Globalization and hypercompetition: Drivers, linkages, and industry differences

Donald R. Goeltz
Holy Family University

ABSTRACT

Although international trade and competition are consistent themes in the business literature, the pace of change in both arenas has quickened in the last several decades. Recent literature, the business press, and the popular press refer to these phenomena as globalization and as hypercompetition, and these two terms are often used together to signify a new paradigm of business.

Five linkages between globalization and hypercompetition are identified at the industry level: 1) common drivers, 2) a fragmented value chain driven by globalization, 3) competitive agility in the value chain required by hypercompetition, 4) increased competition within the fragmented value chain elements, and 5) a trend toward global hypercompetition across many industries. Value chains are further examined to determine industry differences that facilitate globalization and hypercompetition, and industry examples are presented. Finally, recommendations are made for further theory development and empirical research.

Keywords: Globalization, Hypercompetition, Fragmented Value Chain, Drivers, Linkages, Cross-Industry Analysis

INTRODUCTION

Globalization

Prahalad (1998) lists "globalization" as the first of eight discontinuities that will change the competitive landscape in the next century, and defines global changes as the emergence of new markets and geographic centers of industry expertise. The IMF (2000) defines globalization as the rise in economic activity between people in different countries, as well as integration of trade and financial flows. The Asia Development Bank (2003) defines globalization as economic integration and diffusion of knowledge and information.

This paper is focused on two primary elements of globalization – the increase in economic activity and the integration of activity between different countries and regions of the world. Daniels, Radenbaugh, and Sullivan (2007) use globalization to mean the "deepening relationship and broadening interdependence" between different areas of the world (page 6). Dicken (2003, p 12) uses a similar distinction, referring to globalization as a complex set of processes:

- An internationalization process that expands the scope of economic activities across national boundaries
- A globalization process that involves geographic extension of economic activity but also the functional integration of dispersed activities.

Waves of globalization are described by Gereffi, Humphry, and Sturgeon (2001) starting with investment-based globalization (1950-1970) after WWII where TNCs sought natural resources and set up global product networks, followed by trade-based globalization (1970-1995) where the emphasis was on exporting from developing countries. In trade based globalization there was a shift from TNC driven production to international sourcing networks (Dicken, 2003). In the current phase of digital globalization (1995 onward), information technologies and the Internet are enabling further global integration of production and demand (Gereffi et al., 2001).

Several authors note that both the volume and the type of globalization activities have changed in the last twenty years. World trade has increased in volume to over $7 trillion and as a percentage of world-GDP to over 19% (The Economist, 2006). Dicken (2003) points out the growing interconnectedness of trade in terms of the growing gap between merchandise output and merchandise trade. Krugman, Cooper & Srinivasan (1995) identify new aspects of world trade including the growth of trade in similar goods, the slicing up of the value chain, and the emergence of super-traders, nations with a very high ratio of trade to GDP. Milberg (2004) declares that the qualitative dis-integration of production is more important than the growth in global trade.

Dicken (2003) refers to both a quantitative and qualitative "shift" in the way that economic activities are organized. In this paper the focus in on how the shift in globalization has affected a shift in competition toward hypercompetition.

Hypercompetition

Hypercompetition is an indication, a result, and a driver of dramatic changes in the competitive environment. This environment has been characterized as discontinuous (Prahalad, 1998), dynamic (Sanchez, 1995), and uncertain (Ilinitch, D'Aveni, & Lewin, 1996). Prahalad (1998) uses the term "new economy" (p. 18) and defines eight discontinuities, including

volatility in demand, convergence in technologies, and indeterminate competitive boundaries. Eisenhardt (1989) describes a high velocity environment where change is non-linear and outcomes are less predictable. The external environment is turbulent and competition is increased for customers as well as resources (Grant, 1996).

Hitt, Keats & Demarie (1998) also describe discontinuities in industry boundaries and technology and define a "new competitive landscape" that includes hypercompetitive markets (p. 22). The most extreme examples of turbulence and complexity are characterized as hypercompetition, a term popularized by D'Aveni (1994). In hypercompetitive markets the traditional goals of cost and quality, timing and know-how, strongholds, and deep pockets have been made less important in an environment where competitive advantages are temporary. Time has collapsed the traditional competitive cycle and equilibrium is impossible to sustain (D'Aveni, 1994). In a hypercompetitive industry, change is rapid and continuous (Snyman & Drew, 2003).

In hypercompetitive environments, a strategic advantage is temporary, so the only advantage is to keep replacing an advantage, including your own advantage (D'Aveni, 1994). D'Aveni has been the main proponent (and perhaps prosthelytizer) of hypercompetitive strategy, and the term is now generally used to denote all highly competitive and turbulent markets, industries, and competitors.

