



Life Sciences Logistics: A Winner-Take-All Marketplace

In a Rapidly-Changing Market, Will You be One of the Winners?

By Benjamin Gordon

If you were the best hitter in baseball, there would never be a better time to play in the Major Leagues than today. Federal Reserve Chief Ben Bernanke points out that we are witnessing the rise of winner-take-all markets, where a small number of winners capture the lion's share of the benefits. This is true not just in sports, but also in business.

As Bernanke puts it: "Two decades ago, the highest paid player on the Red Sox, Jim Rice, earned (in inflation-adjusted terms) just over \$3.0 million. In 2004, the highest-paid player on the Red Sox (and all of major-league baseball) was Manny Ramirez, who received \$22.5 million for the season...But the number of fans who fit in Fenway Park has not changed...technology innovations and globalization have helped leverage superstars' talents over a wider sphere."

However, the benefits of modern Major League Baseball are not shared equally. As Bernanke adds, "it would be shocking if inequality hadn't increased." As winner-take-all markets develop in baseball, the gap between the most highly-paid and the median has reached an all-time high.

In the life sciences and supply chain industries, we are witnessing the same wave of change, creating big winners and also big losers. As the market evolves toward "winner-take-all," will you be one of the winners?

The market dynamics are right for a winner-take-all market to emerge.

Increasingly, supply chain management in life sciences is becoming a winner-take-all market. Market leaders will reap the rewards of success, but undifferentiated mid-market companies will face unprecedented pressure to survive. The winners will have the scale and resources to create market differentiation and sustainable competitive advantage. They will win by: 1) extending their global reach; 2) addressing the complexities of the life sciences supply chain commercial and regulatory environments; and 3) investing or acquiring to develop innovative, industry focused and technology enabled solutions.

Outsourcing logistics services will escalate as pharmaceutical and life sciences companies address the current market challenges, market share declines, margin erosion and value chain cost inefficiencies that threaten their very existence. Life science manufacturers are driven to outsource and have accepted this reality to protect their eroding margins, preserve precious cash, and focus on their core

competencies – filling their product pipelines and speeding to market the next generation of blockbuster drugs.

Supply chain management related companies can expect dramatic growth in pharmaceutical outsourcing over the next four years and foreseeable future. To capture the growth opportunities, these companies must have the scale and right set of offerings to effectively compete for the growing number of outsourcing contracts. According to industry analysis, pharmaceutical companies spend approximately \$900 million USD on each new potential drug with only 15% of those new drugs making it to market. These companies have historically been reluctant to give up control of their supply chains, but now realize that they must strive to create more flexible and cost efficient distribution networks. Logistics Service Providers (3PLs) will begin to manage more of the movement of drugs from production through the retail, and the emerging complexities of the direct-to-consumer channels.

As an example of this trend, according to In-Pharma Technologist, DHL has landed a lucrative long term contract with Wyeth to become the first logistics provider to be given complete responsibility for the company's worldwide clinical trial materials distribution. Wyeth is just one of many life sciences companies beginning to embrace outsourcing as a means of reducing logistics and supply chain complexity, cost containment, cash preservation and outsourcing anything that is not a core function of their business. In fact, life sciences companies are looking for supply chain efficiencies to cut costs in excess of hundreds of millions of dollars.

The pharmaceutical industry will rely on increased utilization of existing drugs in more markets further stretching their global distribution channels and supply chains. As the value chain becomes more global, complex and consumer direct, life sciences companies will continue to consolidate their service providers and align with companies that can provide a broad and robust set of highly specialized logistics solutions to meet their needs.

The proliferation of life sciences mergers and acquisitions in recent years has created supply chain inefficiencies marred by disparate and dated compilations of systems and technology. All this is occurring as life sciences companies need cohesive technology platforms for R&D collaboration, and potential alliances, mergers and acquisitions to develop, manufacture and distribute to a more global customer base.

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The market will continue to show rapid growth, with more than \$25 billion spent on logistics services in the manufacturing sector alone. The pharmaceutical manufacturing industry is a \$700 billion USD a year industry, with sales more than doubling between 1998 and 2005, and expected to continue at this rapid clip.

The competitive landscape and requirements to win are changing.

