

The Development of Logistics Networks in Central and Eastern Europe

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☐ 보고서 집필 내역

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제6장, 총괄

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머 리 말

글로벌화와 정보·교통기술 혁명은 세계 물류환경을 크게 변화시키고 있으며, 특히 글로벌 제조기업들이 집중 진출하고 있는 중국, 동남아, 인도, 동유럽을 중심으로 한 신흥시장에 빠른 변화를 가져오고 있다. 현재 세계 물류시장의 규모는 세계 전체 GDP의 13.8%에 이르고 있다.

구소련의 붕괴로 촉발된 동유럽의 경제성장은 EU의 동진정책으로 더욱 가속화 되고 있으며, 또한 글로벌 제조기업들의 진출과 함께 대상지역이 유럽, 아프리카, 중동을 연결하는 주요한 물류시장으로 급성장하게 되었다. 현재 유럽시장은 세계 물류시장의 약 10%를 차지하고 있다. 유럽은 치열한 물류업체의 격전장으로 세계 20대 물류업체가 33%의 시장 점유율을 가지고 있을 만큼 다수의 물류업체들이 치열한 시장확보를 위한 경쟁 중에 있다.

EU 27개국 중 2006년까지 신규 가입한 12개국 중 10개국이 중동유럽(Central and East Europe) 국가이며, 이들 국가들은 사회주의체제에서 벗어나 자본주의체제로 편입되어 EU의 새로운 사회·경제 환경의 중추로서 부상하고 있다. 다수의 유럽계 제조업체와 유럽, 아프리카, 중동시장을 겨냥한 글로벌 제조업체들은 글로벌 생산네트워크화로 인해 증가하는 물류비를 극복하고자 신규 EU가입국인 중동유럽시장으로 빠르게 진출하고 있다. 중동유럽은 글로벌 제조업체와 이를 지원하기 위한 물류기업들의 물류시설 이전 및 신규 투자 등으로 유럽 물류지도에 큰 변화를 일으키고 있다. 특히, 발틱해를 유일하게 연결할 수 있는 폴란드의 그다니아항, 아드리아해를 통해 중동유럽을 서유럽 항만(로테르담, 함부르크항)보다 해상으로 7-10일(2,000nautical mile)을 단축할 수 있는 코퍼항, 흑해지역의 최적입지에 있는 콘스탄자항 등은 강력한 유럽의 신흥물류거점으로 부상중이다.

따라서 본 연구는 중동유럽에서 물류기업 진출이 가장 두드러지고 있는 유럽 TEN의 남부(크로아티아, 슬로베니아), 북부(폴란드), 동부(루마니아, 불가리아)측에 있는 국가들과 그 해당 컨테이너 항만을 중심으로 물류시장 변화와 글로벌 물류기업들의 진출 현상을 조사하여 새롭게 재편될 중동유럽의 물류

패턴 현상과 글로벌 물류기업의 진출전략 분석을 통해 우리나라 물류기업들의 유럽 물류거점 확보를 위한 기초 자료와 진출방안을 중점적으로 제안하고자 하였다.

본 연구의 시사점으로 우리나라 기업입장에서는 장기 관점에서 글로벌화 전략 수립, 글로벌 경쟁에 필요한 임계규모 확보, 다양한 현지화 전략 구사, 다양한 글로벌화 tool 확보, 글로벌화 트렌드에 단순 동조하는 me-too 전략 삼가가 필요하다. 우리나라 정부에 제안할 수 있는 내용은 국내 물류기업들의 임계규모 확보를 위한 정책지원, 특정 산업위주 지원보다 경쟁력 있는 기업위주 지원으로 전환, 국가간 FTA 적극 활용, 금융관련 인프라 정비, 글로벌 물류네트워크 전략의 지속적인 추진 등을 강조하였다.

본 연구는 이성우 부연구위원, 김운수 책임연구원, 최영석 연구원, 김근섭 연구원이 공동으로 수행하였다. 본 연구의 수행에 있어서 유럽 물류시장 동향 부분의 집필과 자료수집에 이탈리아 제노아대학 물류비즈니스센터 Francesco Parola 박사와 Claudio Ferrari 박사가 공동으로 참여하였다. 한국 정부가 추진 중인 글로벌 물류네트워크 추진사업의 현황과 문제점 등의 지적을 통해 적절한 정부정책이 반영되도록 해양수산부 김명진 사무관이 자문을 해 주었으며, 한국 물류기업들의 글로벌 물류시장 진출 전략에 직면한 문제점 등은 (주)한진 김운 구주사업팀장이 조언해 주었다. 이외 본 원의 강종희 해운물류안전 연구본부장, 김학소 항만연구본부장, 정봉민 선임연구위원, 임진수 기획조정실장, 양창호 정책동향실장, 김종덕 기획조정팀장은 전체적인 내용과 연구집필 체계 등에 많은 도움을 주었다. 그리고 본 보고서가 출판되도록 행정 및 편집업무를 수행한 이남순, 김은정 행정원의 많은 도움도 있었다. 이 연구보고서가 출판되기까지 많은 도움을 주신 모든 분들께 이 자리를 빌려 심심한 감사를 표하는 바이다.

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ABSTRACT

The global economy is constantly changing as regionalism and economic integration progress, and today's global economic environment is becoming more competitive than ever. As global trade barriers are broken down and trade relations around the globe improve, there is no longer a clear division between domestic markets and international markets, and meaning that many small-sized domestic companies are now faced with direct competition from global companies in the world market.

Companies around the world have to maintain high quality in their products and services, while maintaining competitive prices, if they are to survive in international markets. Furthermore, the top-tier companies across the worldwide markets try to be more competitive by establishing strategic partnerships, joint ventures, or mergers with other companies that possess core technology, capital, information, human capital and so on in that line of business. Globalization has helped global logistics companies to achieve economies of scale through M&As, joint ventures, strategic partnerships, and so forth, and to establish global logistics networks that provide greater efficiency in globalized services, and result in greater earnings.

Global economies and their dynamic trading systems are continuously changing, and most countries, including developed and developing countries, try to speed up their economic advancement and expand their capabilities in order to gain advantages. Until recently, the NAFTA, the EU, and the North East Asia economic blocs have been major economic axes. However, the emergence of new economies in China, India, ASEAN, Mercosur, and CEE (Central and East Europe) has lead to the development of a more diverse and well connected variety of axes around the world market. Increased trade between economic blocs has been facilitated by bilateral free trade agreements which lower tariff and non-tariff

barriers in trades and services.

Democratization and capitalization in CEE countries, and the enlargement of the European Union, has encouraged multinational corporations that already have a significant business presence in the region to move into CEE countries looking for new low-cost opportunities. The economies of the CEE countries have experienced a manufacturing boom after accession into the EU. Currently, 10 of the 27 EU member countries are CEE countries. The economies of these countries are making the transition from socialism to capitalism, which should lead to further economic growth in the future. The EU accounts for around 10% of the world logistics market. Many manufacturing and logistics companies that do business in the EU as a main market, have moved their production and operations from other places into the CEE region to take advantage of lower logistics costs, and to further enable global vertical specialization with an extended market while intensively competing with each other.

Logistics markets in CEE countries have grown rapidly, due to the unification of processes in customs clearance and other administrative agreements within the EU. Because of the low cost cluster effects, many MNCs have reinforced their investments in the region in order to boost their competitiveness, by saving manufacturing and logistics costs. So far during this process, the logistics markets in Poland, Slovenia, Croatia, Romania, and Bulgaria have grown particularly quickly as strategic centers for many companies. The Mediterranean and Black sea ports support the new manufacturing and logistics markets by saving costs and time, and by extending these logistics markets as opposed to those of the traditional northern European ports, such as Rotterdam, Hamburg, and Antwerp.

This research aims to analyze new logistics networking patterns in the CEE countries by examining the emerging trends of global logistics enterprises, and by assessing their strategies in launching new initiatives into the newly developing markets. It further explores the restructuring processes of logistics networks, and the trends of logistics activities adopted by current players, and newcomers in the market. The study focuses on the launching patterns and strategies of global logistics companies in CEE based on their type of business.

This study closely examines the logistics system changes in the rapidly evolving CEE countries, due to the expansion of global logistics companies into foreign target markets amid market integration processes in Europe, that are a result of the unification of the EU and the liberalization of the CEE countries. Economic unification in the EU has led to an increase in intra-regional trade between the developed Western European countries and the underdeveloped CEE countries. Industrialization in the CEE countries has led to trade increases between Asian countries and CEE countries. This, in turn, has led to rapid development of ports in CEE, as well as logistics system changes across the whole continent. Most notably, the ports in the Mediterranean and Black Sea areas, which are leading trade partners with Asian countries, have shown tremendous development. This study has covered three groups of areas: the southern group including the port of Koper in Slovenia and the port of Rijeka in Croatia, the eastern group including the port of Constanza in Romania and the port of Varna in Bulgaria, and the northern group including the port of Gdynia in Poland and other northern European areas. The study analyzes the launching processes and characteristics of global logistics companies, such as shipping lines, stevedores, and 3PL companies, with the ultimate aim of assessing the implications for Korean logistics companies and their future access to target markets overseas and global logistics networks in the region.

CEE markets have become more friendly towards Korean companies due to the privatization of state-owned companies and open market policies, such as deregulation and other policies to induce FDI. In addition, the Korea-EU FTA will provide many business opportunities for Korean manufacturing companies and logistics companies. However, many global shipping lines and stevedores have expanded their markets into CEE ports to secure logistics posts, and the trend is becoming more and more intensive. Furthermore, specialized logistics companies have also expanded into the target markets of CEE countries and have started vigorously advancing into the surrounding countries such as Hungary, the Czech Republic, and Slovakia. It seems likely that this trend will continue into the foreseeable future.

Although there are many obstacles to overcome when advancing into the new markets, the on-going logistics network build-up is improving and will allow global manufacturers to reduce their expenses, and the time required to establish themselves effectively in the targeted CEE based logistics networks. Therefore, this research strongly recommends that Korean logistics companies invest aggressively in the CEE markets. The evidence suggests that the south axis of Croatia-based Corridor V and the east axis of Romania-based Corridor IV will be new logistics centers. In terms of market advancing strategies, global logistics companies seem to prefer M&A for various reasons; it is a more efficient way of capital financing through global capital liquidity, there is a reduced risk when advancing into new markets, an increase of M&A deals which involve the privatization of state owned companies in CEE, and the deregulation of economies by European countries.

With the accelerated industrialization of CEE countries, increased intra regional trade, increased trade volumes from Asia and other countries to the target markets, and increased exports to neighboring countries, the CEE countries will have more interactions with Eastern Asian countries such as South Korea, China, and Japan. As a result, the three axes mentioned in this research are expected to play a major role as trade gateways to CEE, and will grow as centers for the logistics industry. In order to make the most of this environment, Korean logistics companies need to accelerate the current expansion of their Southeast Asia and China based operations. This will allow them to enter into new business with CEE, Russia, and South America, taking the initiative amid fierce international competition.

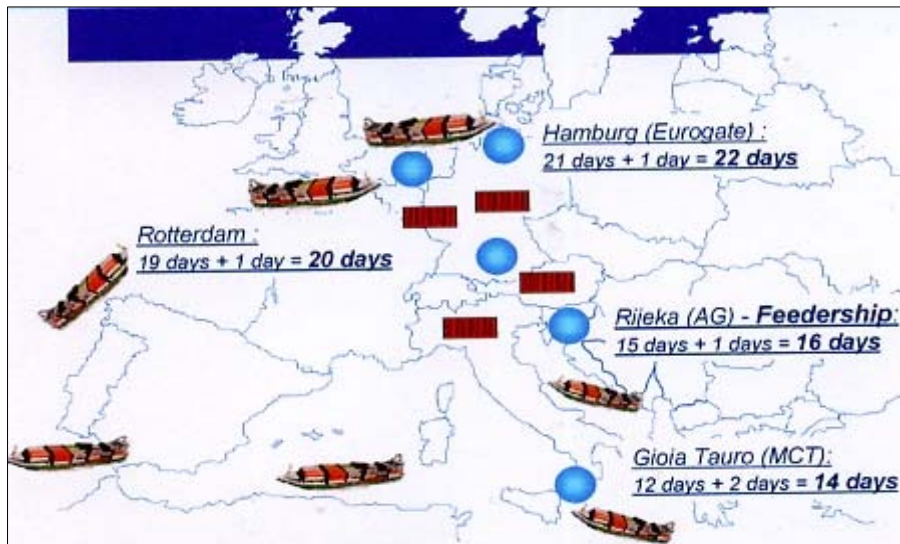
제1장 서론

1. 연구배경 및 목적

- 현재 세계 물류시장의 규모는 세계 전체 GDP의 13.8%에 이르고 있으며, 이중 유럽시장이 약 10%를 차지하고 있음
 - 유럽은 치열한 물류업체의 격전장으로 세계 20대 물류업체가 33%의 시장 점유율을 가지고 있을 만큼 다수의 물류업체들이 치열한 시장확보 경쟁 중
 - EU 27개국 중 2006년까지 신규 가입한 12개국 중 10개국이 중동유럽(Central and East Europe) 국가이며, 이들 국가들은 사회주의체제에서 벗어나 자본주의체제로 편입되어 EU의 새로운 사회·경제 환경의 중추로서 부상하고 있음
 - 다수의 유럽계 제조업체와 유럽, 아프리카, 중동시장을 겨냥한 다국적 기업들은 글로벌 생산네트워크화로 인해 증가하는 물류비를 극복하고자 신규 EU가입국을 포함한 중동유럽시장으로 빠르게 진출하고 있음
- 이처럼 중동유럽 10개국은 EU의 기존 회원국에 비해 인건비와 토지임대료가 저렴한 나라로 저비용 클러스터(low-cost cluster) 효과를 발휘하고 있음.
 - 중동유럽은 글로벌기업들의 물류비 절감과 시장진입을 위한 생산시설 재배치에 의한 신규투자가 급증하고 있어 유럽 물류지도에 큰 변화
 - 삼성, LG, 현대 등이 중동유럽시장에 적극 진출하고 있으며, 물류비 절감을 위한 기존 화물수송 경로 변경에 많은 노력을 기울이고 있음
- 또한 중동유럽의 물류요충지에 입지한 폴란드, 체코, 헝가리, 슬로바키아, 슬로베니아, 루마니아, 불가리아 등의 물류시장이 크게 성장하고 있음
 - 특히, 발틱해를 유일하게 연결할 수 있는 폴란드의 그다니아항, 아드리

아해를 통해 중동유럽을 서유럽 항만(로테르담, 함부르크항)보다 해상으로 7-10일(2,000nautical mile)을 단축할 수 있는 코퍼항, 흑해지역의 최적입지에 있는 콘스탄자항 등은 강력한 유럽의 신흥물류거점으로 부각되고 있음

극동아시아에서 중동유럽으로 운송시 장점



- 글로벌 물류기업들은 중동유럽시장 진출 교두보로 지중해 주요 항만에 진출하였으며, 특히 폴란드, 슬로베니아, 루마니아 등 항만기능과 연계된 물류네트워크(Trans Europe Network)에 적극 진출하고 있음
 - 2006년 HPH는 폴란드 Gdynia항에 컨테이너터미널을 운영하기 시작하였고 불가리아 Constantza항은 DPW와 APM터미널이 이미 진출하였음
 - 슬로베니아 코퍼항에는 최근 도이치방크 등 유럽계 자본들이 투자를 적극 고려하고 있음
- EU확장에 따른 저비용클러스터인 중동유럽으로의 산업입지 이전이 진행 중이며, 물동량 증가, 물류인프라 확장, 다국적 물류기업 진출 등으로 지중해와 흑해를 중심으로 한 지역에 새로운 물류패턴이 예상되고 있음
 - 이에 해당지역에 빠르게 진출하고 있는 글로벌 물류기업들의 진출 현상을 조사하여 새롭게 재편될 중동유럽의 물류패턴에 대한 현상 분석과 함께 글로벌 물류기업의 진출전략 분석을 통해 우리나라의 유럽 물류거점

확보를 위한 기초자료와 진출방안을 제안하고자 함

2. 선행연구 검토

- 최근 글로벌 물류기업들의 해외진출 전략과 중동유럽 지역의 물류환경 및 물류구조 변화에 대한 많은 연구들이 진행되고 있음
- 글로벌화에 의한 글로벌 물류기업들의 해외진출 전략 관련 선행연구는 1990년대 이후 글로벌화가 물류산업에 크게 영향을 줄 무렵 글로벌 네트워크 확대 사례를 중심으로 등장하기 시작함
 - 초기 연구로는 주로 항만을 중심으로 한 선사, 운영사들의 전략적인 해외 진출에 대한 사례 연구가 중심되었고 최근 연구들은 선사, 운영사, 전문 물류기업들의 지역별, 업종별 물류구조 변화, 통합과 그 영향으로 인한 사회적, 경제적 변화에 초점을 맞추고 글로벌 물류기업들의 시장경쟁력 확보를 위한 전략 등 다양한 시각에서 접근됨
 - 이러한 선사들의 글로벌 통합사례에 대한 연구로는 Midoro, R. et.al., (2005)의 선사와 항만하역사간의 시장 경쟁구도와 경쟁전략, Parola, et.al., (2006)의 동북아시아 선사들의 글로벌 시장 진출 패턴 유형화 등의 연구가 있음
 - 한편 항만을 중심으로 한 항만운영업체들의 글로벌 네트워크 확장에 대한 연구로는 Olivier, D.(2005)와 Olivier, et.al.,(2007)의 아시아지역 항만하역사들의 글로벌화 전략, Parola, F. & Musso, E. (2007)의 항만운영사와 선사들의 시장구조와 경쟁구도 분석 등이 있음
 - 중동유럽 지역의 물류환경 변화 및 물류구조 변화에 대한 연구는 2005년 이후 주로 이루어졌으며, 거시적 관점에서 Percoco, M. & Reggiani, A. (2007)는 유럽의 물류네트워크와 공간적 선택에 대한 연구 등이 있음
- 이러한 연구들은 신흥 물류시장인 중동유럽에 대한 물류환경과 시장구조 변화, 해상물동량 증가에 따른 내륙물류 구조 변화, 항만물동량 증가에 따른 새로운 항만개발 전략 등에 대한 연구들이 진행됨
- 그러나 두 분야의 연구들이 아직 중동 유럽지역을 중심으로 통합되어 추진되고 있지 못함
 - 이는 중동유럽이 아직 완전히 EU에 포함되어 있지 못해 통계자료의 부재,