Note that hypercompetition is a relatively new term and has issues of specificity and measurement. Porter (1996) dismisses hypercompetition as a "self inflicting wound" (p.61) and the result of the pursuit of operating efficiencies as opposed to establishing defensible strategic positions. Zohar & Morgan (1996) calls hypercompetition a metaphor that offers insights into assumptions about competitive strategy in turbulent environments, but they also note that there are moderating forces against hypercompetition.

Nonetheless, D'Aveni (1994) claims that hypercompetition is widespread, and Thomas (1996) describes a world of dynamic, Schumpeterian competition and a hypercompetitve shift. This hypercompetitive shift is linked in this paper with the shift in the nature and extent of globalization.

Extended value chain

In this paper, the primary concern is with analysis of globalization and hypercompetition at the industry level, with the extended value chain as the primary analysis tool. Porter (1985) uses five forces of suppliers, substitutes, entrants, buyers and rivalry as a way of looking at the forces driving industry competition and value chain analysis as a tool for analyzing a firm's competitive advantage. The extended value chain includes buyers, suppliers, and competitors (Kaplinsky, 2000) and is represented in Figure One (Appendix).

The value chain is used by Dicken (2003) to understand the network of activities on a global basis that make up production of goods and services. Dicken adds that the flow of goods goes in one direction but that the flow of information about demand and supply status in the other direction serves to integrate the value chain. The value chain is a conceptual representation of how competitive strategies are executed, and is therefore a good candidate for linking globalization and hypercompetition.

Simple Model

The linkage of globalization and hypercompetition through the value chain is shown in Figure Two (Appendix). Globalization changes the quantity and quality of the value chain by dispersing it and then integrating activities globally. These changes set the stage for hypercompetition on an industry-by-industry basis. As a "feedback loop," intense competition for resources and markets reinforces and accelerates globalization.

The remainder of this paper develops this model further by defining the drivers of globalization, examining the competitive reactions to globalization and the effects on the global value chain, and by linking hypercompetition with globalization through the changes that globalization has caused in the value chain.

THE DRIVERS OF GLOBALIZATION

In defining the drivers of globalization, the concern is with the underlying structural changes that cause expansion in scope and integration of economic activities. Many of the "drivers" in the literature, such as opening of new markets or regional technology clusters, are a result of basic economic changes or part of a competitive response to globalization. Here, the interest is in structural changes that have increased globalization in the last two decades and are likely to continue as a force for continued increases in globalization.

Structural drivers from the literature on globalization are summarized in Table One in terms of six categories: changes in technology, political forces, the rise of transnational corporations, market pull, support services, and competitive strategies. The most common drivers mentioned are technology, changes in trade practices, and structural changes - such as a shift toward more open, more democratic governments - that have opened new markets.

Key technologies mentioned are communication/computing (C/C) and transportation. C/C technologies have had both a pull and push effect on globalization (Dicken, 2003). Transportation technologies such as container shipping via air/boat/train/truck have facilitated serving remote markets (Yip, 1989), as well as shipping the intermediate bits of production for assembly at a remote location. These technologies have enabled demand-pull as consumer trends become global and demand for similar, if not the same, goods and services increase on a global basis (Mussa, 2000). Technology has also facilitated control over dispersed production and support activities (Asian Development Bank, 2003).

Porter (1990) looks at globalization from a microeconomic perspective in terms of factor shifts. Porter (1984) focuses on specific factors such as transportation costs, strategic innovations in product definitions, and reduced government constraints. The rise of transnational corporations (TNCs) is a key driver of globalization, as TNCs have the power to shift resources rapidly to both expand activities and increase integration Dicken (2003). In this analysis, TNCs. are regarded as both a result and a driver of globalization.

Note that the drivers of globalization in Table One (Appendix) are both self-reinforcing and interactive, that is they work together to cause globalization and they interact with globalization to create more force for globalization (Krugman et al., 1995). For example, technology drives globalization, but increased globalization also drives technical innovation by TNCs to gain market share and resources. Likewise, lowered trade barriers in one geographic area have led to overall lowered barriers.

Competition is also both a driver of and a result of globalization (Yip, 1989). Competitive actions and reactions such as expansion and relocation of assets, mergers and acquisitions, and innovative strategies (Calori, Atmer, & Nunes, 2000) drive both local

responsiveness and global integration (Bartlett & Ghoshel, 1987). The interaction of competitive actions with both globalization and hypercompetition is examined in more detail in the expanded model.