The playing field is changing. With a chronic shortage of new blockbuster drugs in the pipeline, fierce competition, and the omnipresent expiry of patents, big pharma is faced with a big challenge. Margin erosion, regulatory constraints and the high cost of R&D have all had a significant impact on the performance of the once market leaders and steadfast corporations of Wall Street. In turn, the requirements for supply chain success are also changing.

Competition for supply chain management and logistics services with life sciences manufacturers is becoming fierce due to pressures from multiple directions: 1) traditional 3PLs investing in more focused and broader logistics services and acquiring companies with complementary services; 2) large wholesalers and distributors reinventing their companies and relationships with their historically strong life sciences customer base; 3) private equity firms actively investing and consolidating the market by making major investments in logistics platform companies; and 4) niche life sciences supply chain management and logistics services companies seeking to define a competitive position in the market. To add to the competitive threats to the mid-market logistics companies, there is growing receptivity and interest by the manufacturing sector to use 4PLs and LLPs to manage multi-company relationships.

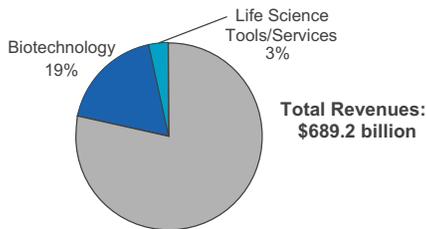
In addition to this competitive playing field, the better organized and larger global consulting firms may extend their supply chain management advisory relationships and seek potential supply chain management execution capabilities.

Across all of the global regions, manufacturers will outsource logistics services at an unprecedented rate. Market leaders will attempt to differentiate themselves from competitors by: commitment to high quality service; global reach; breadth of service offerings; superior technology and systems capabilities; and operational excellence. Increasing supply chain complexity and customer demands will lead to further consolidation of the industry and increased mergers and acquisitions across all regions.

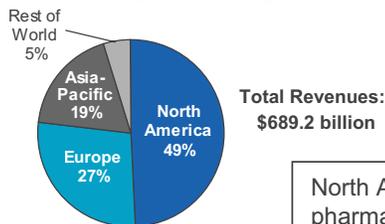
3PLs will consolidate and grow.

Consistent with this trend and to capitalize on the growth of the market, several acquisitions have taken place in recent years. Deutsche Post acquired DHL, and then Exel, in a deal valued at nearly \$7 billion USD. This move gave DHL immediate market positioning, deep expertise in life sciences supply chain management, and a portfolio of market-leading pharmaceutical customers. UPS Supply Chain Solutions acquired Menlo Forwarding, Fritz Logistics and made a number of other acquisitions, investing hundreds of millions of dollars to build out their life sciences and supply chain management capabilities. Kuehne + Nagel acquired USCO and ACR Logistics, contributing to their life sciences capabilities, expanding their solutions offerings and global reach. Many other similar industry consolidation deals are currently in negotiations. DHL and Kuehne + Nagel in particular are taking market leadership roles in the important APAC region with the life sciences manufacturers.

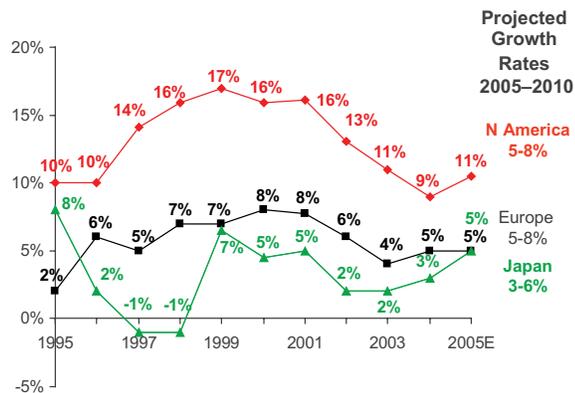
Global Pharma, Biotech and Life Science Industry by Sector, 2005



Global Pharma, Biotech and Life Science Industry by Geographic Region, 2005



Historical Growth of Major Pharmaceutical Markets, 1995 - 2005E



North America represents nearly half the global sales for pharmaceuticals, while the top two markets account for 77%.

Source: Industry Reports, "Healthcare: Pharmaceuticals," S&P, 2006; IMS Health, Deutsche Bank estimates; "Global Pharmaceuticals, Biotech, and Life Sciences" Datamonitor, April 2006.