10여개 나라로 분리된 다양하고 복잡한 지역특성 그리고 최근 EU가입국들의 자료축적 미흡 등으로 인해 연구추진에 많은 제약이 있기 때문임

- 따라서 본 연구는 이러한 연구한계를 극복하는 측면에서 중동 유럽을 대상 지역으로 하여 글로벌 물류기업의 진출 현황과 전략 등을 통해 해상과 육상을 연결한 전반적인 물류체계 변화와 향후 전망을 중심으로 연구를 추진함
 - 세밀한 Data를 활용한 분석은 어려우나 다양한 문헌조사와 2차 자료를 중심으로 시공간 연계분석을 수행하고자 함
 - 특히 본 연구는 유럽의 TEN계획을 근거로 중동 유럽을 연결하는 3개축의 항만을 중심으로 그 물류체계 변화를 전망함

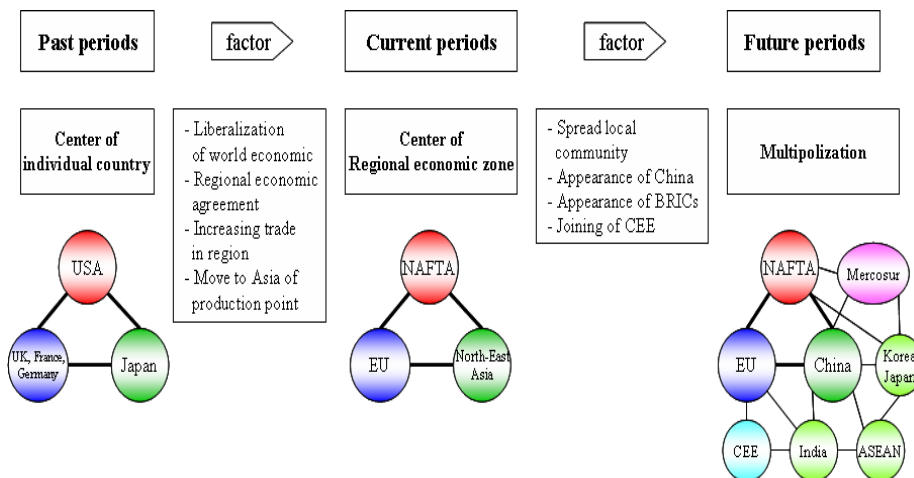
제2장 본문 요약

1. 글로벌 물류시장 환경 변화 분석

- 세계 경제의 글로벌화와 산업의 수직적 분업화가 이루어지면서 국제물류 산업은 초고속 성장을 지속하고 있음
 - 물류산업 성장에 힘입어 2005년 세계 물류시장 규모는 전 세계 GDP 43조1,610억 달러의 13.8%(CIA)인 6조 달러를 기록하였음
- 글로벌 물류기업들은 M&A, 전략적 제휴 등을 통해 규모의 경제를 실현함과 동시에 글로벌 네트워크 구축을 통한 글로벌 서비스 제공으로 막대한 수익을 창출하고 있음
 - 해운분야에서는 Maersk와 같은 초거대 선사가 M&A를 통한 막대한 시장 지배력 확보 노력을 계속하고 있으며
 - 터미널운영 분야에서도 HPH, APM, DPW 및 PSA 등이 시장지배력 향상과 글로벌 서비스 제공을 위해 지속적인 투자 진행하고 있음
- 물류부문에서의 가장 큰 변화는 초국적 기업군, 로지스틱스 서비스 제공업체의 등장으로 Global Supply Chain 개념의 등장과 함께 메가허브항에 의한 대륙간 국제물류 네트워크가 형성되고 있다는 것임
 - 대륙간 물류 연계체제의 구축은 거대항만, 거대공항을 요구하고, 또한,

- 항만의 대규모 유통센터화, 부가가치운영, 조립생산기지, 로지스틱 컨트롤 센터화를 요구
- 또한 UPS, DHL, FedEx, HPH, Maersk, APM, DPW 등 각 분야별 최대 물류기업은 전 세계의 전략적 위치에 거점 및 시설을 확보하고 글로벌 복합물류서비스를 제공
 - 물류기업의 글로벌화는 시장점유율 향상, 사업 리스크 분산, 시장진입장벽 형성 등 3가지 효과 추구를 위한 수단으로 사용
- 세계교역구조는 과거 미국, 영국, 프랑스, 독일, 일본이라는 개별 국가중심의 체제에서 지역경제협력의 강화에 따라 현재 NAFTA, EU, 동북아라는 지역경제권 중심의 3극체제로 발전함
- 향후에는 신흥지역의 급부상에 따라 동북아, NAFTA, EU를 중심으로 인도, ASEAN, 동유럽, 남미경제공동체(MERCOSUR) 등이 연계된 다극화체제로 경제구조가 전환될 것으로 전망됨
- 이러한 경향은 최근 전 세계적으로 확산되고 있는 자유무역협정(FTA)과 함께 중국 시장의 부상, 인도로의 다국적기업 아웃소싱 확대, EU가입에 따른 동유럽의 생산기지화, 아세안자유무역협정(AFTA)의 활성화 경향에서 찾을 수 있음

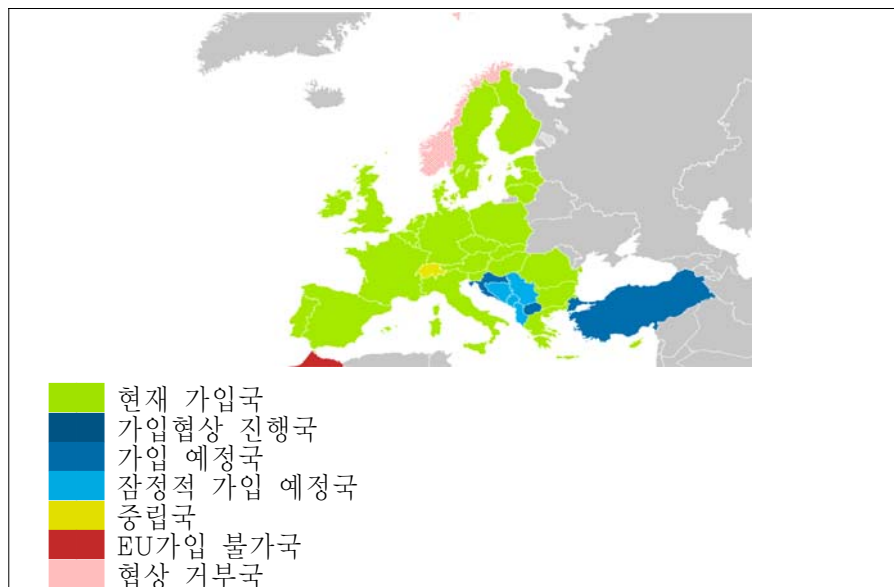
경제공동체사이의 관계 동향



2. CEE 물류시장의 현황분석 및 전망

- EU공동체는 1956년 6개국에서 시작하여 5차에 걸친 확장을 통해 2007년 현재 27개국, 인구 4억 9천명에 이르는 거대 경제공동체로 거듭남
 - 특히 신규 가입한 루마니아와 불가리아를 위시한 중동유럽 10개국은 이 지역의 새로운 산업화 지역으로 경제, 산업, 물류 등에 큰 발전을 가져오고 있음
 - 향후 발칸반도, 터키, 일부 CIS국가까지 EU공동체가 확장할 경우 글로벌 경제의 중심이 될 것이며, 중요한 물류시장으로 성장할 것으로 전망됨
 - 현재 크로아티아, 마케도니아, 터키, 알바니아, 몬테네그로, 보스니아&헤르체고비나, 세르비아 등이 차기 EU공동체 편입대상국가임

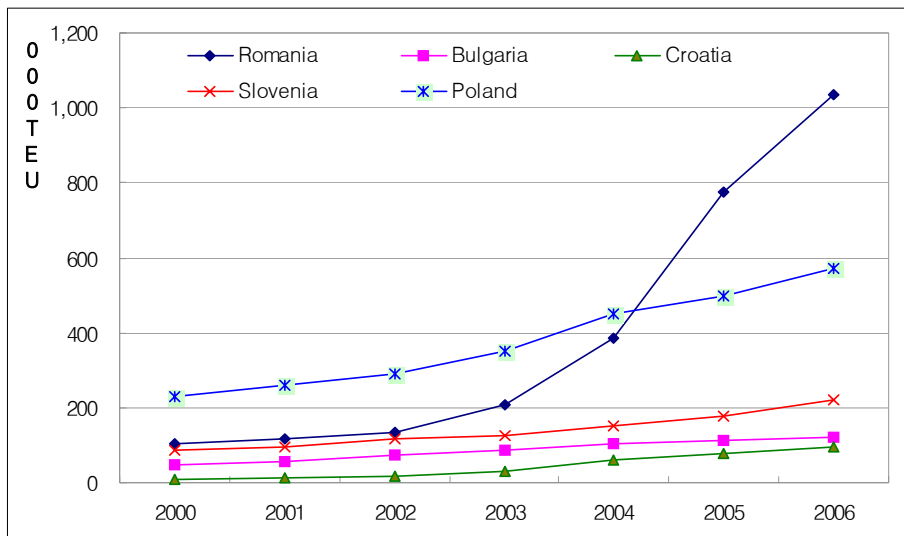
EU가입국과 가입진행국 현황



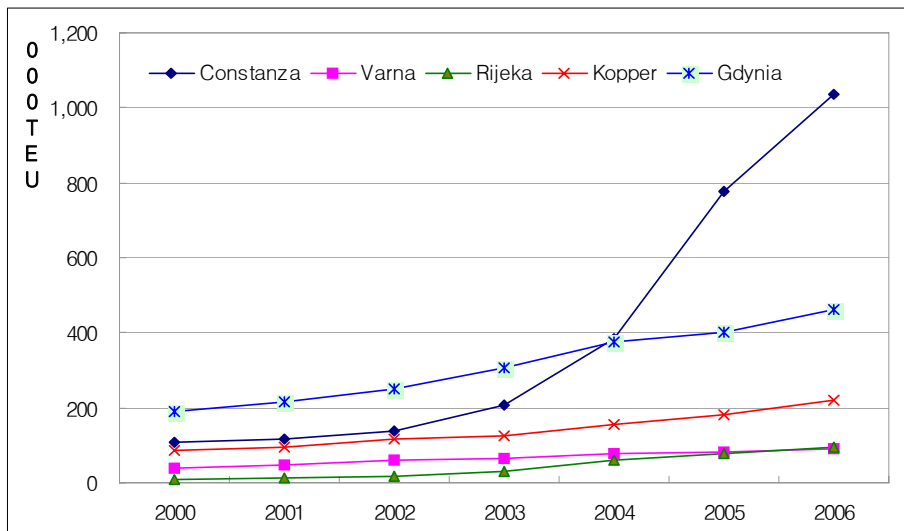
- EU공동체의 중동유럽 가입국들은 EU의 지원과 외자유치를 통해 2006년 기준 약 4~8% 정도의 실질GDP 성장률을 보이고 있음
 - 1인당 소득은 슬로베니아가 EU평균의 80%, 체코는 72% 수준에 도달하고 포르투갈의 수준과 유사할 만큼 빠르게 성장하고 있음

- 그러나 이들 국가들은 사회간접자본 가동률 증가, 투자증가, 실업을 감소, 낮은 인플레이션 등 긍정적인 경제지표를 보이고 있는 반면, 인건비 상승압력과 이민자 증가 등 사회불안도 공존하고 있음
- 또한 중동유럽의 물류인프라 시설현황은 산업투자에 비해 상대적으로 늦게 확충 및 개선되고 있으며, 특히 과거 높은 철도 의존도에서 점차 도로, 내륙수운의 활용도가 높아지고 있음
 - 내륙운송망은 중동유럽의 내륙교통망 정비차원에서 도로, 철도와 내륙수운을 연계한 10개의 물류네트워크 TEN(Trans-Europe-Network)이 개선, 정비 및 확충되고 있음
 - 중동유럽의 EU가입 후 가장 개선된 인프라 시설은 항만시설이며, 이는 물동량이 크게 증가하고 있는 아시아-유럽간 항로와 물류비 절감차원에서 지리적으로 인접해 있고 글로벌 기업의 진출에 따른 수출입 화물의 증가에 따른 항만시설 확보가 선행되어야 했기 때문임
- 유럽의 컨테이너 해상물동량 중 아시아-유럽간 항로에서 수송되는 화물비중이 1990년 55.1%(3백만TEU)에서 2005년 69.4%(1천 2백만TEU)에 이르렀으며, 2015년에는 74.4%(2천 2백만TEU)를 차지할 것으로 전망하고 있음
 - 주로 항만시설 투자가 이루어지는 곳은 지중해와 연계된 아드리아해와 흑해, 북유럽의 발틱해이며, 지중해의 환적항(몰타, 지오르타루, 리마솔 등)의 투자도 증가하고 있음
 - 주요 항만별 물동량 증가율은 살펴보면, 루마니아 콘스탄자항(흑해)은 2006년 기준 5년간 66% 증가, 폴란드 그다니아항(발틱해) 15.6%, 슬로베니아 코퍼항(아드리아해) 17.5%, 크로아티아 리에카항(아드리아해) 57.1% 증가하는 등 폭발적인 증가세를 보이고 있음

2000년 이후 5개 대상국 컨테이너 물동량 증가율



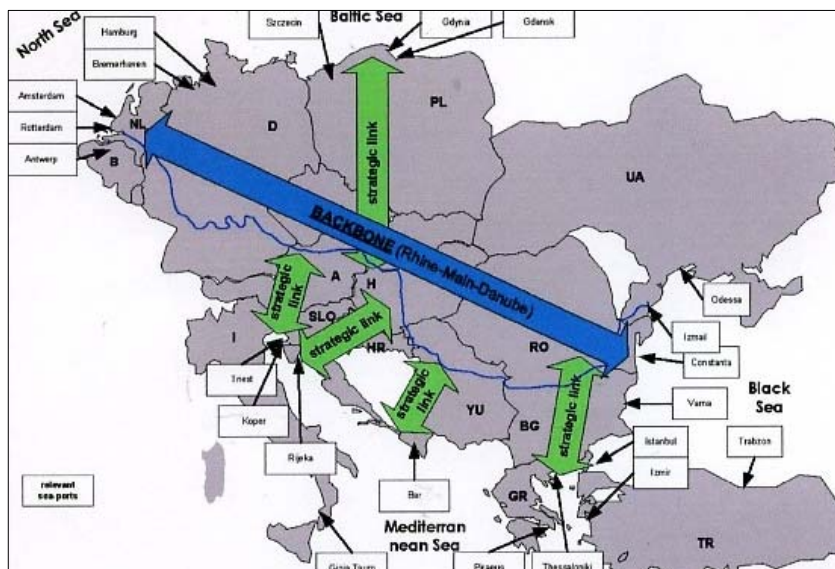
2000년 이후 5개 대상항만의 컨테이너 물동량 증가율



- 중동유럽의 물류시장은 서유럽국가의 50~60%, 인도의 75%에 불과한 인건비를 바탕으로 급성장하는 제조업시장과 연계하여 빠른 성장세를 유지하고 있음

- 현재 서유럽의 물류시장과 분리되어 있으며, 자국의 토착 물류기업들의 강세로 글로벌 물류기업들의 진출이 부진한 상황임
 - 특히 항만을 중심으로 연계된 내륙물류 인프라와 시스템이 아직 부실하여 글로벌 물류기업의 내륙 물류시장 진출은 1990년대 중국 물류시장의 진출과 유사한 상황임
 - 그러나 중국보다는 주변국가와 물류네트워크 연계가 용이하고 TEN계획에 의한 EU차원의 정비 및 통합으로 조만간 글로벌 물류기업들의 진출이 활발할 것으로 예상됨
 - 진출이 용이한 항만지역은 상기 언급한 것처럼 많은 글로벌 터미널운영사와 선사들이 진출을 했거나 준비 중에 있음
- 슬로베니아, 크로아티아(아드리아해-남부축), 루마니아, 불가리아(흑해-동부축), 폴란드(발틱해-북부축) 등 3개축에 입지한 국가의 주요 항만들을 중심으로 물류시장이 빠르게 증가하고 있음