THE DRIVERS OF HYPERCOMPETITION

The increased and more integrated business activity associated with increased globalization also results in more competition. There are more competitors at every level of the value chain, all vying for new and growing global markets. As markets become more competitive and more turbulent, competition can intensify to become hypercompetition (D'Aveni, 1994).

Hypercompetition is competition that has escalated to the point that advantages are quickly created, but a competitive lead is temporary (D'Aveni, 1994). This is a hostile business environment, where value is eroded as competition increases towards hypercompetition (Thomas, 1996). Hypercompetition is widespread across a broad range of industries (Wiggins and Ruefli, 2005) and is expected to increase as globalization increases (Harvey et al., 2001).

D'Aveni (1999) differentiates between four different types of industry environments – equilibrium, fluctuating equilibrium, punctuated equilibrium, and disequilibrium. Hypercompetition is associated with the latter environments where the frequency of disruption is greater and the effects on competency creation and destruction are greater. Although disruptive strategies can be applied in any environment, the high-tech and newly deregulated industries are more likely to exhibit hypercompetition.

Huyett and Viguerie (2005) distinguish between three types of hypercompetition - trench warfare, judo competition, and white-knuckle competition. Trench warfare is typical of mature or declining industries where demand is shrinking and/or there is excess supply. In judo competition, the industry is growing but there are nimble competitors are constantly looking for an advantage. In white-knuckle competition, the market is shrinking but excess supply is driving the market toward hypercompetition.

Companies and industries do not naturally choose hypercompetition, but are driven there by a number of factors. These factors are discussed below and summarized in Table Two.

The Asia Development Bank (2003) equates globalization with technology as the drivers of increased competition. Recently, globalization and technology has "increased the complexity of the production process" so that explaining how a good is produced is no longer simple. Production is broken up all over the world and MNCs can move production at will to provide a competitive advantage. This cycle has increased the level of competition across many developed and developing countries (ADB, 2003).

Harvey et al. (2001) list four drivers of global hypercompetition including macroeconomic, political, technology, and organizational drivers. Macro drivers include universal availability of key production factors and increased flow of technology across borders. Technology drivers include increased speed of technical change, facilitated control of the factors of production, and globalization of demand.

Thomas (1996) states that hypercompetition is driven by the rapid creation of new firm-specific resources and structural features that promote competition, and competitive behaviors across multiple industries. The three industry factors driving a dynamic resourceful industry are features of demand and supply that push innovation, and extensive knowledge base, and lowered entry barriers.

Kapur, Peters, and Berman (2005) contend that the future is vertical, not horizontal as the value chain has become more and more dispersed and specialized. They list seven drivers of a horizontal hypercompetitive future, including unbundling and global suppliers, a shift in consumer preference to price-performance, and industry standards.

According to D'Aveni (1994), hypercompetition is being fueled by changes in the environment, including changes in consumer demand, the increased knowledge base of firms and workers, the declining height of entry barriers, and the increasing alliances between firms. Consumers win in a hypercompetitive market as prices are driven down and feature competition increases and cost and quality competition intensifies. With increased industry and firm knowledge, the timing and know-how of traditional competition has been escalated. Lowered entry barriers affect strongholds, and deep pockets are under attack by cross-border and cross-industry alliances (D'Aveni, 1994).

Thomas and D'Aveni (2004) state that hypercompetition is caused by extensive innovation throughout the value chain and over time (p. 9). The innovation occurs in rapid sequence, and can t-range from upstream innovation in components or distribution to downstream innovation in consumption patterns. This innovation can come from direct competitors (Schumpeterian) or from outside the immediate industry including falling tariffs and foreign competitors. Innovation and greater specialization in the supply chain are one of the supply side forces defined by Huyett and Viguerie (2005).

As noted for the drivers of globalization, the drivers of hypercompetition, summarized in Table Two (Appendix), all work together to cause increased competition and are interactive with increased competition. For example, technology has made the fragmented and dispersed value chain manageable, while specialization in the value chain has increased innovation at each point. Demand-pull from the markets and lowered barriers have created supply chain competition and increased agility in the supply chain.

Hypercompetition is a relatively new term and market phenomena, with a commensurate lack of basic definition and rigor as well few empirical studies. The drivers of hypercompetition can be summarized as pull from the markets enabled by lowered barriers, technology, and a dispersed, fragmented and globally available value chain.

The link between globalization and hypercompetition is explored further in terms of common drivers and the value chain.