The big three wholesalers and distributors are reinventing themselves.

The big three wholesalers, McKesson, Amerisourcebergen and Cardinal, dominate the major life sciences wholesale distribution channels. However, with the dramatic changes in the market, channel strategies and disintermediation, these large wholesalers are pressured to move toward a “fee-for-services” model, which is eroding their margins and forcing them to consider alternative business strategies. These well funded giants of the industry are already beginning to invest in innovative solutions to keep up with the market. For example, direct distribution model, pallets changing to packages, disintermediation and channel management, mail order and internet channels have all contributed to the changing landscape of timely distribution, customer service levels and cost to serve models. These firms are responding by reinventing their business models. As a result, they are likely to pose a greater competitive threat to mid-market companies in the coming three to five years.

Well-financed and industry focused private equity firms get into the game.

The private equity sector is accelerating its investment in the logistics and supply chain management markets. Today, over \$120 billion in private equity capital sits on the sidelines, waiting to be deployed. As private equity pours into the logistics sector, competition will accelerate. Private equity firms generally invest in companies that they believe can achieve a return of more than 30 percent. In the short run, smart capital will fuel smart companies

to compete more aggressively, and the fragmented logistics market focused on the life sciences sector will come to be dominated by a handful of giants.

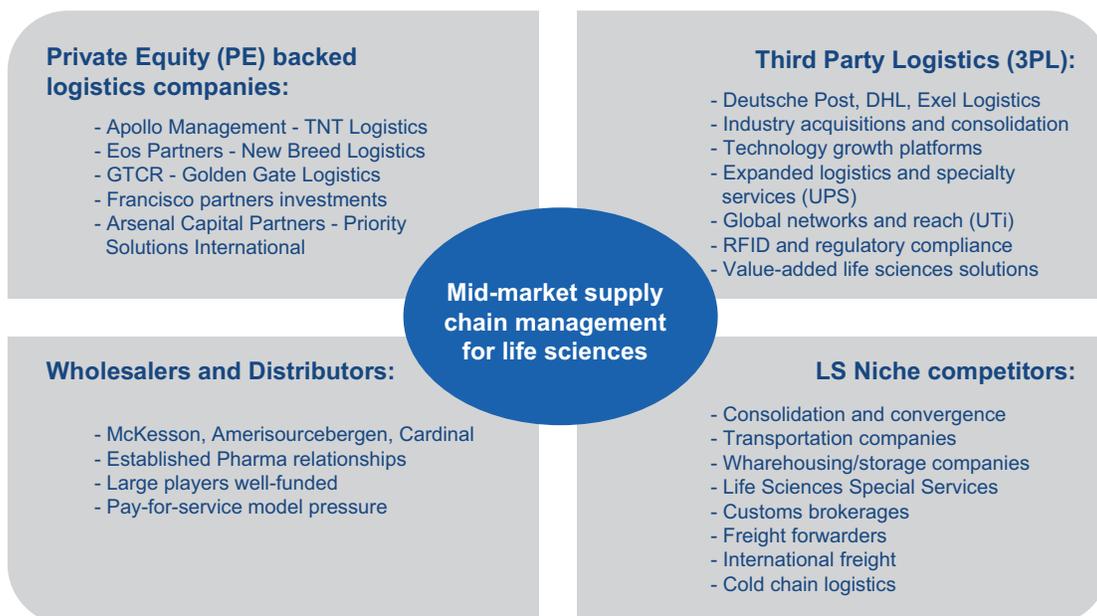
Private equity firms are captivated by the growth and consolidation potential of the supply chain management and logistics market. For instance, Apollo Management acquired TNT’s worldwide logistics business for \$1.9 billion USD to serve as a platform for future growth and investment. Other examples include: Eos Partners’ investment in New Breed Logistics; GTCR’s Golden Gate Logistics deal; and Arsenal Capital Partners acquisition of Priority Solutions International in life sciences logistics.

The mid-market will fight for survival.