TEN계획에서 중동유럽 항만들의 전략적 위치



- CEE의 동북아와의 무역 증가는 초기 서유럽 항만을 이용하던 물류패턴에서 점차 중동유럽 항만들의 이용비중을 급격히 증가시켜 전체 동아시아

- 아-유럽간 컨테이너 화물의 중동유럽 항만 처리 비중이 2001년에는 22.6%에서 2005년 30.5%로 급증하였음
- 이는 중동유럽 항만들의 연간 물동량 증가율에서도 확인할 수 있는데 이러한 현상은 용선료 증가와 유가 상승으로 인하여 더욱 가속화 될 것으로 보임

중동유럽에서 주요 컨테이너 항만들의 성장추세

단위: 천 TEU

Categories	2006	2005	Growth
Northern EU	39,374	36,046	9.3%
West Med	18,237	17,399	4.8%
East Med/Black sea	3,547	3,142	12.9%
Scandinavia/Baltic sea	4,966	4,313	15.1%
Total Port	66,130	60,900	8.6%

- 글로벌 선사들의 과점화 현상은 세계 10대선사가 2000년에 전체시장의 53.1%에서 2007년 60.2%로 빠르게 진행되고 있음
- 이러한 글로벌 선사들의 과점화 현상은 CEE 3개국에서도 분명히 진행되고 있어 2000년에서 2005년 사이에 많은 글로벌 선사들이 남부와 동부 측 항만들을 중심으로 기항을 확대하고 있음
- Hub & Spoke 개념에 의해 글로벌 선사들의 주도하에 많은 피더라인들이 개설되고 있으며, 특히, 콘스탄자항은 흑해지역 환적항 역할을 수행하고 있음

제3장 결론 및 정책제언

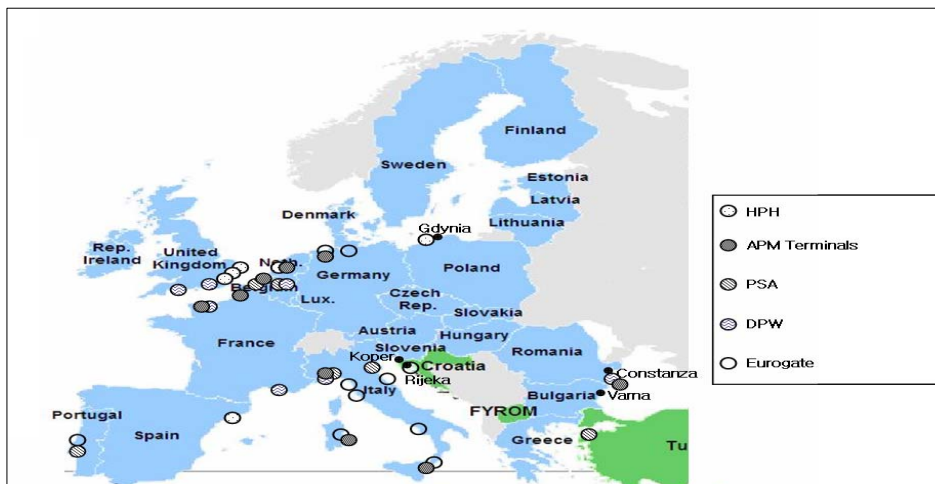
1. 요약 및 결론

- 본 연구는 EU통합과 중동유럽의 민주화에 기인한 유럽시장의 통합과정에서 급변하고 있는 중동유럽의 물류체계를 글로벌 물류기업의 대상 지역 진출 과정을 통해 살펴봄
- 유럽지역의 경제통합은 산업구조에서 선진단계의 서유럽과 발전단계의 중

동유럽간의 역내 교역증진과 중동유럽의 산업화에 따른 아시아와의 교역 증진으로 인해 대륙전체의 물류시스템이 변화하고 중동유럽의 주요 항만들의 급성장을 가져옴

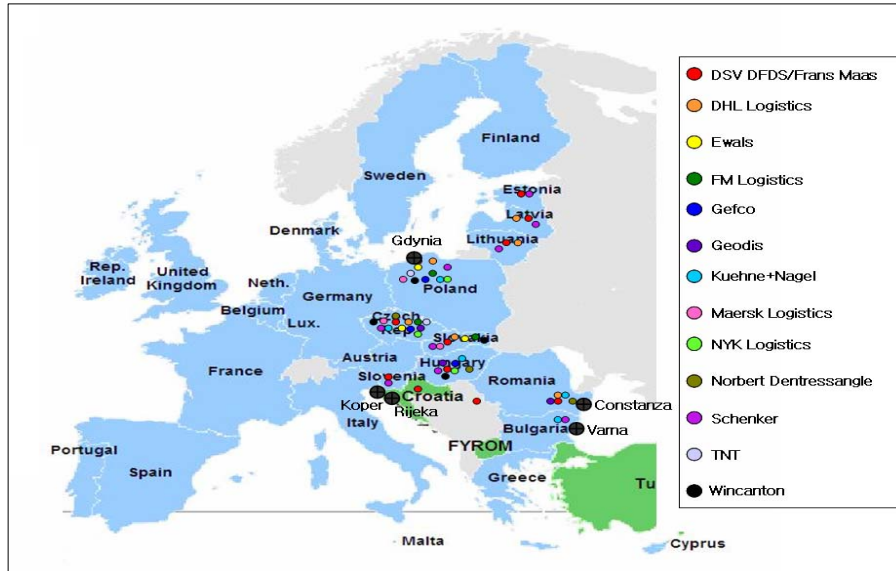
- 특히 아시아 지역과의 교역을 주도하고 있는 지중해와 흑해연안 항만들이 급 성장하였고 중동유럽 최대 국가인 폴란드를 중심으로 한 성장이 두드러짐
 - 본 연구에서 살펴본 3개 물류축은 이러한 아시아와 중동유럽과의 교역을 주도하는 슬로베니아 코퍼항과 크로아티아 리에카항을 묶은 남부축, 루마니아 콘스탄자항과 불가리아 베르나항을 묶은 동부축 그리고 폴란드 그다니아항을 중심으로 한 북부축으로 구성됨
 - 이들 3개축에 글로벌 물류기업(shipper, stevedore, 3PL company)들이 진출하는 과정과 형태를 분석하여 향후 우리나라 물류기업들의 대상지역 진출과 글로벌 물류네트워크 구축을 위한 시사점을 도출함
- 본 연구에서 발견한 주요한 내용들은 다음과 같음
 - 첫째, 선사와 하역사들이 1990년대 후반부터 중동유럽지역의 주요항만에 거점확보를 위해 진출하기 시작하였으며, 최근에 그 추세는 더욱 강화되고 있음. 특히 루마니아 콘스탄자항에 MSC, Maersk, APM, 크로아티아 리에카에 Eurogate, 폴란드 그다니아항의 HPH 등이 그 대표적인 경우임

유럽에서 글로벌 터미널 운영사들의 진출전략 포트폴리오



- 둘째, 전문물류기업들이 2000년대 이후부터 루마니아, 슬로베니아, 폴란드 등과 배후지인 헝가리, 체코, 슬로바키아 등에 적극 진출 중이며, 이러한 추세는 지속될 것으로 전망됨

동유럽에서 글로벌 물류 기업들의 진출전략 포트폴리오



- 셋째, 유럽의 TEN 구축에 따라 EU자금에 의해 3개축 물류망의 지속적인 개선이 이루어지고 있으며, 이는 현재 서유럽중심의 물류네트워크에 비용과 시간 경쟁이 가능하게 되어, 기 진출한 글로벌 제조업체들의 물류비 절감과 서비스 증진 요구에 글로벌 물류기업들의 새로운 대안으로 부상하고 있음
- 넷째, 중동유럽 물류축은 남부축의 크로아티아를 중심으로 하는 Corridor V와 동부축의 루마니아를 중심으로 하는 Corridor IV에 집중될 가능성이 높아 이 지역에 대한 우리나라 물류기업들의 적극적인 투자가 필요할 것으로 보임
- 다섯째, 글로벌 물류기업의 진출전략은 대부분 M&A에 의한 시장진출을 선호하고 있는데 이는 글로벌 자금의 유동화에 따른 M&A 자금확보 용이, 신흥시장 진출에 따른 리스크 감소, 중동유럽 국영기업들의 민영화에 따른 M&A 물건 증가, 중동유럽 국가들의 경제부흥을 위한 규제완화

등이 대상지역 M&A 증가에 기여한 것으로 보임

- 향후 중동유럽지역은 동아시아의 한국, 중국, 일본과 같은 다른 경제성장국의 공존으로 인한 국제분업화(International Specialization)와 생산재의 중국대체 효과 등이 가속화될 것으로 예상되고 이는 중동유럽지역의 빠른 산업화와 함께 역내교역 역시 빠르게 증가할 것임
 - 아시아와 기타지역으로 부터의 조달물류(수입)가 급증하게 될 것이고 반대로 지역 생산품의 지중해 연안국, 러시아, CIS, 중동으로의 판매물류(수출) 역시 급증하게 될 것으로 예상되고 있음
 - 결국 본 연구에서 선정한 3개축에 있는 항만들이 중동유럽의 수출입 게이트웨이 역할을 하면서 물류산업의 중심으로 급성장할 것으로 전망됨
- 따라서 한국 물류기업들은 한국 제조업체들처럼 대상지역에 조속히 진출하여 물류거점 및 네트워크를 확장하여 향후 예상되는 중동유럽의 경제성장에 따른 반사이익을 확보해야 할 것임
 - 우리나라 기업들은 과거 수출중심의 원화절하 정책과 국내 성장위주로 인한 자금부족 등으로 거시경제측면에서 많은 장애물들이 있었으나 최근 유가인상, 원화절상, 국내 저성장으로 인한 기업보유자금 풍부, 주요 경제공동체와의 FTA 등으로 해외 진출을 위한 좋은 환경에 직면하고 있음
 - 또한 중동유럽은 민주화 및 자본주의화로 인한 공기업 민영화와 FDI 유치가 활성화 되고 있어 우리나라 물류기업들의 진출이 비교적 용이한 시장으로 변하고 있음

한국 기업들의 글로벌 비즈니스 환경 변화

	Past		Present
Capital	Domestic Deposit < Investment	➡	Abundant Foreign Exchange Holding
Incentive	Low Currency and Interest	➡	Revaluation, Low Interest
Business Environment	Local Competition	➡	Global Competition
Market Environment	High Growth in Local Market	➡	Low Growth in Local Market

- 따라서 이러한 환경을 최대한 활용하여 현재 추진되고 있는 중국, 동남아 중심의 진출 전략을 확대하고 중동유럽지역, 러시아, 남미 등으로 적극 진출하여 치열한 국제경쟁과 과점화 되고 있는 국제물류시장에서 우리나라 물류기업들의 주도권을 확보할 수 있도록 노력을 해야 할 것임
- 마지막으로 본 연구의 한계는 기존 EU가입국과 신규 가입국 그리고 가입대상국간에 물류관련 자료가 통합적으로 관리되지 않고 일부는 수집이 불가능한 관계로 3개축에 대한 계량분석을 통한 경쟁력 우위 분석이나 물류업종별, 물류기업별 진출전략의 유형화 등을 하지 못했음

2. 정책제언

- 본 연구를 통한 기업들의 해외진출을 위한 정책제언은 다음과 같음
 - 첫째, 장기성장 관점에서 글로벌화 전략을 수립해야 할 것임. 단기 수익 창출이나 가시적 효과에 의존하지 말고 개별 기업의 글로벌 물류네트워크 전략에 입각하여 차분한 추진이 필요함. 이를 위해 성장전략, 과점화 전략, 글로벌화전략을 단계적으로 연계 추진하여 큰 틀에서 기업의 미래를 설계해야 할 것임
 - 둘째, 글로벌화 전략수립에 앞서 글로벌 경쟁에 필요한 임계규모를 확보해야 할 것임. 글로벌 플레이어들과 경쟁하기 위해서는 충분한 규모의 경제를 확보하고 있어야 함. 따라서 국내와 국제 M&A 등을 활용하여 내부적으로 임계규모를 확보한 후 글로벌 시장에 적극적으로 진출해야 할 필요가 있음
 - 셋째, 글로벌화 전략을 잘 추진하기 위해서는 다양한 현지화 전략을 구사할 수 있어야 함. 영국의 소매물류로 유명한 테스코의 경우 글로벌로 칼리제이션(globalocalization)으로 신규시장에 과감히 진출하되 신규시장에 있는 인수기업(M&A 혹은 지분인수 등)의 역할과 특성을 적극적으로 수용하여 글로벌화는 업스트림, 로컬화는 다운스트림의 방식으로 글로벌화를 추진하여 큰 성과를 거두고 있음
 - 넷째, 다양한 글로벌화 tool을 확보하고 있어야 함. 글로벌 기업들이 주로 활용하는 진출도구는 기 언급한 M&A, Piggy backing, Alliances, JV

등으로 모든 방법을 지역, 시점, 리스크 등을 고려하여 적절하게 활용할 수 있어야 할 것임. 특히, 최근 많이 이용되는 M&A는 경험이 중요하므로 소규모 국내 M&A 시도, M&A 전담기관 운용, M&A 전문가 영입, 타문화 경영역량 흡수 프로그램 등을 통해 짧은 시간내에 내부 M&A 능력을 극대화해야 함

- 다섯째, 동일업종에서 추진되고 있는 글로벌화 동향에 단순히 따라가는 me-too전략은 삼가야 함. 주변에 있는 기업이 어느 지역에 투자를 했거나 어느 기업을 인수했다는 등 무리한 확장이나 지역여건을 모른 채 경쟁기업 진출을 모방하여 투자했을 때 막대한 손실을 입을 수 있음
- 본 연구를 통해 우리나라 정부에 제안할 수 있는 내용은 다음과 같음
 - 첫째, 국내 물류기업들의 경쟁력 확보를 위해 임계규모를 확보할 수 있는 정책적, 제도적 기반을 더욱 강화해야 함. 글로벌 물류거점을 확보하거나 네트워크를 확장하고자 할 경우 투자여력이나 물류시설 운영 경험 등 개별기업의 규모와 명성에 많은 가점을 부여하고 있으나, 국내의 물류기업 중 한진해운과 현대상선을 제외한 어떠한 물류기업도 이러한 글로벌 경쟁에서 자유롭지 못함. 이러한 점을 고려하여 국내에서라도 적극적인 임계규모를 확보할 수 있는 방안을 강구해야 함
 - 둘째, 과거 첨단산업, 사양산업 등으로 구분하여 산업전반에 대한 지원을 추진하여 왔으나 지금은 산업에 대한 지원보다 경쟁력 있는 기업에 대한 지원으로 전환이 필요함. 최근 도이치방크와 DPW의 성장은 결국 독일과 아랍에미레이트의 물류산업 전체의 성장으로 이어져 대상 국적의 물류기업들이 글로벌 시장에서 우대받고 있음
 - 셋째, 국가간 FTA를 적극 물류시장에 활용해야 할 것임. 특히, EU와 FTA가 체결될 경우 EU물류기업들의 우리나라 물류시장 진출이 가시화될 것 이지만 반대로 우리 물류기업의 EU시장 진출도 용이해 질 것임. 따라서 적정규모의 유지, 다양한 진출전략 확보, 자원조달 능력 확보를 통해 EU물류시장에 다양한 방법(M&A, JV, Alliance 등)을 활용한 진출이 필요함
 - 넷째, 국제 M&A, 지분인수 등 글로벌화 전략을 수행하기 위한 금융관련 인프라가 정비되어야 할 것임. 국제 M&A는 글로벌 자금과 정보를 제공하는 금융기관의 도움이 필수적인 상황임. 따라서 현재 추진 중인 국제물류펀드의 조속한 설립과 함께 향후 안정적인 운용을 위한 기반이 확보되어

야 함. 이를 위해서는 물류, 법률, 금융, 전략, 회계, 지역전문가들로 구성된 지원조직이 필요함

- 다섯째, 글로벌 물류네트워크 전략의 지속적인 추진임. 임계규모를 확보한 기업들이라도 글로벌 전체에 대한 동향과 정보를 모두 파악하거나 확보할 수 없는 상황임. 따라서 정부차원에서 지속적인 글로벌 물류네트워크 전략을 추진하여 그 틀 속에서 다양한 글로벌 물류동향, 정보, 전략 등을 기업에 공급할 수 있다면 우리나라 물류산업의 빠른 성장과 글로벌화에 크게 기여할 수 있을 것임

Chapter 1 Introduction

1. Background and Purpose

Over the past four decades, globalization has become a popular trend in the world. One of the major features of this trend has been Asia's industrialization and high economic growth, achieved through the economic integration of the NICs (Newly Industrializing Countries) into the world economy; especially with the opening of China's industries by the economic reforms of 1978. With these changes, many multinational corporations (MNCs) have been concentrating on the Asian region as a low-cost cluster, and further, this trend has been extended to other geographic areas, such as Central and Eastern Europe (hereafter named just 'CEE')¹⁾, and even Africa.