EXPANDED MODEL - GLOBALIZATION, THE VALUE CHAIN, AND HYPERCOMPETITION

Link #1 – Common Drivers

From Tables One and Two, globalization and hypercompetition are linked by common drivers – that is, technology, market-pull, and lowered barriers. Technologies such as transportation and communication have made markets more homogenous, brought markets closer, and enabled mass customization. Production technologies and process technologies have broken the value chain into pieces and dispersed it to the most price competitive global locations. Communication, information, and transportation technologies then reintegrate the fractured value chain. Communication technologies also help create market pull, as branding becomes a global marketing tool. Lowered barriers and market pull work with technology to drive rapid expansion of new markets and rapid acceleration of competition.

Although the common drivers of technology, market pull, and lowered barriers drivers help explain the concurrent increase in global economic activity and global competition, the global value chain is the primary linking factor between globalization and hypercompetition. Expanding on the simple model in figure one, the value chain has been fragmented and dispersed by the forces of globalization. This new global value chain is the key enabler and driver of hypercompetition, as discussed by all of the referenced articles above in Table Two.

An expanded model of globalization and hypercompetition, as shown in Figure Three (Appendix), includes the common drivers, the link of the fragmented/specialized/dispersed value chain, and the effect of hypercompetition on globalization. The interaction between the common drivers described in the prior paragraph is labeled with the number 1.

Link#2 – Sliced Value Chain

The organization of TNCs is both a response to the complex environment and a management strategy of differentiation and integration (Malknight, 2001). A primary element of the complex environment is the sliced, dispersed, fragmented and specialized value chain, labeled number 2 in the expanded model.

Krugman et al. (1995) uses the term "slicing up of the value chain" and points out that the volume of trade can only be explained by the increase in vertically linked trade among geographically dispersed elements of production. This has resulted in the emergence of "supertrading nations" such as Singapore, which export more than 50% of their GDP. Many of these nations are example of the dispersed value chain, where goods are shipped for a labor-intensive step, and then shipped on to the next stage of production and assembly (Krugman et al., 1995).

Dispersion in the value chain comes as new markets open up, causing production investments in those markets and new, specialized manufacturing and service centers emerge in developing nations. Dispersion is illustrated in terms of a global component network for Ford's manufacture of the Escort, with parts of the automobile coming from fifteen different countries in Europe, Asia and the U.S. (Daniels et al., 2007).

Fragmentation in the value chain is defined as the ability to break up the integrated production and support process, moving the elements to lower cost locations. Fragmentation is facilitated by lowering trade barriers, and by the lowering of the cost of moving goods and information locations (Venables, 1999). Examples include the movement of software development to India, Russia, Malaysia, and central Europe and the movement of manufacturing into (and away from) the Mexican maquiladoras corridor as costs and capabilities change.

Fragmentation can occur with a single country, for example with the cluster of suppliers around Detroit, but is most often associated with TNCs and the rationalization of production and support activities. In the latter case, fragmentation of the value chain leads to competition for the production element and often to further cost competition (Venables, 1999). Burda and Dluhosch (2002) model fragmentation as a supply driven engine of globalization and the outcome of cost competition between TNCs, intensifying trade in intermediate goods and requiring business services with skilled labor to manage the global production process.

One result of the vertical linkages in the production chain is vertical specialization, defined by Hummels, Ishii, and Yi (2001) as the use of imported good in producing goods that are exported. Specialization involves that interconnection of the value chain with each country specializing in a particular stage of production. These authors document vertical specialization

using input-output tables for ten OECD and four emerging economies, calculating that vertical specialization accounts for 21% of these countries' exports and that vertical specialization has grown 30% between 1970 and 1990.

Link#3 – Hypercompetitive strategies

Globalization has driven changes in the global value chain that set the stage for hypercompetition. A major portion of these changes in dispersion, fragmentation, and specialization is driven by TNCs, which by their nature are in the business of investing in market seeking or efficiency seeking expansion and FDI (Milberg, 2004). The expanded model in figure two ties globalization to these changes in the global value chain, but an additional factor is the competitive strategies of TNCs, labeled as three in figure two.

A recommended strategy for competing in turbulent and hypercompetitive environments is the development of capability for change, described in terms of flexibility, dynamism, adaptation, and the ability to morph. In a hypercompetitive arena where change is constant, the organization should be prepared to change as needed.

Flexibility comes in two forms in the literature – strategic flexibility and organizational flexibility. Strategic flexibility according to Sanchez (1995) requires both resource flexibility and coordination flexibility of the firm in using its resources. Flexible organizational forms and capabilities enable strategic flexibility. Volberda (1996) defines flexibility as the degree to which the organization has a variety of managerial capabilities and speed with which they are activated to increase control (Volberda, 1996).