The mid-market will feel increased pressure to define and execute on global business growth strategies. The life sciences sector business dynamics creates an opportunity for mid-market logistics services, niche players and 3PLs to gain significant market share. The market opportunity exists to assist life sciences companies to create and sustain competitive advantage through more flexible, agile, information technology enabled and demand driven value chain networks. This will in turn allow such companies to focus on their core businesses. Some of these companies will include smaller geographic oriented logistics services companies, life sciences specific solutions providers, freight forwarders, customs brokerages, supply chain applications companies, and several asset-light supply chain management companies contemplating various consolidation and growth strategies.

Competitive Threats to Mid-Market Life Sciences Service Providers

A “winner-take-all” market is emerging as aggressive investments are being made by Third Party Logistics (3PLs) companies, wholesalers and distributors and private equity firms who all threaten the competitive position of the mid-market players.



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The mid-market logistics companies face a tremendous competitive threat. Many could be squeezed out of business if they provide only one, or a limited number of the services offered by their key competitors.

Life sciences companies have increasing expectations of their supply chain management partners.

Life sciences companies will award larger and longer term contracts to fewer services providers. Outsourcing selection criteria will demand that the market winners provide much more robust supply chain management solutions offerings. The big players in life sciences logistics will invest aggressively in solutions and technology to differentiate their companies, create barriers to entry and capture market share by creating long term strategic relationships.

The growing expectations that leading life sciences companies have for their logistics and supply chain management partners include: sophisticated and optimized distribution networks with global reach, flexible asset-light Transportation Management Systems (TMS), Warehouse Management Systems (WMS), web-based Supply Chain Event Management (SCEM), advanced planning and forecasting capabilities, inventory management and optimization, RFID and next generation sensory technologies, and a broad spectrum of investments required for the safe and secure supply chain, track and trace, chain-of-custody, ePedigree compliance, regulatory compliance, patient safety, drug anti-counterfeiting, returns management, recalls and reverse logistics, expiration date control, temperature sensitive environments, import/export and quarantine services, and more. In a recent industry study, 98% of companies outsourcing services to 3PLs stated that information technology capabilities were extremely

important in their selection process, yet after two years only 30% of the respondents were happy with their level of technology and systems integration capabilities.

A few major winners will emerge.

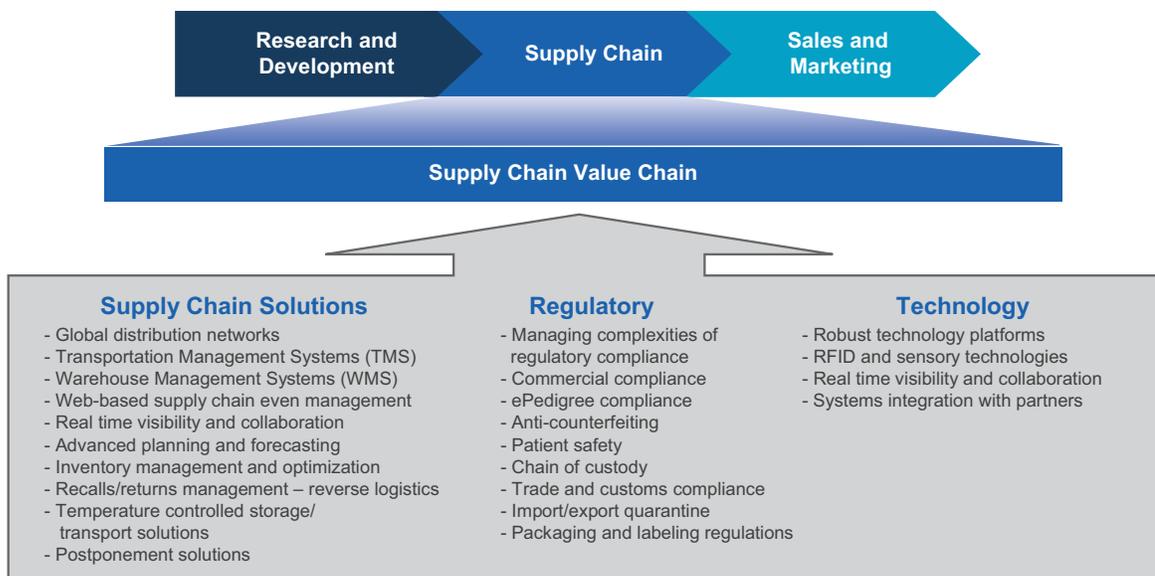
There is plenty at stake in the “winner-take-all” life sciences logistics and supply chain management arena.