Since the early 1980's, industrial production has become increasingly international, and competition among businesses has been significantly increased around the globe. This globalization has created a real-time global market and a business focus on maximizing comparative advantages when sourcing and supplying products. In terms of global supply chains, MNCs are forced to operate continuously in order to enhance efficiency and save costs. Under these circumstances, international supply chains have become extremely complex, and have extended over almost all industries, and logistics models have continuously evolved²⁾. This is the reason why

1) CEE The OECD list of CEE countries (EU and extra-EU): Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Poland, Romania, Slovakia, Slovenia, Yugoslavia (Serbia and Montenegro)

2) Lee, et.al., A tale of Asia's world ports: The spatial evolution in global hub port cities, *Geoforum*,

the logistics industry has quickly advanced and become one of the major drivers of the global economy.

Up to 2010, the average growth rate of world logistics industry is expected to be 7.9%, which is significantly higher than the world economic growth rate of 6.4%. The value of the global logistics industry is expected to increase from 6 trillion US dollars (13.8% of world GDP) in 2005, to 9 trillion US dollars in 2010³⁾. In addition, logistics industries will become more attractive as investment targets in terms of profit and growth. Under intensive global competition global logistics companies are eager to reinforce their global market dominance by establishing overseas logistics facilities and launching merger & acquisition (M&A) strategies.

Furthermore, democratization and capitalization in CEE countries, and the enlargement of the European Union has encouraged MNCs that already have significant business presence in the region, to move into CEE countries looking for new low-cost clusters.

The EU accounts for around 10% of the world logistics market. Although the EU has a relatively small land area compared to other continents, it has a bigger logistics market because its member countries are wealthy and have strong economies. That is why many logistics companies are intensively competing in this market, and the top 20 logistics companies control 33% of this market⁴⁾.

Currently, 10 of the 27 EU member countries are CEE countries that are in the process of changing their systems from socialism to capitalism in order to advance their economies. MNCs, who do business in the EU as a main market, have also moved their production and operations from other places into the CEE to take advantage of lower logistics costs, and further enable global vertical

Vol 39, No.1, 2008.

3) TI, Global Logistics Strategies 2006, 2006. 3.

4) UNIDO, Logistics Value Chain, 2005.

specialization with an extended market.

Logistics markets in CEE countries have grown rapidly, due to the unification of processes in customs clearance within the EU, and the agreements of the "*EU Acquis Communautaire*". Because of low labor and land costs, and rapidly increasing economic growth, the CEE countries are expected to display strong low-cost cluster effects as were observed in China and South Asia. In the CEE countries, as a consequence of the low cost cluster effects, many MNCs have reinforced their investments in order to boost their competitiveness by saving manufacturing and logistics costs. As a result, the logistics map of the region is being dramatically altered.

During this process, a very important role is played by the Mediterranean and Black sea ports in supporting the new manufacturing and logistics markets by saving costs and time, and by extending these logistics markets as opposed to traditional northern European ports, such as Rotterdam, Hamburg and Antwerp. The logistics markets in Poland, Slovenia, Croatia, Romania, and Bulgaria are growing particularly quickly as strategic centers for many companies. Most notably, Gdynia of Poland on the Baltic sea, Koper of Slovenia, Rijeka of Croatia on the Adriatic sea, Constanza of Romania, and Varna of Bulgaria on the Black sea are likely to become regional hub ports and centers of logistics networks, thanks to their good locations, and strong economic growth and development in the hinterland areas.

2. Objective

With the above background in mind, this research aims to analyze new logistics networking patterns by examining emerging trends of global logistics enterprises (e.g., 3PLs, GTOs and Mega carriers), and

by assessing their strategies in launching new initiatives into the newly developing markets in the CEE countries on the basis of (de-) concentration. It will explore restructuring processes of logistics networks, and the trends of logistics activities adopted by current players and newcomers in this market.

The specific objectives of the research are as follows:

- To investigate the launching patterns of global logistics companies in CEE countries.
- To analyze the characteristics of establishment, by business type and location.
- To investigate major logistics corridors and ports as new gateways in the region.
- To suggest where and how Korean Logistics companies should advance into the markets of the CEE countries.

3. Methodology and Scope

In order to identify issues, the study will investigate the macro trends of global and European logistics markets by reviewing relevant literature and analyzing statistic data. In addition, it will attempt to define a position for the whole of Europe and the CEE countries in global logistics markets.

In greater detail, the study examines the backgrounds and peculiarities of the logistics markets in CEE, by studying literature on the enlargement of the EU and by reviewing collected statistical data.

Analytical steps are made to identify the launching processes of major global logistics companies in different types of business; GTO, Mega carriers, and 3PLs in CEE. Also, it investigates launching characteristics and strategies through case studies.

Finally, it identifies the characteristics of new business launched by

global logistics companies, by using spatial and time comparison analysis based on the type of business and location.

The study will focus on the launching patterns and strategies of global logistics companies in CEE based on their type of business. Geographically, the study will cover the CEE countries, mainly focusing on the sea-facing countries during the period between 1995 and 2005. There are three main reasons for the choice of these three groups for the study. First, these areas connect the South, East, and North to the sea as points of cargo departure and arrival in the European Logistics Network Construction Plan, namely TEN. Second, the container cargo volume in these countries has recently seen remarkable increases. Third, these groups have been recognized and promoted as the strategic strong points in recent researches⁵⁾ on port logistics in CEE.

〈Figure 1-1〉 Location of Geographical Scope



5) Parola, F. & Musso, E., Market structures and competitive strategies: the carrier-stevedore arm-wrestling in northern European ports, Vol.34, No.3, 2007, pp. 259~278; Musso, E. & Parola, F., Mediterranean ports in the global network: how to make the hub&spoke paradigm sustainable?, *Ashgate*, forthcoming, 2007.

4. Literature Review

Recently, there have been a number of research projects on the overseas business expansion strategies of global logistics companies, and on the changes in the logistics environment and its structure in CEE.

The previous research projects on the overseas business expansion strategies of global logistics companies first appeared after 1990 when globalization began to have a significant effect on the logistics industry. To begin with, the studies focused on the strategic overseas business expansion examples of the shipping liners and port operators. However, recent studies have focused on the logistics structure changes, and the M&As of shipping liners, port operators, and logistics companies in different areas with different business types. They also take a closer look at the social and economical changes involved in the process.

The studies which focused on the global M&As of the shipping liners, started with McCalla, et.al., (2004)'s study on the globalization and localization between the shipping liners and their affiliated logistics companies. Midoro, R. et.al., (2005) analyzed the market competition patterns between the shipping liners and the stevedoring companies. Parola, et.al., (2006) categorized the global market expansion patterns of the shipping liners in Northeast Asian countries. Olivier, D.(2005) and Olivier, et.al., (2007) analyzed the globalization strategies and the expansion patterns into the new markets of the stevedoring companies in Asian countries. Parola, F. & Musso, E., (2007) studied the market structure, and the competition patterns between the port operators and the shipping liners in North European countries.

These studies on the logistics environment and structure changes in CEE were mainly done after 2005. Percoco, M. & Reggiani, A. (2007)

studied the broad view of logistics networks and spatial selection in Europe. Musso, E. & Parola, F. (2007) studied the changes of the "Hub & Spoke" phenomenon in the process of global logistics networks. Medda, F. & Carbonaro, G. (2007) suggested strategic port development due to the increasing cargo volume in the Mediterranean port areas.

These studies analyze the rapidly changing logistics environments, and the various strategies of global logistics companies from different perspectives in CEE market.

There have also been studies on the changes in the logistics environment and market structure, the inland logistics structure, and the new port development strategies in the emerging CEE markets. However, these studies could not be done systematically due to insufficient information and the complex peculiarities of the region. Despite these barriers, this study tries its best to show the overall logistics changes, and the perspective in CEE, by analyzing the status and the strategies of global logistics companies in the area. Analysis with specific data was limited in this study. However, various documentary records and secondary data were used for time and space analysis. This study took the "TEN Plan" of EU as a reference point for examining logistics changes, and to come up with the logistics outlook in the three regions.

5. Research Structure

This research consists of six chapters. The structure of the research is illustrated in <Figure 1-2>

Chapter 1 includes the introduction, the background and methodologies of the research.

Chapter 2 introduces the changing environment and the status of Europe in the global logistics market. Especially, it highlights the

social and economic backgrounds related to logistics industries in CEE.

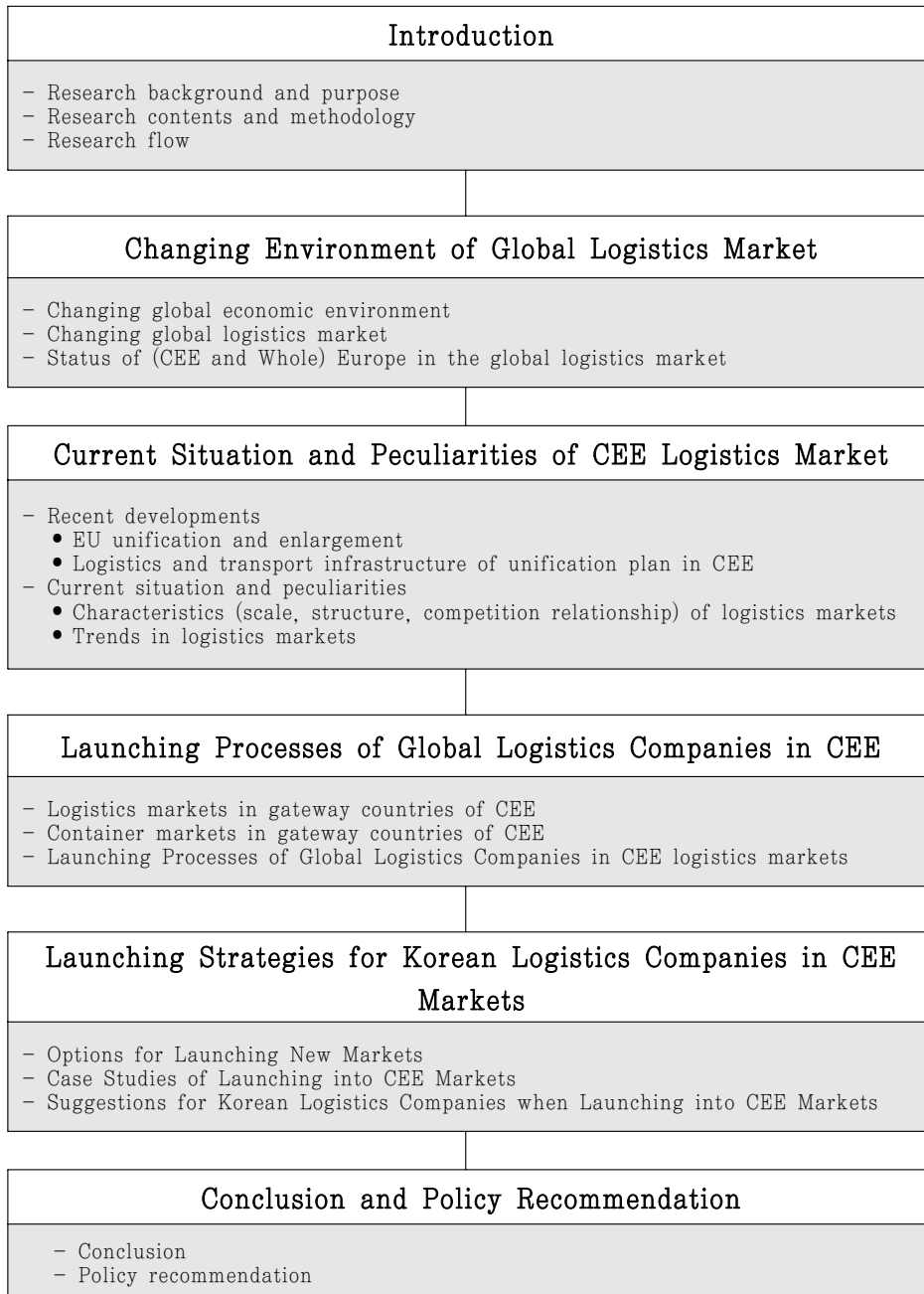
Chapter 3 analyzes the current situation and peculiarities of CEE logistics markets by investigating recent developments and trends.

Chapter 4 analyzes the launching processes of global logistics companies in CEE, especially in main gateway countries. It also focuses on the current market situation, with consideration of business and launching types, and the main obstacles that the logistics companies face.

Chapter 5 suggests launching strategies for Korean logistics companies in CEE logistics markets through analyzing trends and case studies. It highlights the strategies of global logistics companies when launching into the region. In addition, possible recommendations for Korean government and companies who want to enter into the CEE market, are provided.

Chapter 6 makes conclusions for the research. It sums up the entire contents and presents the major findings. Finally, several limitations with regard to the study are pointed out, and suggestions for future research and studies are made.

〈Figure 1-2〉

Structure of Research

Chapter 2 Changing Environment of Global Logistics Market

1. Changing Global Economic Environment

Today's global economic environment is considered to be fiercely competitive for companies around the world. During the last couple of decades the World Trade Organization (WTO) has made great efforts to break down global trade barriers and improve trade relations around the globe. This has increasingly meant that there is no longer a clear division between domestic markets and international markets, and that many small scale domestic companies are now faced with direct competition from global companies in the world market.

The global economy has changed dramatically as regionalism and economic integration have progressed. Regional economic integrations such as the North American Free Trade Agreement (NAFTA), the European Union (EU), and the Asia-Pacific Economic Cooperation (APEC) have emerged, reducing costs and increasing efficiency in trade and economic cooperation. Furthermore, the round of WTO negotiations which started on July 1st, 1995, accelerated this economic integration and the globalization process by lowering tariffs and non-tariff trade barriers around the world.

The world's economies have developed ever-closer links for the last 3 decades, in trade, investment, and production. Many companies who previously benefited from the national protection of tariffs or regulations, may no longer be competitive in borderless world markets. Now more than ever before, companies around the world

have to maintain high quality in their products and services, while maintaining competitive prices, if they are to survive in international markets⁶⁾.

Notably, the top-tier companies across the worldwide markets try to be more competitive by achieving strategic partnerships, joint ventures or mergers with other companies that possess core technology, capital, information, human capital and so on in that line of business.

The world economy driven by globalization encourages human innovation and technological progress, especially in information communications and supply chains which are progressing towards a swiftly unified integration process. This new world economic paradigm shift through trade in products, services and financial flows enables the movement of people and knowledge across international borders more freely than ever before⁷⁾.

Countries which aimed at export-led growth, particularly China and India, benefited by liberalizing trade and opening up their markets to the world. They accelerated the process of globalization by embracing a more open management strategy, and by building up a more investment friendly environment and system of governance.

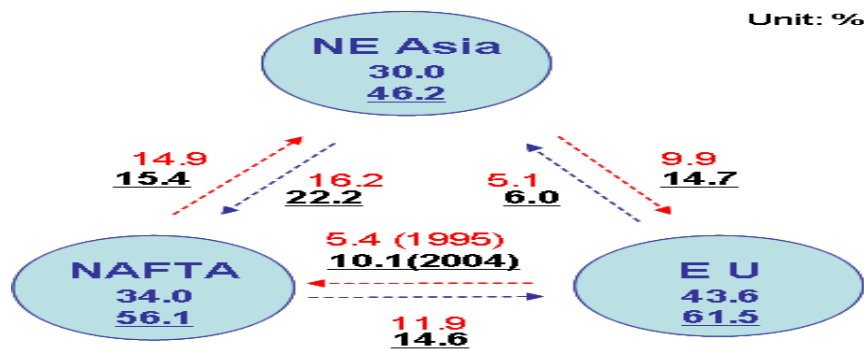
Increased international trade and capital mobility provides economic benefits through a more efficient international allocation of production and capital for multinational corporations, who benefit most out of these global structural changes.

Once Asian countries joined the world trading system, the volume of world trade grew much faster and changes driven by the liberalization of trade and finance as shown in 〈Figure 2-1〉, had greater impacts on the world economy as a whole, significantly improving transport and communications worldwide.

6) TI, Global Logistics Strategies 2006, 2006.3, p.12.

7) Ibid, pp.12~13.

Changes of trading patterns between major economic entities
 〈Figure 2-1〉



Source: WTO, International Trade Statistics, 2005.

2. Changing Global Logistics Markets

Economic globalization and vertical specialization in industries have been the major factors in shaping the world economy and have lead to substantial growth in global logistics markets in recent years.

The international logistics industry has expanded substantially with the volume of 6 trillion dollars it generates amounting to 13.8% of the world GDP of 43.161 trillion dollars⁸⁾. More recently, with increased global relocation of manufacturing centers, many Western companies outsource jobs and production overseas. By outsourcing their production to other firms around the world and managing their supply chains on a global scale, multinational corporations play a prominent role in transforming and expanding global logistics services markets. In a list of Fortune 500, 70% of the companies are reported to be outsourcing their supply chain management in order to gain substantial cost reduction in logistics, and this trend is going to be increasingly widespread⁹⁾.

8) CIA, www.cia.gov, 2006.

9) Armstrong & Associates, Inc., CSCMP Annual Conference, 2005.

Globalization is considered a huge opportunity for multinational corporations, including global logistics companies. The emergence of these opportunities in world markets has helped global logistics companies to achieve economies of scale by having M&As, joint ventures, strategic partnerships, and so forth, and to establish global logistics networks that provide better and more globalized services, and result in greater earnings. In the ocean shipping sector, mega carriers like Maersk, strengthened their market shares through various M&A activities, and global terminal operators like HPH, PSA, APMT, DPW, and so on improved their market dominance and global based services significantly through continuous investment around the world.