Teece, Pisano, and Shuen (1997) contend that in a turbulent and competitive environment, dynamic capabilities are the best way to build a sustainable advantage. They define dynamic capability as the ability to renew competencies to make them fit with a change in the environment, and define capabilities as the ability to adapt, integrate, and reconfigure the internal and external resources and competencies.

The most effective way to reconfigure the flexible assets required for these competitive ability to change or morph is to use the flexibility inherent in the global value chain that has created by the forces of globalization. Hence the common theme in the literature of the global value chain and the link labeled as 3 in the extended model in Figure Two (Appendix) to hypercompetition.

Link#4 – Feedback Loop to the Value Chain

The link labeled number 4 in the extended model signifies that hypercompetition is not just between firms in highly competitive industries, but also between competitors for a slice of the value chain. Emerging markets compete in a wide variety of manufacturing and services – e.g. India, China, Brazil, Malaysia, Mexico, Russian states – creating over-supply and a short term advantage for any given geographic area.

Link#5 – Global Hypercompetition

The final link between globalization and hypercompetition is a direct interaction between the two phenomena, called global hypercompetition (Harvey et al., 2001), where hypercompetition feeds directly into a cycle of globalization through increased innovation and

increased competition (figure two). Harvey et al. (2001) describe a global hypercompetitive marketplace where firms tend to "leapfrog" each other in both market positioning and in their search for competitive market-based resources (p. 603). Zahara and O'Neill (1998) define global competition as a force field of environmental and organizational conditions, while Hitt et al. (1998) describe a new competitive landscape caused by globalization and technology where industry boundaries are blurred and markets are hypercompetitive.

However, not all industries are experiencing globalization at an equal rate and not all industries are hypercompetitive. The differences between industries are examined in terms of differences in the value chains.

INDUSTRY DIFFERENCES IN THE EXPANDED MODEL

Value chains differ from industry to industry in terms of the level of technical differentiation and integration and in the drivers of the industry-level elements of the value chain. Technologies in production are classified by Woodward (1958) into ten levels of complexity based on whether the production can be programmed in advance, ranging from hand assembly (e.g. a Rolls Royce) to continuous flow (e.g. chemicals).

These complexity levels were grouped into three types of production - small-batch, large-batch and continuous process production. For purposes of industry analysis of globalization and hypercompetition, advanced assembly, large batch, and semi-process production are most likely to lead to fragmented, specialized and dispersed value chains, although technology is blurring these boundaries.

Gereffi et al. (2000) classify global commodity chains as either producer-driven or market-driven. Producer-driven chains are common in capital intensive and technology intensive industries dominated by large transnational companies, such as automotive and computing industries. Market-driven value chains are controlled by large retailers and branded manufacturers, who set up decentralized manufacturing networks in a variety of exporting countries. In market-driven value chains the companies may design and market the end products, but often do not make the products, whereas the complexity of the production process drives control to the producer in producer driven value chains.

Note that this classification is a simplification and crossovers can occur, such as Dell subcontracting its value chain elements. Also note that as products and services move into later stages of their life cycles, they become "commoditized" and are more subject to value chain slicing and dispersal.

A classification of industries using the concepts of production complexity and producer/market-driven is illustrated in Figure Four (Appendix). Globalization increases at the industry level as the value chains are more discrete and more market driven, resulting in a dispersed and fragmented industry value chain. Oil companies operate globally, but the industry controlled value chain and the continuous production technology limit the hypercompetitive flexibility ands sudden changes in strategy. The steel industry was once in the same position, but technology (the mini-mill) moved the industry toward more discrete production and increased competition. The automotive industry is also production-driven, but its value chain can be sliced globally and integrated by the branded company such as Ford or Toyota.

Market-driven industries are more likely to be hypercompetitive, as consumer tastes demand more flexible and responsive value chains and competitive strategies. Software has moved toward a more discrete and dispersed production and has become more competitive.

Consumer electronics has become hypercompetitive as an industry, as production has become both agile and fragmented and the life cycle of products has become shortened by market-driven forces.

Another effect of discrete value chain technology is increased competition in the value chain itself, as price and feature comparisons can be made on a global basis. Manufacturers of the elements also become brand competitors, such as Korean (Samsung) and Chinese (LG) competitors. Note also that the industries are dynamic, not static as implied by these classifications. Software is becoming more fragmented, particularly in open systems arenas, and the automotive industry value chain is becoming more globally fragmented.

This typology of industry value chains illustrates that the link between globalization and hypercompetition is moderated by: 1) the drivers of the value chain and by 2) the technical complexity the industry value chain. Global industries with discrete production technologies and market driven value chains are more likely to be hypercompetitive.

