Telecommunications				X	X	
Transportation				X	X	
Wholesalers				X	X	
Total	4	2	1	8	12	8

Note. This table shows the distribution of identified competitive advantage traits per relative industrial sector.

***H4: Is there a correlation between organization growth and profitability, and if so, does it still validate the conventional business model?***

There is a correlation between organizational growth and profitability of the firm over all the relative industrial sectors, as shown in Table 7. Among most relative industrial sectors, profitability and growth of the firm are correlated, but there are some industrial sectors where

profitability and growth of the firm are not correlated—see Table 7 for details. Apparel, business services, retailing and wholesalers were industrial sectors where there is not a correlation between profitability and growth. These findings show that the conventional model of business still applies to today's volatile marketplace; however, industry trends point to this model possibly becoming obsolete in the coming years.

Table 7

*ANOVA Results of Correlation between Profitability, Growth and Competitive Advantage by Industrial Sector*

ANOVA Results				
Industrial Sector	Profitability and Growth	Growth of the Firm and Competitive Advantage	Profitability and Competitive Advantage	Profitability, Growth of the Firm, and Competitive Advantage
Aerospace & Defense	Correlation	Correlation	Correlation	Correlation
Apparel	Not Correlated	Not Correlated	Correlation	Not Correlated
Business Services	Not Correlated	Correlation	Correlation	Correlation
Chemicals	Correlation	Correlation	Correlation	Correlation
Energy	Correlation	Correlation	Correlation	Correlation
Engineering & Construction	Correlation	Correlation	Correlation	Correlation
Financials	N/A	N/A	N/A	N/A
Food and Drug Stores	N/A	N/A	N/A	N/A
Food, Beverages & Tobacco	Correlation	Correlation	Correlation	Correlation
Health Care	Correlation	Correlation	Correlation	Correlation
Hotels, Restaurants & Leisure	Correlation	Correlation	Correlation	Correlation
Household Products	Correlation	Correlation	Correlation	Correlation
Industrials	Correlation	Correlation	Correlation	Correlation
Materials	Correlation	Correlation	Correlation	Correlation
Media	Correlation	Correlation	Correlation	Correlation
Motor Vehicles & Parts	Correlation	Correlation	Correlation	Correlation
Retailing	Not Correlated	Correlation	Correlation	Correlation
Technology	Correlation	Correlation	Correlation	Correlation
Telecommunications	Correlation	Correlation	Correlation	Correlation
Transportation	Correlation	Not Correlated	Correlation	Not Correlated
Wholesalers	Not Correlated	Correlation	Correlation	Correlation

*Note.* This table shows the correlations between profitability and growth of the firm per relative industrial sector.

Table 8

*Total Dataset ANOVA Result*

<b>2011-2015 Market Combined Results Excluding Unfit Data</b>		
<b>Industrial Sector</b>	<b>Profitability</b>	<b>Growth of the Firm</b>
Aerospace & Defense	107	73
Apparel	33	186
Business Services	7	63
Chemicals	31	109
Energy	-554	-404
Engineering & Construction	32	74
Food, Beverages & Tobacco	40	-22
Health Care	92	263
Hotels, Restaurants & Leisure	40	48
Household Products	-23	12
Industrials	-164	-310
Materials	-10	25
Media	0	26
Motor Vehicles & Parts	-128	45
Retailing	4	141
Technology	-6	326
Telecommunications	628	870
Transportation	215	431
Wholesalers	12	83
<b>ANOVA Correlation between Profitability and Growth of the Firm</b>		

*Note.* This table shows the positive correlation between profitability and growth of the firm over all combined industrial sectors.

**Corollary hypotheses.** From the research questions above, there are three related corollary hypotheses, including (H5), (H6), and (H7).

**H5:** *Certain competitive advantage traits are more valuable than others and there are trends per industrial sector.*

True. There are trends per industrial sector, which define certain competitive advantage traits as being more valuable. A certain trait, or traits, of competitive advantage are associated with a small group of one or more as revenue leaders in new market share growth. Not only did the research identify traits as being more, or less, valuable, but the amount of value that a particular intangible asset has can be measured.

***H6: There are trends between industrial sectors displaying early adopters to competitive advantage traits.***

True. There are two separate trends seen by the leaders or early adopters of competitive advantage traits. An industrial sector leader is absorbing nearly all the revenue growth for an industrial sector, or the leader is simply leading the pack with the competitors not far behind. Early adopters can be identified as a leader of an industrial sector in competitive advantage, but the competition is not close to being able to capture comparable revenue growth. A caveat to this conclusion is the possibility of an early adopter in a competitive advantage trait, which is not utilized by the majority. If a competitive advantage trait was innovation, then the innovation may seem like a fluke instead of an indicator of a market demand shift.