Nowadays, integrated supply chain management is a buzzword on everyone's lips in the logistics industry. Supply chain management focuses on mutual cooperation among companies in a supply chain outsourcing to more specialized and efficient companies.

The logistics industry has witnessed many global logistics companies rising to prominence with dramatic increases in the free movement of goods and capital around the world. These supranational logistics providers contribute to establishing inter-continental and global supply chain networks, closely linked to mega hub ports across the world. In short, in order to create inter-continental supply chain systems, it is also necessary to have mega ports and airports, large distribution centers, logistics control centers, and so forth in place. The rapid spread of supply chain management across major industries is changing the way companies organize production, and increasingly allowing services as well as manufacturing to be outsourced on a global scale.

Specialized logistics companies now play a crucial role in supply chains, by extending their traditional services of transport, storage, and so on to include comprehensive services covering air, land and

ocean shipping, as well as value-added logistics services designed to meet various clients' needs.

Globalization and the increasing integration of emerging markets into the world economy have had a large impact on the pattern of global trade. With the liberalization of trade and services, companies try to maximize the benefits by positioning their bases or centers for production, sales, or distribution into countries where costs are lower and efficiency is higher.

Supply chain management between headquarters, and production or sales centers is becoming even more important and complex in terms of the range and variety of goods produced and transported by air or sea. While core R&D development work is carried out in headquarters, other related work is allocated to sites around the world utilizing a closely linked network of logistics.

Due to cost and efficiency considerations, low cost countries are becoming important export competitors for the developed countries and international interdependence is becoming more widespread. Trade patterns have changed as a consequence of the growing presence of new economies, especially China and India which are experiencing an unprecedented economic boom that is transforming the prospects of world markets. The growth of China and India has been accompanied by their rapid integration into world markets, and it is likely that this has affected the patterns of trade specialization of other economies as well.

Many countries try to offer a variety of incentives when hosting foreign companies, and invest a great amount of capital in improving and expanding logistics infrastructure to accommodate "global production/sales centers" in their countries¹⁰).

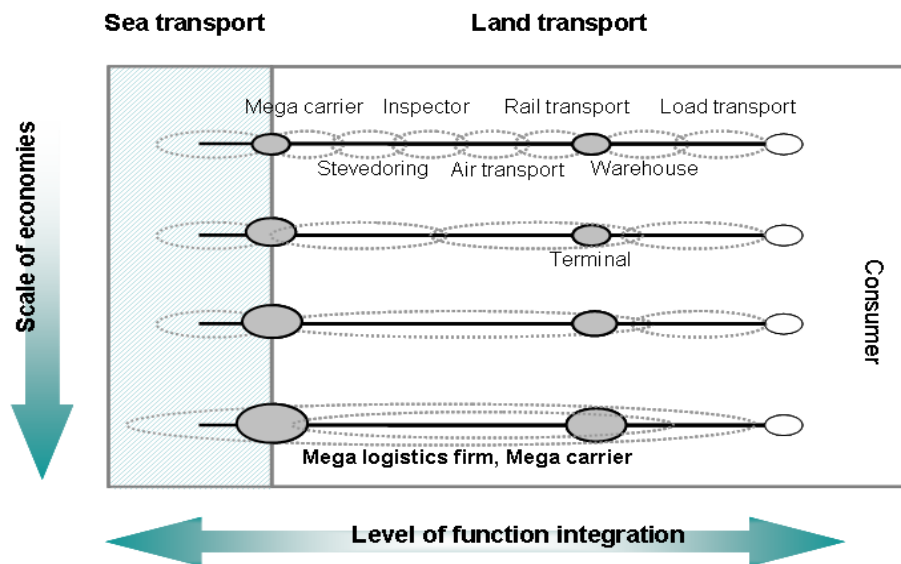
The containerization of cargoes, which began in the 1970's, has been

10) Lee, S-W. & Kim, C-H, Performance Evaluation of Asian Port Distripark Using Factor Analysis, *Ocean Policy Research*, Vol.21, No.1, 2006.

rapidly increasing. As this mode of transport became standard in the industry, it became possible for carriers to integrate all modes of transport including shipping, air-lifting, inland water transport, and road transport. The emergence of a multi-modal transport system revolutionized the transport industry, and its impact has been felt across many other industries¹¹⁾.

It is likely that traditional shipping companies will continue to expand their businesses over land, inland water and even air by embracing this innovative and standardized technology of containerization as shown in <Figure 2-2>. Having established multi-modal services, they were able to reduce overall costs, provide just-in-time delivery, and meet their clients' specific requirements.

<Figure 2-2> Integration of Logistics Player centered-Port



Source: Robinson, R., Ports as Elements in Value-driven Chain System: the New Paradigm?, Maritime Policy and Management, Vol.29, No.3, 2002.

11) Ducruet, C. & Lee, S-W, Measuring intermodalism at European port cities: an employment-based study, *World Review of Intermodal Transportation Research*, Vol.1, No.3, 2007.

The spread of knowledge, technology, and information exchange is an integral aspect of globalization. The advent of the digital age and the introduction of the internet into the mainstream by the late 1990s, allowed free flows of information and has brought an expansion of business-to-business transactions around the world, especially since transaction costs have continuously decreased. Because of technical innovation, more companies now have cheaper internet by using EDI systems for inter-company transactions. A wide variety of information on production methods, management techniques, and capital management are available in a very cost effective and integrated way. These are highly valuable resources for companies who support supply chain management between suppliers and end users. With the usage of E-business increasing, every major international company in the industry now focuses on e-SCM by expanding its investments in this area. e-SCM helps companies satisfy all the needs of their suppliers, clients, and employees, and enables them to optimize their business operations with maximum efficiency.

After the 9/11 terrorist attacks in the United States of America, security assurances across international trading systems are of critical importance for global logistics managers and government officers when they are managing supply chains and transport planning. The United States Government has been regularly introducing new security related initiatives and regulations, which affect global trading and logistics systems as a whole. In order to deal with security related issues, shipping companies and cargo owners need to prepare well in advance, and should be well informed of the changes and new developments in the regulatory regime. Furthermore, at a central and local government level, relevant authorities and bodies are required to cooperate by finding ways to enhance security assurances, and to facilitate international trade and investment. With detailed action plans and systems, a nation can maintain its competitiveness in global

supply chains and trade, particularly with regards to sea and air transport.

The Bush administration passed the Safe Port Act in October, 2006¹²⁾. As a result, America is almost in a position where it has complete security coverage of shipping, ports, and logistics. This has been achieved by having an enactment of the Act complemented by the Maritime Transportation Security Act of 2002. The ripple effect of this will be felt quite seriously across the world. The SAFE Port Act authorizes the development of high-tech inspection equipment, that will allow customs agents to check cargo containers for dangerous materials without having to open them. Therefore, it is expected that many export companies and shipping lines will be faced with limitations or constraints when doing business with America. Furthermore, there are controversial issues left to be considered including the right to inspect all containers aboard a ship, and the introduction of port security fees.

However, as the supply chain security issues become increasingly globalized and urgent, a new line of business has emerged. The supply chain security industry is evolving and inventing new devices; for example, devices which can be attached to a container box, and are capable of identifying cargoes and storage status inside the box. These devices promote automatic screening processes in customs inspections and clearances, and play a significant role in preventing criminal or terrorist activities including theft, loss, smuggling, or drug trafficking.

Recently we have seen security issues in ports and international transportation becoming more crucial and imperative in executing business planning and operations. There are many issues and areas which are very difficult, and challenging, for countries and companies to deal with. However, it is still possible to locate and achieve new

12) SAFE Port Act : Security and Accountability For Every Port Act of 2006.

business opportunities and benefits with a competitive edge in these rapidly changing surroundings.

In addition to increased potential costs of security management, shipping lines are likely to have to assume other burdens by reducing emissions or pollutants from their operating vessels. Many port authorities around the world are embarking on schemes to regulate air pollution in port areas. Furthermore, a regulatory regime on ballast water treatment is also imposing additional costs for ship operators.

These changes to environmental regulations implemented by the leadership of the International Maritime Organisation (IMO), have made significant progress in developed countries, especially the United States. It is also interesting to witness how global shipping companies are taking very proactive positions in tackling these issues. Recently there have been many positive developments with respect to the International Convention for the prevention of Pollution from Ships : MARPOL which was adopted in 1997 by IMO. Furthermore, it is expected that a new international convention on ballast water treatment will be in full force as early as 2009¹³⁾.

Since the Kyoto Treaty went into effect in 2005, Korea has to abide by the rules and regulations under the protocol from 2012. In the years to come logistics companies will have to obtain proper knowledge and specialists, in areas of environmental management for manufacturing or distribution companies; it also appears likely that logistics and supply chain management companies will have to deal with issues like the emission trading system, for their clients.

Global logistics companies are challenged to overcome the current scope of service coverage and their geographical limitations. Dynamic global logistics companies with global supply chain networks in place provide their clients with comprehensive or total logistics services. UPS, DHL, FedEx, HPH, Maersk, APMT, and DPW having established

13) KMI, 2007 World shipping forecasting, 2006. 12.

their operations and facilitations in strategic locations around the world are able to offer globally integrated logistics services. These companies provide their own logistics services, while breaking down all the barriers in cross-border transactions and trade¹⁴⁾.

In port operations, Global Terminal Operators (GTOs) such as HPH and PSA take the lead in providing integrated logistics services, having acquired container terminals in major locations across the world. These global terminal operators are continuously seeking M&A opportunities. DPW, in particular, made the headlines after it bought out P&O Ports. DPW has strengthened its position in the global business of port operations. DPW has benefited from the on-going growth of the container shipping market worldwide, and is still making great efforts to penetrate into the markets of developing countries in order to achieve a more geographically diverse portfolio.

The increasing globalization of logistics companies enables them to increase their market shares, re-allocate business risks, and build up entry barriers for other competitor companies. Hence, small scale companies are left out and are unable to join the league of these elite globalized logistics companies. This means they are unable to take advantage of the ever growing global market and have very limited access to the markets.

It is important to note that the top 20 companies in 3PL areas accounted for 33% of the European market in 2006. These top tier companies are in a phase of rapid expansion through globalization and localization, which is enhanced by M&As and gives these companies a greater market dominance. The most exemplary case is that of DPWN (Deutsch Post World Net) which bought out the English logistics company, Exel. Both companies are well known for their outgoing growth strategies achieved through M&A transactions, but whilst

14) Parola, F., Lee, S-W & Ferrari, C., On the Integration of Logistics Activities by Shipping Lines: The Case of East-Asia, *Journal of International Logistics and Trade*, Vol.4, No.1, 2006.

maintaining high quality management.

The best outcome of the merger of DPWN and Exel is to create synergies, by combining the strengths of DHL, which is owned by DPWN, and specialises in express delivery and air logistics services, with those of Exel which specialises in contract logistics. These synergies stimulate the growth of businesses by increasing their market shares and influence over newly developing markets. Other significant examples of M&As are DB with Bax Global in January, 2006, and TNT with Wilson Logistics in June, 2004¹⁵⁾.

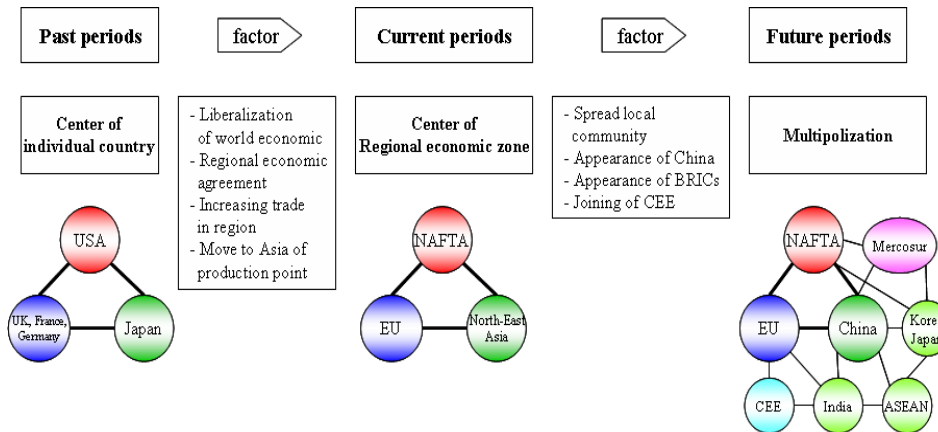
3. The Status of Europe in the Global Logistics Market

Global economies and their dynamic trading systems are continuously changing, and most countries, including developed and developing countries, try to speed up their economic advancement and expand their capabilities in order to stay ahead or move forward. Recently the NAFTA, the EU and the North East Asia economic blocs have been major economic axes. However, the emergence of new economies around the world has led to the development of a more diverse and well connected variety of axes including the economies of AEAN, Mercosur, India, and CEE. Increased trade between economic blocs has been facilitated by bilateral free trade agreements which lower tariff and non-tariff barriers in trades and services. Furthermore, several other major factors have combined to enhance the development of the global economy. First, there is China's emergence as a major player in the world economy and the huge consumer market it provides. Secondly, there is India's economic expansion and outsourcing industry. Thirdly, the economies of the CEE countries have experienced a manufacturing boom after accession

15) TI, Global Contract Logistics 2006: Outsourcing and Collaboration, 2006. 5.

into the EU. Finally, there is the integration of the Asian economies into economic blocs such as the AFTA or AEAN. These factors have combined to encourage the integrated development of the global economy, providing opportunities for all countries around the planet.

〈Figure 2-3〉 Trends in Relationships Between Economic Entities



Source: KMI, Current Report, 2006.

Notably, private multinational companies are at the forefront of the development in the CEE economies, as they face global competition amid global market openings. These companies try to implement new business strategies and ideas to compete in a rapidly changing global market. Intense global and regional competition combined with market growth lead to various changes for companies, including the relocation of manufacturing production and operations into countries where costs are low and effective comparative advantages are offered. The driving force of this new paradigm in development in the CEE economies allows countries to allocate natural resources, labor, and capital more effectively, resulting in productivity increases and economic growth, that eventually leads to improvements in the income and living standards of people in the region. Furthermore, as the common market in Europe becomes more integrated, significant

changes are likely to occur in the future. As a result, global transportation and logistics companies will have to deal with constantly emerging new issues and challenges arising out of this trend.

Substantial progress is currently being made in these areas as discussions and plans are implemented, with regards to the development of ports and logistics infrastructures. We will see great benefits for business in the future, and numerous opportunities arising in the context of new growth in the transport and logistics markets. Furthermore, once the transport and logistics systems of CEE become more modernized and achieve greater efficiency, these countries will be increasingly able to compete on a global basis.

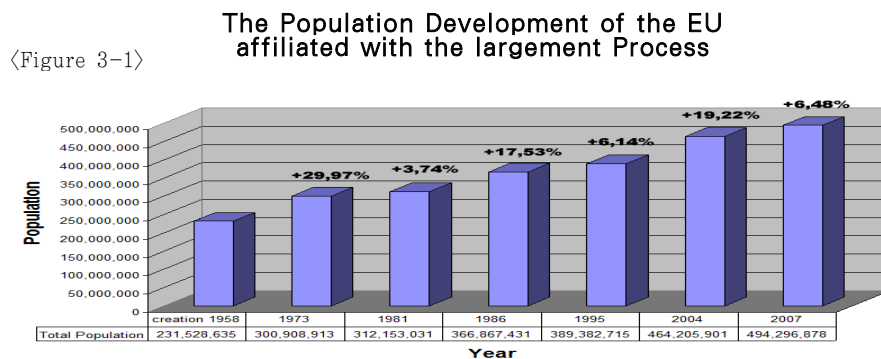
Players in the global supply chain should keep in mind that appropriate directions and goals need to be implemented effectively in a timely manner. Otherwise, the comparative advantages and valuable knowledge accumulated so far will be lost instantly, as changes can occur extremely quickly. In the future, IT is going to play a much greater role in many areas affecting the industry. Therefore, by introducing and adopting highly advanced technologies into transport and logistics sectors, companies will be able to take a proactive leadership role in establishing the standardization of logistics systems, and will improve efficiency in a very responsive way.

Chapter 3 The Current Situation and Peculiarities of the CEE Logistics Market

1. Recent Developments

1.1. EU Unification and Enlargement

The European Union (EU) was created by six founding states in 1958¹⁶⁾, and since then has grown to embrace a total of 27 member states. So far there have been five enlargements, with the largest occurring on May 1, 2004, when 10 new member states joined, and the most recent occurring on January 1, 2007, when Bulgaria and Romania joined. In the beginning, the total population of the EU member countries was 2.3 hundred million. In the year 2007, the population, after five enlargements, is expected to reach 4.9 hundred million as shown in <Figure 3-1>.



16) Following the earlier establishment by the same six states of the European coal and steel community in 1952.

Source: European Commission, official website, 2007

Currently, accession negotiations are underway with several other states. The whole process of enlargement is referred to as European integration. However, this term is also used to refer to an intensification of cooperation between EU member states, as national governments allow for the gradual centralization of power within European institutions.

In order to join the EU, a state needs to fulfill the economic, social and political conditions generally known as the Copenhagen criteria (named after the Copenhagen summit in June 1993). These require a secular, democratic government, with the rule of law and corresponding freedoms, and institutions. According to the EU Treaty, each current member state and the European Parliament have to agree on any future enlargement plan.