CONCLUSIONS AND AREAS FOR FURTHER RESEARCH

Globalization was defined as a substantive increase in global economic activity and a substantive increase in the interrelation of global business activities. Hypercompetition was defined as a competitive environment where competitive advantage is fleeting and the best competitors are those who can quickly change their competitive strategies. Drivers of globalization and hypercompetition were reviewed with technology and changes in the value chain identified as common drivers.

Multiple links between globalization and hypercompetition were developed, starting with the effects of globalization on industry value chains. Increased fragmentation and integration of value chains has driven and enabled hypercompetition, at the industry, competitor, and value chain supplier levels. Industries that have discrete value chain elements and that are demand-driven tend to be more global and more competitive.

Areas for further research include more detailed examination of specific competitive strategies and competitive value chain strategies as links between hypercompetition and globalization. More industry analysis and segment definitions are required to examine specific industries and value chain types as a means of developing and testing the links between globalization and hypercompetition. Specific industries could then be compared and a model refined and tested.

Further areas for research include the effects of Internet and computing technologies on value chains and the effect on globalization and hypercompetition, with the expectation that these technologies will increase the rate of global hypercompetition. Another area for further investigation is the increasing role of SMEs as opposed to larger TNCs as technology and an accessible value chain opens up the global market to smaller firms. The increased role of services in global markets is another area that could be developed using the value chain and links between globalization and hypercompetition. Finally, the link between clusters of production and different types of clusters (Porter, 2003) and hypercompetition can be explored as theoretical and empirical research.

Overall, the increases in international business and in competition make the link between globalization and hypercompetition an interesting and important area for further research and theory development.

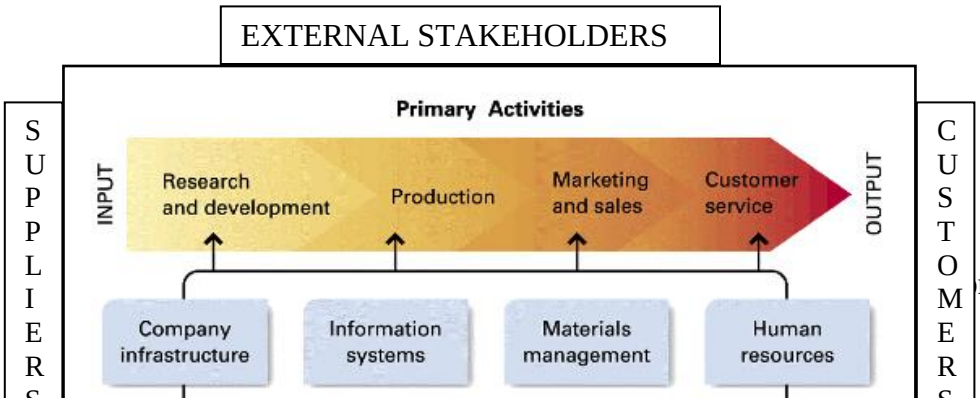
REFERENCES

Globalization, technology, and competition. www.adb.org.
Bartlett, C. A., & Ghoshal, S. (1987). Managing Across Borders: New Organizational Responses. *Sloan Management Review*, *29*(1), 43-53.
Burda, M. C, & Dluhosch, B. (2002). Cost competition, fragmentation, and globalization. *Review of International Economics*, *10*(3), 424-441.
Calori, R., Atamer, T., & Nunes, P. (2000). *The dynamics of International competition*. London: SAGE Publications.
D'Aveni, R.A. (1994). *Hypercompetition: Managing the dynamics of strategic maneuvering*. New York: The Free Press.
D'Aveni, R. A. (1999). Strategic supremacy through disruption and dominance. *Sloan Management Review*, *40*(3), 127-135.
Daniels, J., Radenbaugh, L., & Sullivan, D. (2007). *International Business: Environments and operations*. New Jersey: Prentice Hall.
Dicken, P. (2003*). Global Shift: Reshaping the global economic map in the 21st century*. New York: Guilford press.
Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal, 32*(3), 543-576
Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy: RIPE, 12*(1), 78-104.
Grant, R. M. (1996). Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science, 7*(4), 375-387.
Harvey, M., Novicevic, M. M., & Kiessling, T. (2001). Hypercompetition and the future of global management in the twenty-first century. *Thunderbird International Business Review, 43*(5), 599-616.
Hitt, M. A, Keats, B.W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. Asian Development Bank (2003). Asian development outlook (2003), *Drivers of change: The Academy of Management Executive, 12*(4), 22-42.
Hummels, D., Ishii, J., & Yi, Kei-Mu. (2001). The nature and growth of vertical specialization in world trade. *Journal of International Economics*, *54*(1), 75-96.
Huyett, W., & Viguerie, S. P. (2005). Extreme competition. *The McKinsey Quarterly, 1*, 46-57.
Ilinitch, A. Y., D Aveni, R. A, & Lewin, A. Y. (1996). New organizational forms and strategies for managing in hypercompetitive environments. *Organization Science, 7*(3), 211-220.
International Monetary Fund (2000). Globalization: Threat or opportunity? Issues Brief 2000, WWW.IMF.org.
Kaplinsky, R. (2000). Spreading the gains from globalization: What can be gained from value chain analysis. *Journal of Development Studies*, *37*(2), 117-146.
Kapur, V., Peters, J., & Berman, S. (2005). High-Tech 2005: The horizontal competitive future. *Strategy & leadership, 31*(2), 34-46.
Krugman, P., Cooper, R. N., & Srinivasan, T N. (1995). Growing world trade: Causes and consequences. *Brookings Papers on Economic Activity, (1*), 327-344.
Malknight, T. (2001). Emerging structural patterns within multinational corporations: Toward process-based structures. *Academy of Management Journal*, *44*(6), 1187-1210.
Milberg, W. (2004). The changing structure of trade linked to global production systems: What are the policy implications? *International Labour Review, 143*(1/2), 45-90.
Mussa, M. (2000). Factors driving global economic integration. WWW.IMF.org.