***H7: There is no longer a predictable correlation between profitability and growth of the firm.***

False and True. When all the market segments are combined, there is a correlation between profitability and growth. Furthermore, most of the industrial segments do have a correlation between profitability and growth of the firm. However, there are several industrial segments in which profitability and growth of the firm do not correlate. This could be an emergent trend indicating that the classic model of correlation between profitability and growth of the firm is eroding.

### **Summary of Research Findings**

It was found in this study that the classic model of business—where profitability is directly related to growth of the firm—does still apply in today’s fast-paced and increasingly volatile marketplace. The correlation between profitability and growth of the firm existed when the industrial segments were aggregated and in most of the individual industrial sectors. There is a small group of industrial sectors in which profitability did not correlate with growth of the firm, which might indicate a slow shift away from the classic model of business.

This study found that management, organizational, and strategy capabilities to reconfigure, sense, absorb and integrate as a competitive advantage trait was the most commonly utilized. The second most utilized competitive advantage traits were organizational learning and competency building and global aptness and cultural intelligence. The third most utilized competitive advantage trait was innovation. These trends occur in the vast majority of the industrial segments, indicating that these are competitive advantage traits managers should look at closely to promote the chances of future revenue growth.

### **Conclusions and Recommendations**

This section offers a brief summary of the research findings, literature review, and conclusions and recommendations made by the researcher. Research findings are summarized from the results section. The literature review features a discussion of key concepts of the literature review section and re-states the research purpose, research questions, and correlated hypothesizes. Finally, conclusions made by the researcher are stated, with recommendations to general industry.

### **Recapitulation of Research Findings**

The classic model of business—where profitability is correlated to growth of the firm—still applies, despite the increasing volatility of the modern marketplace. However, there is no correlation between profitability and growth in several individual industrial sectors. This lack of dependence of business growth on profitability may be signaling a change in the marketplace and could foreshadow the potential need for a new model of business.

Analyzing current market trends shows that the most utilized competitive advantage trait is management, organizational, and strategy capabilities to reconfigure, sense, absorb and integrate. The second most utilized competitive advantage traits were organizational learning and competency building and global aptness and cultural intelligence. Early adopters in the area of competitive advantage traits would be difficult to identify without long-term market trends.

### **Recapitulation of Literature Review**

The literature review featured a discussion of what competitive advantage is and the intangible traits leading to sustaining a competitive advantage. Organizational culture was discussed and how the many inputs to an organizational culture lead to a different experience for the individual and the firm as a whole. It was found that the difficult to duplicate factors of organizational culture can be adjusted and tuned to create competitive advantage.

A key metric for this study, the Competitive Advantage Index, was defined. Additionally, competitive advantage intangible traits in relation to their use in general industry were discussed. A proposal to further examine the correlation of profitability, growth of the firm, and competitive advantage over time was made to better understand the changes in the increasingly volatile marketplace.

**Statement of the problem.** Competitive advantage as a theoretical concept is studied in economics and business courses around the world. However, concrete analysis and measurement of competitive advantage traits is difficult and the discussion is contentious (Klein, 2002). Competitive advantage is not specific to firms or products. It spans across firms and industrial sectors.

Research has been conducted regarding some competitive advantage traits, theories have been developed, and inferences have been drawn from case studies. Some theorists have focused on team sizes, layouts, and group charters for projects (Klein, 2002). Implementation of small, functional groups with a specific project charge enabled Lockheed Martin's Skunk Works to be nimble and to meet customer demand for speed to solution (Rich & Janos, 1994). However, manipulating team sizes and project scopes may not fit the needs of all companies—different market segments require different organizational, cultural solutions. An organization needs to develop niche market requirements through strategic planning. Certain features of an organization's culture will favor some competitive advantages over others.

A complicating factor across industrial sectors is increased market volatility resulting from the adoption of new technologies and the speed at which these technologies are brought to market. Existing theoretical models may not provide the insight that strategic managers need to guide their companies to succeed.

**Purpose.** The purpose of this study was to examine the competitive advantage traits of an organization and how these traits relate to achieving profitability and growth of the firm. This knowledge may be utilized as a roadmap by strategic managers pushing to either achieve or to maintain a competitive advantage in current volatile markets, where profitability does not directly correlate to market share.