The present EU Treaty, the Treaty of Nice, does not provide for the voting arrangements that will have to be adopted if further enlargement takes place beyond the current 27 member states. Although the proposed European Constitution did provide such a mechanism, the ratification of this Treaty is currently on hold. New arrangements would therefore need to be agreed prior to any further expansion¹⁷⁾. The timeline of completed and planned enlargements to the EU is shown below.

〈Table 3-1〉 **Timeline of Enlargement of EU**

Time	Stage	Contents
1950.5		French Foreign Minister Robert Schuman presents his proposal of a united Europe, known as the Schuman declaration, which is considered to be the beginning of what is now the European Union
1952.7		The Treaty of Paris entered into force establishing the European Coal and Steel Community (ECSC). Founding members were the Benelux countries, France, Italy, and West Germany

17) European Commission, 2005 enlargement strategy paper, European Union's official site, 2007.

Timeline of Enlargement of EU(continuation)

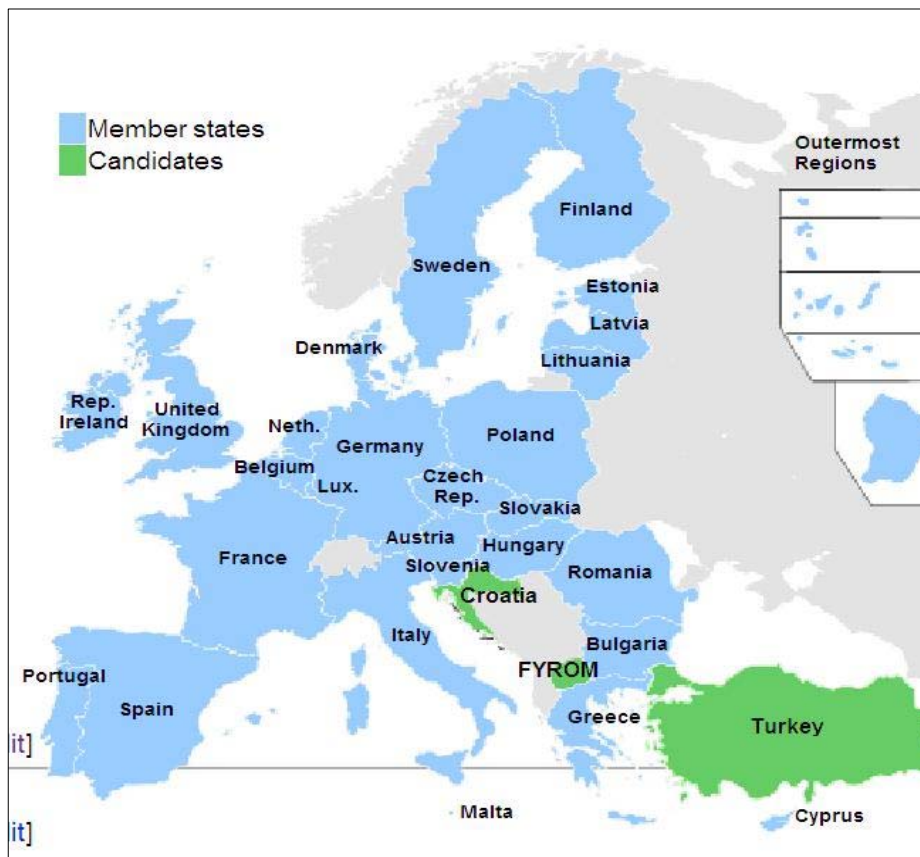
Time	Stage	Contents
1958		The ECSC members establish the European Economic Community, which later becomes the European Community (EC)
1962		Algeria gains independence from France and leaves theEEC
1973.1	1st Enlargement	Denmark, Ireland, and the United Kingdom accede to the EC
1981.1	2nd Enlargement	Greece accedes to the EC
1985		Granted home rule by Denmark six years earlier, Greenland decides to leave the EC following a referendum See Special member state territories and the irrelations with the EU for details
1986.1	3th Enlargement	Portugal and Spain accede to the EC
1990.10		East Germany and West Germany reunify, automatically adding the former East Germany to the EC; reunification adds to the EC's area and population, but not the number of member states
1993.11		The Maastricht Treaty takes effect, formally establishing the European Union
1995.1	4th Enlargement	Austria, Finland, and Sweden, accede to the EU
2004.5	5th Enlargement I	Comprising the largest number of countries ever admitted at one time, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia accede to the EU
2007.1	5th Enlargement II	Bulgaria and Romania
2008.12		The Caribbean islands of Bonaire, Saba and Sint Eustatius will become part of the Netherlands as special municipalities, and will thereby also become part of the European Union

Source: European Commission, official website, 2007.

Below is a sequence of tables giving statistical data for the past and future enlargements of the EU. All data refers to the populations, land areas, and gross domestic products (nominal) of the respective countries at the time of their accession to the European Union, illustrating historically accurate changes to the Union.

〈Figure 3-2〉

Current Situation of EU Members



Source: European Commission, official website, 2007

The EU was created by six founding states in 1957 when the Treaty of Paris entered into force, establishing the European Coal and Steel Community (ECSC). Founding members were Belgium, the Netherlands, Luxembourg, France, Italy, and West Germany. The volume of GDP was 1,123 billion US dollars.

〈Table 3-2〉

The EU 6 in 1958 (creation)

Member Countries	Population	Area (km ²)	GDP(billion US\$)	GDP per capita (US\$)
Belgium	9,052,707	30,528	58,316	6,442
France	44,788,852	674,843	312,966	6,988
West Germany	54,292,038	248,717	400,554	7,378
Italy	49,476,000	301,336	265,192	5,360
Luxembourg	310,291	2,586	2,938	9,469
Netherlands	11,186,847	41,526	83,351	7,451
EU6 (1958)	169,106,736	1,299,536	1,123,317	6,643
				

Source: All data sourced from individual country entries on Wikipedia. Presumed source CIA World Factbook 2004. Populations usually 2005 estimates; historical/future estimates not used.

In 1973, Denmark, Ireland and the United Kingdom acceded to the EU.¹⁸⁾ The volume of GDP was 3,148 billion US dollars; an increase of about 32% since the foundation of the EU.

In the 1981 enlargement, only Greece joined the EU. The volume of GDP was slightly increased to 3,781 billion US dollars.

18) At the time, Norway signed the treaty but failed to ratify due to a negative opinion in a national referendum on accession.

〈Table 3-3〉 The EU 9 in 1973 and the EU 10 in 1981 (enlargement)

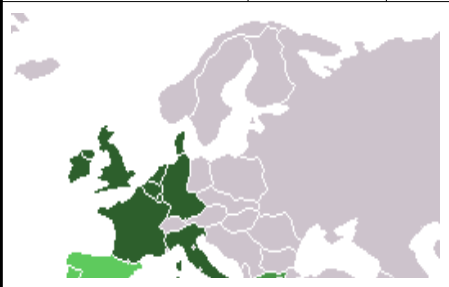
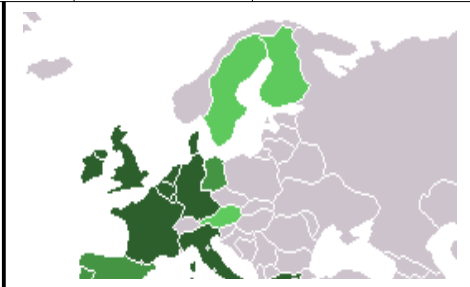
Member Countries	Population	Area (km ²)	GDP (billion US\$)	GDP per capita (US\$)
Denmark	5,021,861	43,094	70.032	13,945
Ireland	3,073,200	70,273	21.103	6,867
United Kingdom	56,210,000	244,820	675.941	12,025
Accession countries	64,305,061	358,187	767.076	11,929
Existing members (1973)	192,457,106	1,299,536	2,381.396	12,374
EU9 (1973)	256,762,167 (+33.41%)	1,657,723 (+25.44%)	3,148.472 (+32.21%)	12,262(-0.91%)
Greece	9,729,350	131,945	86.553	8,896
Existing members (1981)	261,743,191	1,657,723	3,694.558	14,115
EU10 (1981)	271,472,541 (+3.72%)	1,789,668 (+7.96%)	3,781.111 (+2.34%)	13,928(-1.33%)
				

In 1986, Portugal and Spain acceded to the EU. This meant that all major European continental countries had now become member states of the EU, except for a few land-locked countries. The volume of GDP was 4,659 billion US dollars.

Austria, Finland and Sweden acceded to the EU in 1995. Norway, however, signed the treaty but failed to ratify due to a negative result in the national referendum. The value of GDP quickly increased, and the area of the EU was expanded much further than before.

〈Table 3-4〉 The EU 12 in 1986 and the EU in 1995 (enlargement)

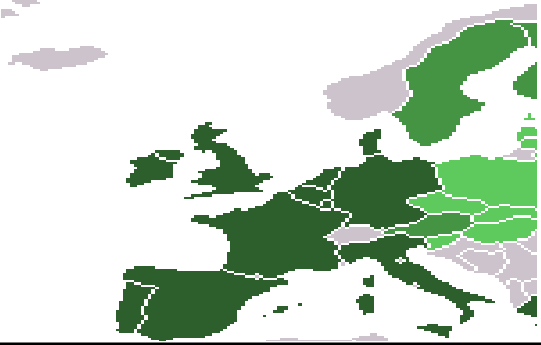
Member Countries	Population	Area (km ²)	GDP (billion US\$)	GDPper capita (US\$)
Portugal	9,907,411	92,391	85,610	8,641
Spain	38,707,556	504,782	386,998	9,998
Accession countries	48,614,967	597,173	472,608	9,721
Existing members (1986)	273,398,552	1,789,668	4,186,176	15,312
EU12 (1986)	366,867,431 (+17.53%)	2,386,841 (+33.37%)	4,658,784 (+11.29%)	14,468(-5.51%)
Austria	8,206,524	83,871	145,238	18,048
Finland	5,261,008	338,145	80,955	15,859
Sweden	9,047,752	449,964	156,640	17,644
Accession countries	22,029,977	871,980	382,833	17,378
Existing members (1995)	350,909,402	2,495,174	5,894,232	16,797
EU15 (1995)	372,939,379 (+6.28%)	3,367,154 (+34.95%)	6,277,065 (+6.50%)	16,831 (+0.20%)

In 2004, the largest enlargement of the EU to date took place: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia acceded to the EU. Since this enlargement, many Eastern European countries have started to join the EU. The volume of GDP grew to around 7,712 billion US dollars.

〈Table 3-5〉

The EU 25 in 2004 (enlargement)

Member Countries	Population	Area (km ²)	GDP(billion US\$)	GDPper capita (US\$)
Cyprus	775,927	9,250	11,681	15,055
Czech Republic	10,246,178	78,866	105,248	10,272
Estonia	1,341,664	45,226	22,384	16,684
Hungary	10,032,375	93,030	85,045	8,477
Latvia	2,306,306	64,589	24,826	10,764
Lithuania	3,607,899	65,200	31,971	8,861
Malta	396,851	316	5,097	12,843
Poland	38,580,445	311,904	316,438	8,202
Slovakia	5,423,567	49,036	52,800	9,735
Slovenia	2,011,473	20,273	29,633	14,732
Accession countries	74,722,685	737,690	685,123	9,169
Existing members (2004)	381,781,620	3,367,154	7,711,871	20,200
EU25 (2004)	456,504,305 (+19.57%)	4,104,844 (+17.97%)	8,396,994 (+8.88%)	18,394 (-8.94%)
				

In the most recent enlargement, Bulgaria and Romania acceded to the EU. The boundary of the EU finally reached the coast of the Black Sea. The volume of GDP increased again to 12,436 billion US dollars.

〈Table 3-6〉

The EU 27 in 2007 (enlargement)

Member Countries	Population	Area (km ²)	GDP (billion US\$)	GDP per capita(US\$)
Bulgaria	7,761,000	111,002	62.29	10,800
Romania	22,329,977	238,391	204.4	10,150
Accession countries	30,090,977	349,393	266.69	8,863
Existing members (2007)	464,205,901	4,104,844	12,170.11	26,217
EU27 (2007)	494,296,878	4,454,237	12,436.80	25,160.59
	(+6.48%)	(+8.51%)	(+2.04%)	(-4.03%)
				

1.2. Current Enlargement Process

In 1989, the European Community's PHARE program¹⁹⁾ was created. It aimed to provide financial support for potential accession countries so that they could expand and reform their economies. To join the EU an applicant country must meet the Copenhagen criteria established by the European Council in 1993.

In December 1995, the Madrid European Council revised the membership criteria to include additional conditions that took into

19) Poland and Hungary Aid for Economic Restructuring.

account the appropriate adjustment of administrative structures, and which need to be fulfilled before the integration of potential member countries into the EU can take place. Since it is important that European Community legislation be reflected in national legislation, it is also critical that the revised national legislation be implemented effectively through appropriate administrative and judicial structures.

In order to assess the progress achieved by countries in preparing for accession to the EU, the European Commission submits 'Regular Reports' to the European Council. These serve as the basis upon which the Council takes decisions on negotiations with potential member states. Since 1993, the Commission has presented a complete set of Regular Reports on a yearly basis, covering the 10 countries in CEE (Bulgaria, Czech Rep., Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia) as well as Cyprus, Malta, and Turkey.²⁰⁾

1.2.1. Potential Candidate Countries

1) Croatia

Croatia applied for EU membership in 2003, and the European Commission recommended making it an official candidate in early 2004. Candidate country status was granted to Croatia by the European Council, the EU's head of government, in mid-2004, and a date for the beginning of entry negotiations was set for October, 2005. The process of screening 33 acquis chapters with Croatia was completed on October 18, 2006.

After Slovenia, Croatia has recovered best from the break-up of the former Yugoslavia and hoped to become the second former Yugoslav state as a new member. It has a stable market economy and has had better statistical indicators than the countries who joined in 2007;

20) European Commission, Candidate countries, European Union's official site, 2007.

Bulgaria and Romania²¹⁾.

In late 2005, EU officials projected that the accession of Croatia would be most likely to happen between 2010 and 2012. In October 2006, an officer of the EU Commission stated: "If Croatia will be able to reform its judiciary and economy with rigor and resolution, then it is likely to be ready around the end of this decade²²⁾." In any case, the EU needs to consider its internal problems before accommodating any new members, because under the current Treaty of Nice, the EU cannot have more than 27 members. The EU Constitution provided one solution to this problem, but its rejection by two member states after national referendums means that other solutions are required. The finalization of all chapters of the *acquis communautaire* is expected in 2009, while the signing of the accession treaty would happen in the year after.

〈Table 3-7〉 **Economic Figures for Croatia**

Member Countries	Population	Area (km ²)	GDP(billion US \$)	GDPper capita (US \$)
Croatia	4,555,000	56,542	45.46	9,980
EU28(EU27 + Croatia)	498,851,878 (+0.92%)	4,510,779 (+1.27%)	12,482.26 (+0.36%)	25,001.93 (-0.55%)

2) Macedonia

The former Yugoslav Republic of Macedonia applied to become an official candidate on March 22, 2004. On November 9, 2005 the European Commission recommended that it became a candidate state. EU leaders agreed to this recommendation on December 17, formally naming the country as an official candidate, but no date for starting

21) Candidate countries, European Union's official site, 2007.

22) Europe's Next Frontiers - Lecture at the Finnish Institute of International Affairs by Olli Rehn, EUROPA - Rapid - Press Releases, 2006.10.

negotiations has been announced yet.

Peace is maintained despite underlying ethnic tensions over Albanians in the west, who achieved greater autonomy through the implementation of the Ohrid Accords. Unlike Serbia, it has maintained sovereignty over all its territory. Prime Minister Nikola Gruevski has suggested that the country could join in 2012 or 2013²³⁾. However, the EU has not come out with any official recognition of this suggested time period.

On Dec., 2005 the EU Council welcomed and congratulated the country on its achievements in implementing multiple reforms and agreements. It supports the continuation of this process. Further concrete steps towards the country's EU membership, beginning with the commencement of negotiations, will be possible after the debate over the general enlargement policy of the EU is decided.

〈Table 3–8〉 **Economic Figures for Macedonia**

Member Countries	Population	Area (km ²)	GDP	GDP per
			(billionUS\$)	capita (US\$)
Macedonia Rep.	2,038,514	25,333	6.25	7,237
EU28	496,335,392	4,479,570	12,433.05	25,049.69
(EU27+Republic of Macedonia)	(+0.41%)	(+1.27%)	(+0.05%)	(−0.36%)

3) Turkey

The status of Turkey with regard to the EU has become a matter of major significance and considerable controversy in recent years. Turkey has been an Associate Member of the EU and its predecessors since 1964 following the signing of the EEC–Turkey Association Agreement (Ankara Agreement) in 1963. The country formally applied on April 14, 1987, but 12 years passed before it was recognized as a

23) Mazedoniens Premier Gruevski im Interview: "Beitrittsverhandlungen ab 2008". Der Standard (November 7, 2006). Retrieved on 2007.3.7.

candidate country in 1999. After a summit on December 17, 2004, the European Council announced that membership negotiations with Turkey were officially opened on October 3, 2005. The screening process which began on October 20, 2005 was completed on October 18, 2006.