Porter, M. (1985). *Competitive Advantage*. New York: The Free Press.
Porter, M. (1990). The Competitive Advantage of Nations. *Harvard Business Review, 68*(2), 73-94.
Porter, M. (1996). What is strategy? *Harvard Business Review, 74*(6), 61-78.
Porter, M. (2003). The economic performance of regions. *Regional Studies, 37*(6,7), 549-578.
Prahalad, C. K. (1998). Managing discontinuities: The emerging challenges. *Research Technology Management, 41*(3), 14-22.
Sanchez, R. (1995). Strategic flexibility in product competition. *Strategic Management Journal: Special Issue, 16*, 135-159
Snyman, J. H., & Drew, D. V. (2003). Complex strategic decision processes and firm performance in a hypercompetitive industry. *Journal of American Academy of Business, Cambridge, 2*(2), 293-298.
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509-533.
The Economist (2006). Pocket World in Figures, 2006 Edition, London: Profile Books.
Thomas, L. G. III (1996). The two faces of competition: Dynamic resourcefulness and the hypercompetitive shift. *Organization Science, 7*(3), 221-242.
Thomas, L. G. III & D'Aveni, R. (2004). The rise of hypercompetition in the US Manufacturing Sector, 1950-2002. *Dartmouth University Working Paper,* 2004-2011.
Venables, A. J. (1999). Fragmentation and multinational production. *European Economic Review, 43*(4-6), 935-945.
Volberda, H. W. (1996). Toward the flexible form: How to remain vital in hypercompetitive environments. *Organization Science, 7*(4), 359-374.
Wiggins, R, & Ruefli T. (2005). Schumpeter's ghost: Is hypercompetition making the best of times shorter*? Strategic Management Journal, 26*(10), 887-911.
Woodward (1958) in Jones, G. (2004). *Organizational theory, design, and change*. New Jersey: Prentice Hall.
Yip, G. S. (1989). Global Strategy... In A World Of Nations? *Sloan Management Review, 31*(1), 29-41.
Zahra, S. & O'Neill H. (1998). Charting the landscape of global competition: Reflections on emerging organizational challenges and their implications for senior executives. *The Academy of Management Executives, 12*(4), 13-21
Zohar, A., & Morgan, G. (1996). Refining our understanding of hypercompetition and hyperturbulence. *Organization Science, 7*(4), 460-464.