Mid-market, niche life sciences companies and aggressive 3PLs are positioned to take market share from manufacturers’ insourcing of logistics services, and wholesalers’ previous market dominance. These large wholesalers and distributors must respond to the emerging market dynamics and adjust their business strategies to move from high inventory, low turn, mass distribution models, to a consumer oriented, highly targeted distribution and fulfillment strategy. Industry estimates indicate that there is more than double the inventory in the logistics pipeline than is needed to meet demand for pharmaceutical products. Life sciences niche players with channel savvy and focused life sciences strategies will be attractive targets for the larger and historically wholesale and distribution oriented companies. Flexible supply chains and emerging technologies will be keys to the success of the market leaders to maintain their share of this changing market.

Mid-market logistics companies and 3PLs are at a crucial juncture to regain sector market share. They must consider alternative strategies to invest and grow, merge with logistics providers who have complementary capabilities, and expand their value added services to address the increasing demands of the pharmaceutical and life sciences companies. Specifically, 3PLs who invest to become dominant niche providers or one-stop-shop solution providers to the life sciences sector will emerge as winners.

The winners in life sciences supply chain and logistics services will have deep industry expertise, a full set of solutions offerings and the ability to execute globally

Supply chain solutions leaders in life sciences will require unprecedented investment in expanded logistics services, regulatory compliance and technology solutions



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In a consolidating market, there are generally three main strategic options: buy, sell or do nothing.

Be an acquirer. Some companies will strive to compete on a global scale and acquire the right set of broad services and solutions, and technology enablers to create market differentiation. Becoming a market leader through acquisition will present many challenges to some of the mid-market players and smaller 3PLs as they commit to this strategy. Most are simply not staffed and structured to execute competently on an acquisition strategy. This will require major investments to develop leading skill sets in target identification, transaction execution, capital-raising and post-merger acquisition. While not impossible, very few firms will be able to execute on this strategy successfully.

Pursue a sale or merger. In consolidating an industry, the most viable survival strategy for well-run, mid-sized supply chain management and logistics services companies is typically to sell to a strategic acquirer. This route can quickly provide the scale to compete successfully in a consolidating market. It can also provide access to resources to allow these companies to expand the breadth and depth of their solutions offerings, as well as to make the required technology investments to create competitive advantage and establish barriers to entry. Most importantly for this sector, valuations are at all-time highs. Smart sellers are able to generate larger premiums than ever before – nearly double the valuations of a decade ago. In addition, there are many creative alternatives to structuring deals which allows business owners any number of different options. Sometimes, owners immediately exit the business. Often though, the energy and inventiveness of the owner is what makes the business an attractive acquisition candidate. Many owners prefer to stay on and continue building the business. In turn, many buyers prefer to maintain the entrepreneurial energy that sellers can generate. Further, as part of a sale, an owner can often choose to roll forward their equity into the new company (often on a tax-free or tax deferred basis), or take some or all of the equity value off the table in cash to help better diversify their personal wealth portfolio.

Do nothing. The default strategy is to simply do nothing and wait for the industry to evolve. The growth forecasts in this sector may make this appear to be an attractive alternative. Unfortunately, the landscape is changing. Mid-sized logistics companies will be squeezed out by the larger 3PLs, distributors, and private equity firms who are aggressively investing in this market. As the market leaders invest to provide the right services, technologies and global locations, a “do nothing strategy” is likely to lead to failure as the market surges forward.

Value chain efficiency is of paramount importance to the competitiveness and viability of life sciences market leaders. The life sciences industry leaders will reward innovative logistics and supply chain management services partners focused on, and committed to, this sector. With a well planned and executed merger, acquisition and business growth strategy, the market dynamics are right for the “superstars” to emerge and reap the rewards of this “winner-take-all” environment.

The choice is yours. Who would rather be? A league-leading Manny Ramirez, dominating the game and commanding a premium salary, or a journeyman warming the bench and watching the game pass you by? Smart CEOs have never had a better time to take advantage of such a favorable market. Whether you are a buyer or a seller, call your shot and take your best swing!