Turkey is member in the common EU customs territory, since the EU–Turkey Customs Union entered into force in 1996. Those opposed to Turkey's accession make diverse arguments. Many opponents argue that Turkey's current and past governments do not respect key principles expected in a liberal democracy. They argue that the government is guilty of discrimination against ethnic minorities, political dissidents and critics of 'Kemalist' nationalism, and that they obstruct their citizens rights to freedom of religion through enforced secularism. In addition, critics are concerned because of the significant role of the army on the Turkish political foreground. The EU has expressed concerns over the rise of nationalism in Turkey, and the adverse effect this could have on the accession process. Its large population would also alter the balance of power in the representative European institutions.

Another concern is that Turkey continues to occupy the northern third of the island of Cyprus, an EU member and refuses to recognize the Republic of Cyprus until a solution is found to the Cyprus dispute under the authority of the UN²⁴⁾.

Arguments in favor of Turkey joining include the belief that it would bolster democratic institutions in Turkey, strengthen the EU economy, and reward Turkey for its pro-NATO stance. Proponents also argue that it abides by most conditions for accession. Some maintain that the EU can no longer refuse Turkey, as it has had an

24) <http://www.un.int/cyprus/scr541.htm>

open candidacy for over 40 years, and has made major improvements in human rights in order to try to satisfy the entry conditions.

〈Table 3-9〉

Economic Figure of Turkey

Member Countries	Population	Area (km ²)	GDP (billion US\$)	GDP per capita (US \$)
Turkey	74,709,412	780,580	392.42	5,515
EU28(EU27 + Turkey)	565,455,525 (+14.40%)	5,237,799 (+17.59%)	12,819.22 (+3.16%)	22,670.61 (-9.82%)

4) Albania

Albania was the first of the officially recognized potential candidate countries to start the negotiations of the Stabilization and Association Agreement in 2003. This was agreed and signed on June 12, 2006, completing the first step towards Albania's full membership into the EU.

However, Albania's admission into the EU depends mainly on the country's economic and political stability. Following the example of the recently admitted CEE countries, Albania has been extensively engaged with EU institutions and NATO, and has maintained its position as a stable and strong ally of Western Europe in the troubled and divided region of the Balkans. The admission of Albania and the rest of the Western Balkans into the EU has been set as a priority by the EU officials.

5) Montenegro

In the independence referendum of May 21, 2006, the Montenegrin people voted for Montenegro to leave the state union of Serbia and Montenegro and become an independent state. It is not yet clear how this will affect Europe's newest independent state, but it is believed that negotiations with the EU will allow quick implementation of an SAA agreement and speedier entry into the club of European nations

than if had it stayed tied to Serbia's EU bid. However, Montenegro is experiencing ecological, judicial and crime-related problems that may hinder its bid. Montenegro has unilaterally adopted the euro as its currency since its launch in 1999. SAA negotiations started in September 2006 and the agreement was signed in March 2007²⁵⁾.

6) Bosnia and Herzegovina

Bosnia and Herzegovina still have many economic and political problems. Recently they have been making slow but steady progress, including active co-operation with the war crimes tribunal at The Hague. Therefore, the outlook is positive.

Negotiations on the Stabilization and Association Agreement started during the year 2005. This is the first step that must be taken, before a country can make an application for candidate status and membership negotiations. They are expected to be finalized in 2007²⁶⁾. EU may show some leniency regarding its economy due to the political issues at stake.

7) Serbia

Serbia has to deal with ethnic tensions in the region of Kosovo, as well as poverty in the south and widespread corruption. Serbia began the reform process in 2000, back then as part of the state union of Serbia and Montenegro.

The government of Serbia wants to prepare the country for EU accession between 2012 and 2015. However, it seems much more likely that it will happen around 2015, due to many domestic problems, the extensive reforms that need to be implemented, and the current institutional crisis in the EU. Negotiations on a Stabilization and

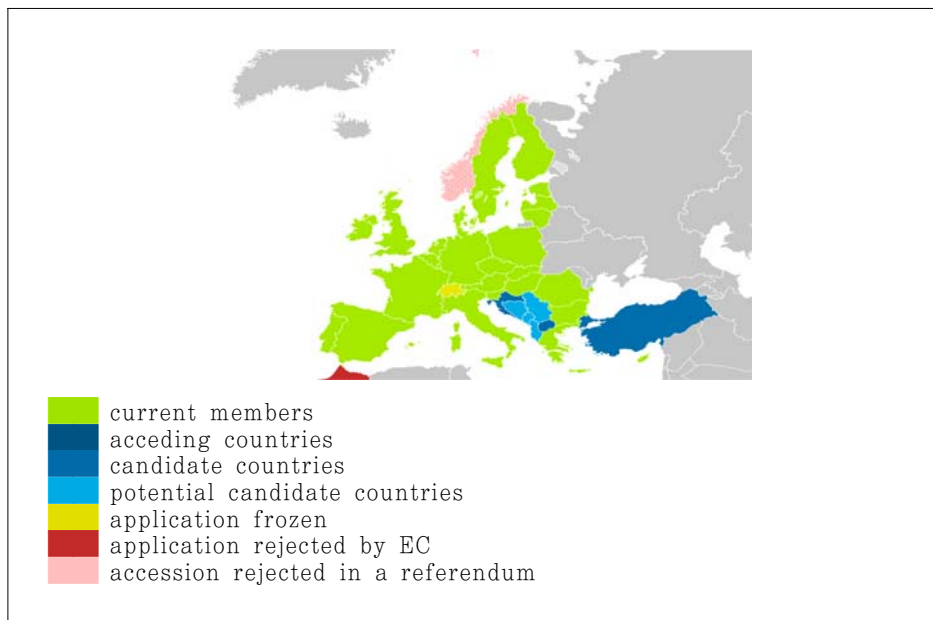
25) Enlargement Process - Montenegro Key Events, European Commission, accessed on 2007. 03. 10.

26) Germany prepares to take over EU presidency, Southeast European Times, 2006. 12. 19, accessed on 2007. 1. 10.

Association Agreement started in November 2005.

The fact that accused war criminals Radovan Karadžić and Ratko Mladić still have not been captured is an obstruction to these negotiations. On May 3, 2006, the EU suspended SAA talks with Serbia over its failure to arrest Ratko Mladić. This is likely to severely hinder the pace of EU entry and the reform process in Serbia. In July 2006, an action plan for the arrest of Ratko Mladić was issued by the government, which is expected to improve relations with the EU. Subject to resolving this issue, SAA negotiations are expected to conclude in 2007²⁷⁾. Likewise, on June 13, 2007 the association talks between Serbia and the EU were resumed²⁸⁾.

〈Figure 3-3〉 **Current EU Members and Candidate countries**



27) 2005 enlargement strategy paper, European Union's official site, 2007.

28) <http://www.iht.com/articles/2007/06/13/asia/serbia.php>

1.3. Progress of Future Enlargements

In the past, enlargements of the EU have repeatedly included multiple entrants. The only previous enlargement which admitted a single state into the EU was the 1981 admission of Greece.

However, EU members and EU ministers have warned that, following the significant impact of the fifth enlargement in 2004, a more individual approach will be adopted in the future, although the entry of pairs or small groups of countries may still be allowed. Croatia is expected to join first, possibly around 2010, with Albania, Bosnia and Herzegovina, Macedonia, Montenegro, Serbia, and Turkey following.

In the Treaty of Maastricht (Article 49), it is stated that any European country that respects the principles of the EU may apply to join. The Copenhagen European Council set out the conditions for EU membership in June 1993 in the so-called Copenhagen criteria. Whether a country is European or not is a subject for political assessment by the EU institutions, but countries in the Council of Europe that fall onto the border between Europe and Asia all have a significant claim for EU membership, as shown with the accession of geographically Asian, but culturally European countries.

The European Union has tended to enlarge along regional lines, adding groups of nearby nations. Currently, the EU is very interested in the integration of the Balkan states. In addition, due to the 2004 "Orange Revolution" in Ukraine, and the 2003 "Rose Revolution" in Georgia, both countries have started and already implemented extensive reform programs, and the future prospects for both countries have become more positive²⁹⁾. In addition, Armenia has shown an interest in joining the EU.

29) Economist. "Ever-Expanding Union?", Economist.com, 2004. 4. 29. Retrieved on 2007. 6. 7.

2. The Logistics and Transport Infrastructure of CEE

2.1. Economic Outlook

January 2007 was an important month for the EU, for two reasons: Firstly, Slovenia adopted the euro currency, and secondly, Bulgaria and Romania entered the EU, taking the total number of member states up to 27. Currently, the accession process with Croatia and Turkey is continuing.

In the second half of 2006, the economic performance of the CEE countries was characterized by dynamic output growth, and improving labor market conditions. The region has maintained its competitive position in the market, with slow wage growth (and exchange rate appreciation) being offset by significant productivity increases. The rate of inflation has been steady in the economies of most countries.

Strong economic growth continues in the region, increasingly driven by domestic demand. The real GDP growth ranged from about 4% to just over 8% in 2006, which is significantly above the growth rate of the euro area as a whole (2.7%), and in most of the CEE countries also higher than in 2005. Per capita income convergence continued: In 2006, Slovenia attained nearly 80% of the euro area average, and like the Czech Republic (72%), moved ahead of Portugal in terms of GDP per capita in PPP terms.

The main reason for the GDP growth across the region was an increase in domestic demand, with the exception of Hungary. This increase was caused by real wage increases, real credit growth in the private sector, and by improvements in the labor market. The other main component of domestic demand, gross fixed capital formation, was supported primarily by strong FDI inflows, favourable credit conditions, and the efficient investment of EU structural funds. Net exports contributed positively to GDP growth in CEE, Croatia, and

Turkey, with the exceptions of Bulgaria and Romania.

Between 2005 and 2006, there was an increase in the average level of capacity utilization in industry in all new EU member states, except Slovakia. The decline in Slovakia is related to new automobile production plants that opened in the third quarter of 2006, and appears to be only of a temporary nature. Capacity utilization accelerated the most in Bulgaria and Romania to about 68% and 77% respectively. The Czech Republic, Hungary, and Slovenia reached capacity utilization levels of more than 80% on average in 2006³⁰⁾.

There was a significant improvement to labor market conditions in 2006 compared to 2005, in most of the countries under review, while the rate of inflation remained stable. The greatest decrease in unemployment levels were seen in Poland and Slovakia. The main reason for this is that strong economic growth and significant FDI inflows have influenced the labour market. In some cases such as Poland, unemployment statistics have been significantly altered by increases in labour emigration after accession into the EU. In several countries, most notably the Czech Republic, Slovakia, Poland, and Romania, rapid economic expansion combined with the tightening of labor markets, has already put upward pressures on the level of wages.³¹⁾

2.2. Infrastructure Outlook

All CEE countries have a lower density of motorways than the 27 member states of the EU, except for Slovenia. The same cannot be said railway density because Slovenia, the Czech Republic, Hungary, Poland, and Slovakia have a railway density higher than the average of the EU 27.

The region doesn't display a modal split as dramatic as Western and

30) TI, Central and Eastern Europe Logistics Report 2007, 2006.

31) European Commission, 2005 enlargement strategy paper, European Union's official site, 2007.

Central Europe: in 2004 the percentage of goods transported inland by railway ranged from 21% in Croatia to 34% in Slovakia. Turkey has a lower percentage (6%) than that of the average EU 27.

However, recent figures show that there has been a decrease in the total volume of goods carried by the railways in the past decade. The only exception to this trend is Croatia. Unlike Western Europe, this region does not lack rail capacity. The reduction in the volume of goods transported by rail is partly due to the influence of capitalism in these economies, and to the neglect of large sections of the rail network because of under-investment. In most countries the rail network is now being up-graded in an attempt to match the high standards of the EU rail network, and also because of investment by international financial institutions.

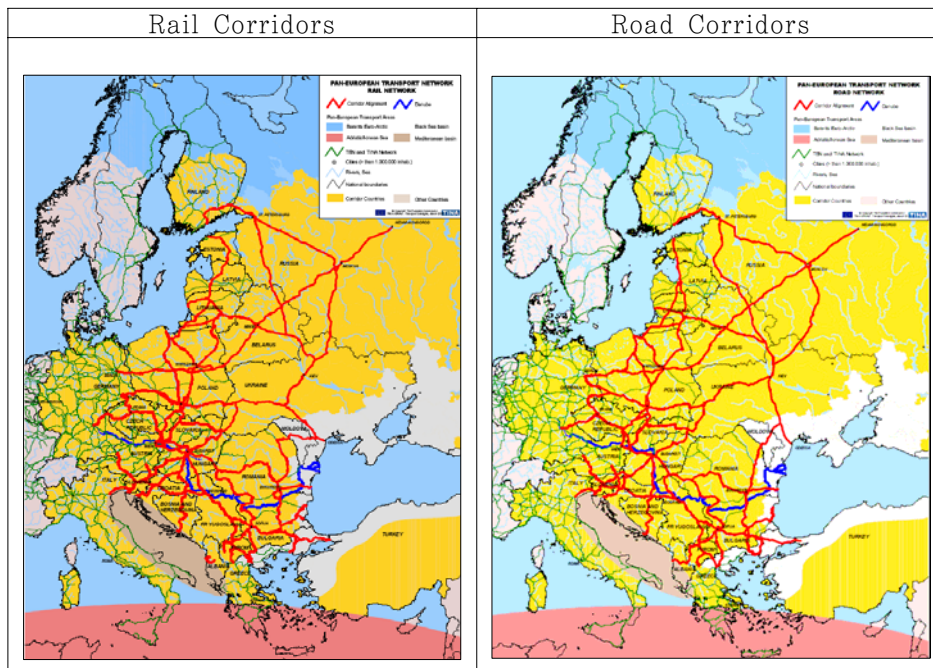
In 2001, the European Commission issued a strategic paper about the transport networks of the Balkans area. This led to a MOU on the Development of the South Eastern Europe Core Regional Transport Network in 2004.³²⁾

The aim in future alterations to the transport infrastructure networks will be to connect them with the European Transport Corridors, as shown in <Figure 3-4>. This principle was defined in 1997, at the Pan-European Conference of the Transport Ministers held in Helsinki.

The same networks are also involved in the different projects of the UNECE, which aims to link CEE to the countries of S.E. Asia.

32) <http://www.seerecon.org/infrastructure/sectors/transport>

〈Figure 3-4〉

Pan-European Corridor

The EU port infrastructure has rapidly developed, because of the enlargement of the EU and the growth of the world economy, especially on the Mediterranean sea and the Black sea where there is easy access from the main trunk lines, such as the Europe to N.E. Asia line. EU enlargement has meant that new EU member states like Slovenia, the Czech Republic, Hungary, Poland, Slovakia, Romania, and Bulgaria are quickly industrializing. This has been a strong attraction for multi-national companies who are seeking new markets and want to extend their global network.

International sea trade, especially with North East Asia, lies at the foundation of trends in European container port demand, in terms of its quantitative increase. As shown in 〈Table 3-10〉, the volume of container cargoes on the Europe to North East Asia routes has been greatly increasing. By 2015, the route is expected to account for

74.4% of the total deep-sea container trade. This is the main reason why Mediterranean sea ports have become more important than ever before.

〈Table 3-10〉 **Europe: Deep-Sea Container Trades(full Con'),1990-2015**

	Europe-N.E. Asia		Europe-North America		Major Arterial	
	000teus	Per cent	000teus	Per cent	000teus	Per cent
1990	2,977	55.1	2,421	44.9	5,398	100.0
1991	3,239	56.8	2,466	43.2	5,705	100.0
1992	3,628	59.1	2,515	40.9	6,143	100.0
1993	3,852	59.7	2,595	40.3	6,447	100.0
1994	4,155	59.9	2,777	40.1	6,932	100.0
1995	4,409	59.7	2,975	40.3	7,384	100.0
1996	5,042	61.5	3,158	38.5	8,199	100.0
1997	5,589	61.6	3,479	38.4	9,069	100.0
1998	5,635	60.4	3,699	39.6	9,334	100.0
1999	6,296	61.6	3,932	38.4	10,228	100.0
2000	7,016	62.5	4,206	37.5	11,222	100.0
2001	7,553	63.8	4,289	36.2	11,842	100.0
2002	8,188	64.3	4,552	35.7	12,740	100.0
2003	9,209	66.5	4,643	33.5	13,852	100.0
2004	10,550	68.2	4,925	31.8	15,475	100.0
2005	11,777	69.4	5,196	30.6	16,973	100.0
2010	16,661	72.2	6,417	27.8	23,078	100.0
2015	22,703	74.4	7,811	25.6	30,515	100.0

Source: OSC, The European & Mediterranean Containerport Markets To 2015, 2006

In this context, the development and upgrading of port infrastructures and facilities will be concentrated on the Adriatic, Black, and Baltic seas, in order to seek the best logistics prospects as mentioned in chapter 1.

On the Adriatic sea, is the Slovenian port of Koper, which is located near to the border with Italy, and has plans for a new container terminal. The present aim is for a 0.5m teu/year facility to be constructed on Pier 3 by 2010. Koper and Budapest were linked by a new rail link which opened in 2001. In addition, highway connections

should be upgraded by 2007, and a second rail link is due for completion in 2012. The present container terminal has 500m of quay, with 300m providing 12m depth alongside, ample for short-sea usage³³⁾.