APPENDIX

Figure One – Extended Value Chain



n, page 12

INTERNAL STAKEHOLDERS

Figure Two - Simple Model linking globalization and hypercompetition

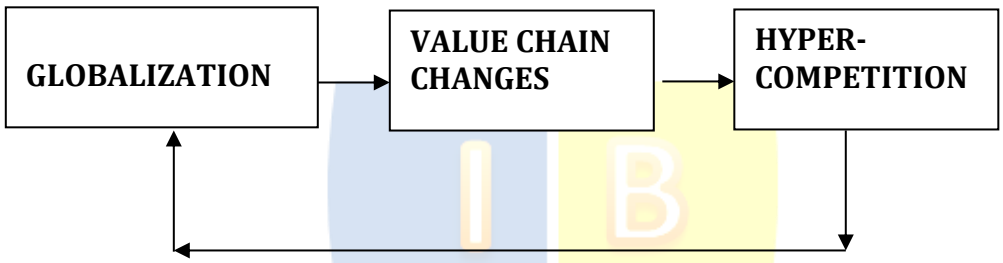


Table One – Drivers of Globalization

Globalization Drivers	Reference					
	Porter (1994, 1990)	Dicken (2003)	Daniels et al. (2007)	AD Bank (2003)	Prahalad (1998)	Yip (1989)
Technology	Technology Factor conditions	Production, communication, transportation	Rate of tech change	Complexity of production	Technology convergence	Favorable logistics Economies of scope and scale
Political states	Government Factor conditions	State trade and FDI policies	Trade liberalization Cross-national cooperation Political openness	Search for new resources; factor differences		Trade policies Technical standards Marketing standards
TNCs	TNC structure and	Coordination and control of	Competition	TNC capabilities	Indeterminate industry	Global competitors

	capabilities	assets			boundaries	
Markets	Demand conditions		Demand pull	Search for new markets	Global consumers New market economies	Large common needs Factor differences
Support services	Related and supporting industries		Financial services	Mobility of capital		Global channels
Competition	Firm rivalry	TNCs				Interdependence of countries Global competitors

Table Two – Drivers of Hypercompetition

Hyper-competition Drivers	**References**					
	ADBank (2003)	Harvey et al (2001)	Thomas (1996)	D'Aveni (1994)	Huyett &Viguerie (2005)	Thomas and D'Aveni (1984)
Technology	Complexity of production	Speed of technical change	Rate of innovation	Price/feature tradeoffs		
Production process	Fragmented and dispersed value chain	Universal availability Facilitated access	Trade liberalization Cross-national cooperation	Industry know-how	Value chain specialization	Intensive value chain innovation
Markets	Search for new markets		Demand pull	Aggregation of demand	Global consumers New market economies	
Political	Mobility of capital		Political openness Lowered entry barriers	Lowered entry barriers	Enhanced market clearing	

Figure Three - Expanded Conceptual Model

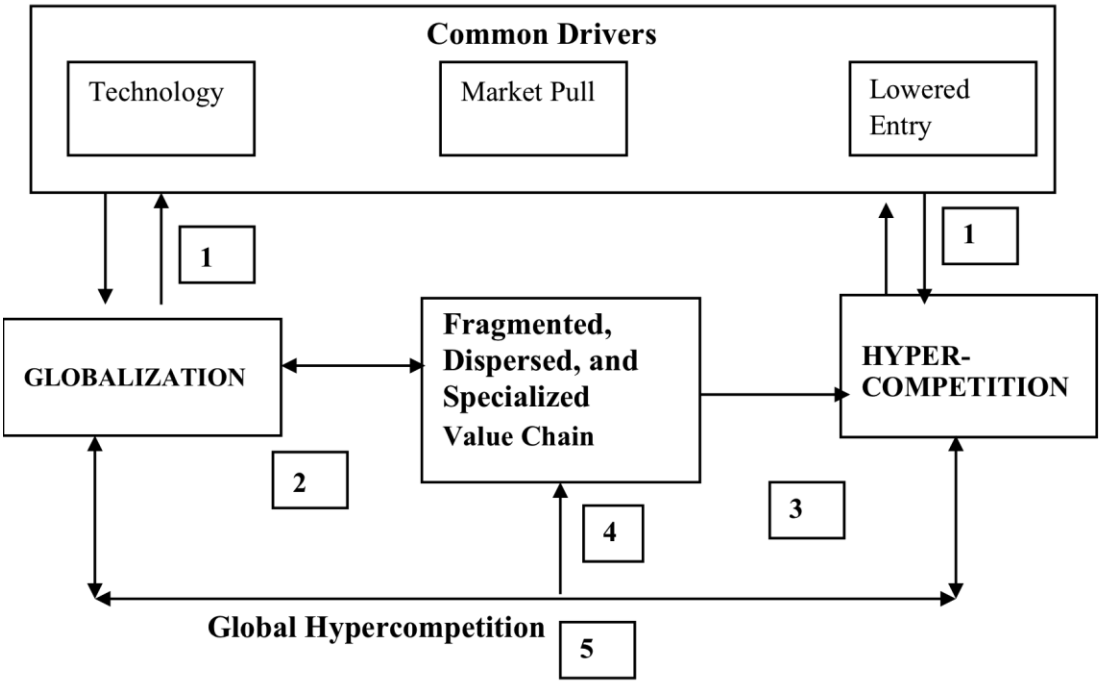


Figure Four – Value Chain Typology