Since the classic business model does not necessarily apply to all industrial sectors, companies must learn to be innovative and adaptable. A goal of this study was to show a relationship between organizations, which adapt their competitive advantage traits to match consumer market demand, and success of the firm.

**Research questions and present hypotheses.** The main research question (H1) and the three related research questions, numbered (H2) through (H4), are as follows:

H1: How important are the intangible factors of an organizational culture and how do they affect the output of a marketplace sustainable competitive advantage in the forms of profitability and growth when altered?

H2: How is competitive advantage distributed within a defined industrial sector?

H3: How is competitive advantage distribution similar or different between different industrial sectors?

H4: Is there a correlation between organization growth and profitability, and if so, does it still validate the conventional business model?

From the research questions above, there are three related corollary hypotheses, numbered (H5) through (H7).

H5: Certain competitive advantage traits are more valuable than others and there are trends per industrial sector.

H6: There are trends between industrial sectors displaying early adopters to competitive advantage traits.

H7: There is no longer a predictable correlation between profitability and growth of the firm.

## **Researcher Conclusions and Recommendations**

The study of competitive advantage traits will be an area to watch as markets transform from stable to unstable growth as disruptive technologies change the paradigm of how business as usual is performed. The current model, the classic model of business, still applies, and that may be because of the entrenched norms of certain industries and existing brand values. There are dangers to the strategic manager from both trusting and ignoring the classic business model. If the classic business model is trusted, then new market revenue may be lost by failing to change quickly enough or by adapting to disruptive technologies. If the classic business model is ignored, then revenue may be lost by lack of product consistency or weakening of fundamental brand value. This double-sided issue complicates the strategic manager's choice of when to hold, adapt, or innovate.

Results from this study show that the investor and strategic manager should continue to use the classic model of business as a baseline when determining success of a firm. Income statements will be able to serve as a guide by showing profitability and growth of the firm. The Competitive Advantage Index is a valid metric, at a minimum, to display gross variances of new revenue within an industrial sector. The combination of the classic model of business with the Competitive Advantage Index should form a solid foundation of data to project strategic movements, combining both present day results with sustainable future solutions.

The most interesting correlation was the growth of the firm with competitive advantage. When growth of the firm and competitive advantage were not correlated, the whole industry did not fit the classic model of business. This result is significant as the relationship between the growth of the firm and competitive advantage may be the most powerful metric to see market trends and to determine future market success. With the reduction of touch labor and an influx

of technology, removing human labor, the use of such a metric is necessary to guide future of business.

Intangible solutions are what will make or break an organization in this new area of technology and global business. Market information is fluid and it is arguable that most businesses are on a similar footing with respect to their strategic management decisions. With the playing field leveled, businesses must rely on their intangible features to be competitive. The most frequently used of the competitive advantage traits among the firms analyzed in this study was the ability for an organization to make good management or organizational changes based on market strategy. This finding drives home the idea that good or bad management will truly decide the fate of a business, not solely the product offering.

An interesting finding in this study is that innovation was used much less than the other competitive advantage traits. Because of marketplace volatility and the emphasis on new technologies in industry, one would assume that innovation would have played a much larger role in the growth of revenue for the businesses studied. Innovation is the most tangible and potentially highest risk of the competitive advantage traits, so the innovation of new products may not be as fiercely pursued as the other traits. Since this study focuses on the review of financial results, the amount of effort and resources put forth to capture revenue with innovative solutions is unknown.

For a more thorough approach to understanding the Competitive Advantage Index and the competitive advantage traits being used in the market, additional research will need to be performed. Trend predictions over an extended period of time should be employed to validate the results of this study. Further investigation of the appropriate application of the Competitive Advantage Index is also needed.

**Implications for practice.** This tool should be used in strategic management planning for one-, three-, and five-year outlooks. Although it is important to understand competitive advantage in your industrial sector, it is also wise to look at changes across the whole market. A holistic market view allows the user to see consumer buying habits, areas of growth and loss, and what types of competitive advantage are currently attracting customers. A business that is a leader in its industrial sector should align with the similar leading competitive advantage traits of its closest competitor(s). A business that is losing market share will most likely not align with the winning competitive advantage traits and should strive to enhance itself in the identified competitive advantages, which are more effective within its industrial sector. Small companies, not competing in the Fortune 1000 level, may be able to use their smaller size to an advantage by capturing least commonly utilized competitive advantage traits to create a niche offering for a customer segment. A benefit to business managers using this type of strategic management planning is that short-term gains or losses will not distract from the long-term trends of consumer habits. Finally, looking to early adopters across industrial sectors will give strategic managers an outline of what to emulate in the future.

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