Croatia, which faces onto the Adriatic sea, was awarded a 155 million USD loan by the World Bank in 2003 for the Rijeka Gateway project which will modernize, expand, and privatize the port, as well as providing a new road network by 2009. The Rijeka Gateway project will fund the construction of the first 250m of a 600m wharf, with over 18m depth alongside. A private operator will then finance the remainder of the wharf on a BOT (Build–Operate–Transfer) basis. An additional 600m is planned for construction at a later stage³⁴⁾.

Constantza port on the Black sea has been rapidly expanding and holds a transshipment hub position. At the port, a 238m berth with 10.6m depth alongside was commissioned for APMT in 2002, and equipped with a mobile crane. At the Socep Terminal a 220m quay has been dredged to 12.5m depth, and at the Umex Terminal there is 420m of berthage. The Constanza South Container Terminal is the largest container facility and was constructed with the help of a loan from the Japan Bank for International Cooperation (JBIC). At the start of 2004, the four-berth CSCT terminal opened under the management of DPW, which has an 18 year concession. Access depth is 16.5m, and the facility has 634m of berthage dredged to 14.5m, making it the deepest container terminal in the Black Sea³⁵⁾.

Varna port of Bulgaria is located on the Black sea, and its development plan up to 2020 which was drafted with the assistance of the European Bank for Reconstruction and the Japan Bank for International Cooperation, will include a container terminal. The

33) Luka Koper, Annual Report 2006, 2007.

34) Rijeka Port Authority, Annual Report 2006, 2007.

35) Interview with Marketing manager, 2007.11; Constanza Port Authority, Constanza Port Handbook 2007-2008, 2007.

two-berth container terminals will provide a depth of 12.5m, which compares with a maximum of 9m at the present container facility, and the capacity to handle 0.12m teu/year.³⁶⁾

At Gdynia port of Poland in Northern Europe, the Philippines based ICTSI acquired the 20-year concession to operate the port's Baltic Container Terminal in 2003, and initiated an investment programme worth \$100 million, which is being implemented in several stages. A further capacity boost up to 0.8m teu/year is planned, with the addition of 3.5ha of storage space, and further equipment purchases. After 2006, a 380m quay extension will be provided by the transfer of a ferry terminal, providing an additional 0.20m teu/year capacity. In 2004, HTH acquired a majority stake in Gdynia's Wolny Obszar Gospodarczy general cargo terminal, which it is converting into a container terminal with a 250m quay and 10.5m depth alongside. The renamed Gdynia Container Terminal could be extended to 555m.³⁷⁾

2.3. Linking East to West: the Ten Network

After the fall of the Soviet Union, it was inevitable that the newly independent CEE countries would significantly intensify their trade links with the countries of the EU. In relation to this it became clear that the East/West transport infrastructure had been neglected for many years, and would be inadequate to support the newly emerging market based economies in the CEE countries.

The countries involved had agreed to designate Pan-European Transport Corridors and Areas as early as 1991, which would be developed as a matter of priority and would receive national and EU financial assistance. At a conference in Crete in 1994, nine long-distance transport corridors were agreed. These corridors are

36) Varna Port Authority, website, 2007.

37) Interview with Marketing manager, 2007.11: Gdynia Port Authority, Annual Report 2006, 2007.

designed to facilitate inter-modal transport and cover cross-border road and rail routes, as well as air and sea ports. In 1997, a tenth corridor and the Pan-European Transport Areas for maritime basins were added. These corridors have become known as the TEN network (Trans Europe Network).

As can be seen from the map on the following page, these routes focus on the CEE countries. They will connect the CEE countries with the markets in Western Europe, provide trade routes from Russia and the other CEE countries to Western Europe, and also provide trade routes between Western Europe and the ports in the South East of Europe.³⁸⁾

A great deal of investment is being put into the development of these transport systems with the objective of 'catching up' on the many years of neglect.

3. Recent developments

3.1. Current Situation

The period since the break up of the Soviet Union has been one of rapid change in CEE. Most of the countries in CEE achieved their political independence in the period. As shown in <Figure 3-5> , 10 countries in CEE have already entered the EU, and have shown rapid economic and social growth facilitated by the economic integration with Western Europe.

38) <http://bankwatch.org/project.shtml?w=147579&s=309617>

〈Figure 3-5〉 The CEE countries already entered in the EU



Politically there are now independent governments in all the countries, which have been elected by popular vote, and democratic and political structures are rapidly evolving. Individuals now have many personal and commercial freedoms, such as freedom to travel and freedom to set up in business. Most of the countries had a difficult period in the 1990s (when they started with virtually nothing) and several suffered in the Russian economic crisis of 1998. In the years following the crisis all have enjoyed sound economic growth, and for majority of their populations, this has meant some improvement in income as well as an increase in the choice of goods and services available.

All these changes however started from a very low base point. Although the economies of the CEE countries are developing rapidly,

per capita production and incomes are still well below the average of Western Europe. The CEE countries are also economically dependant on Western Europe. For most of the states there is unfinished business, with the residues of the old regime and its over-regulation, state control, and corruption still prevalent in parts of the system. For many of the people of these countries, a 'free market economy' has provided the opportunity to increase their prosperity, but inevitably, for others, it has meant unemployment and the withdrawal of the state support system.

The most important catalyst for change has been the prospect of EU accession. Many changes have been made to enable countries to join the EU, but the change process is still continuing at a rapid rate. The key elements in the process of wider European integration have been as follows³⁹⁾:

- On 1 January 2007, 2 countries joined the EU. Total Ten countries in CEE joined the EU members. They are the Czech Rep., Estonia, Hungary, Latvia Lithuania, Poland, Slovenia and Slovakia. The later two countries joining were Romania and Bulgaria.
- Three other countries, Croatia, Macedonia, and Turkey have become "candidate countries".
- Discussions have opened with the three remaining Balkan Countries, – Albania, Bosnia and Herzegovina, and Serbia and Montenegro with a view for them joining the EU. These are known as the "potential candidate countries".
- Lying between Russia and CEE are three states, Ukraine, Belarus, and Moldova. These countries have traditionally followed the leadership of Moscow in the way that they develop. There is some evidence of these relationships changing, notably after the 'Orange Revolution' in the Ukraine, where a more western

39) TI, Central and Eastern Europe Logistics Report 2007, 2006.

orientated Government is now in power. The Ukraine, together with Belarus and Moldova, seems likely to develop further its relationships with CEE and Western Europe.

1) Bulgaria and Romania

Bulgaria and Romania joined the EU in 2007. Bulgaria has a population of 7.4m, whilst Romania is a relatively large country with 22.3m people. These countries are on the routes that provide access to Central Europe from the ports of the Black Sea and the Bosphorus, and they also sit astride the Danube waterway. As the economies of the CEE countries grow, these routes will increase in their importance for traffic moving between Asia Pacific, and Europe.

In many respects the economies of Bulgaria and Romania are similar to those of other CEE countries. Both are growing quite rapidly from a very low starting point, and are proving attractive as manufacturing bases for West European manufacturers seeking to reduce the cost of labor inputs.

Currently, in Romania, multinational companies from Europe, the US, and Asia (Korea, China, Japan, etc) are conducting business in various sectors such as the automobile, shipbuilding, and steel industries. Global port operators and shipping liners are increasing their efforts to enter into the Romanian market, especially into Constanza. Bulgaria is also in a similar situation to Romania. The improvement of the logistics infrastructure in the ports of Varna and Burgas have been combined with a recently received Japanese economic cooperation fund intended for the development of the container ports⁴⁰⁾.

2) The Balkan States (Adriatic Sea)

It remains to be seen whether the South East European ports will become key points of entry into the EU for the trade between Asia

40) Interview with Marketing Manager in Constanza.

Pacific and Europe. The "opening up" of the Balkans offers this possibility.

The main trade route from Central Europe to the Greek ports, and also to Istanbul, traditionally runs from Austria and Slovenia through the Central Balkans. It passes through Croatia, Bosnia and Herzegovina, Serbia and Montenegro, and Macedonia. These states are at various stages of recovery from the civil war, which lead to the break-up of Yugoslavia. All hope to gain membership in the EU in the near future. The timing of their accessions will depend upon their progress in the development of civil institutions and structures, which promote inter alia, human rights, law and order, and free markets.

These countries, together with Albania, have a combined population of around 26 million people. Historically the populations were involved as Mediterranean traders, and then later in the commerce of the Austro-Hungarian and Ottoman Empires. So culturally they have a tradition of market economics. Although accession into the EU is some time away, these are countries with a tradition of trade, and it must be expected that they will, like the other CEE countries, become areas of rapid economic growth in the coming years.

3) Poland

Poland has maintained yearly economic growth of 4% in the past three years. The per capita GDP reached 10,000 US dollars and the FDI was well over 8 billion euros in 2005. The constant influx of FDI led to an increase of exports, leading to 37.7% of growth in 2005. It is likely that this trend will continue for several years to come.

Currently, the Polish government is attempting to improve domestic corruption, and sufficient political support means that this positive trend can continue. The country is trying to recover economically by creating more employment, by enhancing certain levels of public finance transparency, by introducing corporate friendly regulations,

by adopting growth oriented financial policies, and by using strong investment induction policies.

Among the new EU members, Poland has achieved the most comparable levels to long standing EU countries in terms of education and infrastructure. It also has a relatively superior tax system, which creates stable environments for corporate activities. Business activities in Poland are pursued in accordance with the Economic Freedom Act (2004. 7. 2). Poland provides a friendly environment for foreign capital.

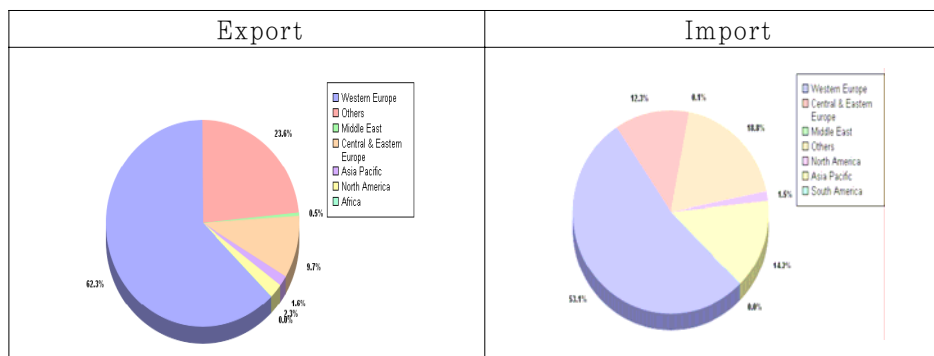
However, there are still major problems that need to be addressed. The problems include strong labor unions, and excessive investment in only the Gdansk–Warsaw group.

3.2. CEE Countries Trade Patterns

The changing trade patterns in Western Europe reveal the importance of the logistics industry of CEE. Western Europe receives much of the export trade from CEE, with a 62% share, while intra-regional trade accounts for 10%. Western Europe also dominates import trade, with a 53% share, while Asia Pacific and intra-regional trade account for 14% and 12% respectively.

Share of CEE merchandise export & import trade by region

〈Figure 3-6〉

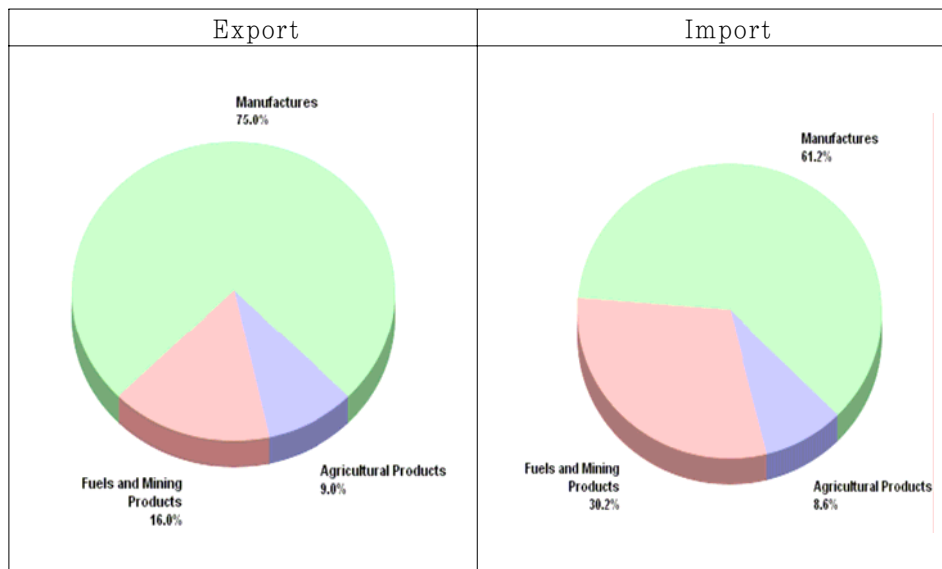


Source: WTO, International Trade Statics, 2005.

The majority of merchandise exports are of manufactured products, with a 61% share. 30% of exports are mining and fuel products, 75% of which are from the Russian Federation.

Export & Import values of merchandise product groups

〈Figure 3-7〉



Source: WTO, International Trade Statics, 2005.

The changing trade patterns have constantly increased the imports and exports of CEE's major countries. The old pattern of import oriented trade has more recently become increasingly import-export balanced. Except for Russia which depends on the export of crude oil and raw materials, countries such as Poland and the Czech Republic are playing a major role in trade activities. The scale of the imports and exports in the CEE countries is rapidly growing.

**Leading CEE exporters and importers
in 2005 (million €).**

〈Table 3-11〉

Countries	Export	Import
Russian Federation	176,678.5	90,891.5
Poland	64,767.2	73,227.2
Czech Republic	56,757.6	55,641.2
Turkey	53,252.6	84,544.5
Hungary	45,052.2	47,907.3
Ukraine	24,870.9	26,215.7
Slovakia	23,180.0	25,632.5
Romania	20,114.6	29,350.8
Slovenia	13,515.9	14,572.7
Belarus	11,589.3	12,113.0
Lithuania	8,568.8	n.a.
Bulgaria	8,505.0	13,188.0
Croatia	n.a.	13,453.5

Source: WTO, International Trade Statics, 2005.

3.3. Logistics Market

The logistics industry has undergone fundamental changes in recent years and it is likely this process will continue for several years to come. These changes have been brought about by the "globalization" of world trade, and the development of information technology. Manufacturers now select exactly where and how they source their materials, where they manufacture and assemble their goods, and how and by what means they distribute them.

These supply chains may extend from one side of the world to the other, and involve many complex links. They often involve huge global manufacturing, assembly, and distribution centers. The flows through these supply chains are controlled by sophisticated IT systems, and provide real time decision support systems for managers⁴¹⁾.

For many years, the outsourcing of manufacturing to regions of low

41) TI, Central and Eastern Europe Logistics Report 2007. pp. 246~248.

cost production has been standard practice, but the trend is by no means homogeneous. The decision of where to source goods from, or where to locate production facilities takes into account a wide variety of different factors, labor costs being just one. For this reason, it is overly simplistic to view out-sourcing as occurring in "waves", starting in CEE and progressing ever eastwards to Asia Pacific. For many products this may be the case, but often there are far more sophisticated forces at work which will ultimately determine the structure of an enterprise's supply chain.

For example, if the most important factor is time to market then the decision may be made to 'near source', that is, locate production in CEE or in the Mediterranean region. One example is in the clothing sector where a whole market of 'fast fashion' has developed. In order to meet short term market trends, retailers buying clothing may choose to near source some product lines. Instead of the three months delivery time required for goods manufactured in China, products can be manufactured and delivered in weeks⁴²⁾.

Near-sourced products tend to be more expensive due to higher labor costs, and therefore require a higher retail price tag to justify the extra spending. It is estimated that wage costs in CEE countries are presently 50–60% of what they are in the west. In India they are about 75% lower. However, labor costs are set to rise as the CEE countries become more westernized. This will inevitably effect some products where overall product cost is more important than the time to market. The CEE region will continue to have a competitive advantage where the time-related positioning of resources to meet user requirements is the most critical factor.

In some ways the CEE region has become increasingly attractive for western manufacturers in recent years. Many of the countries which have acceded to the EU have committed to adopting the European

42) Ernst & Young, EU enlargement: European Distribution Centres on the move?, 2004.

single currency, the euro. This will maintain currency stability, and therefore reduce trade risks. The car manufacturing sector in particular, has traditionally been deterred from manufacturing in multiple currency regions, and this could mean that the sourcing of components from further afield is unlikely.

The major logistics companies have developed new logistics models to meet the needs of their clients. These range from full logistics provision, including real estate and transport assets, to 'virtual' logistics provision; buying in all services from sub contractors. In Western Europe, the market for logistics provision has become polarized between the sophisticated and usually very large companies who are able to offer a complete logistics service around the world, and the small operators who specialize in the needs of specific clients and local businesses, or work as sub contractors to the major logistics providers. Middle sized operators find themselves in the familiar "squeeze" of being too large to offer tailored services, and too small to compete on price or service levels with major providers. Many of these have been taken over or have gone into liquidation.

The CEE countries have no indigenous logistics providers who operate supply chain management systems on a global scale. The CEE countries typically have well educated populations, and have civil institutions and infrastructures that are rapidly improving. For these reasons, many international organizations have moved their manufacturing operations, and outsourced their business processes and research into the CEE countries, in order to take advantage of low costs and the well educated workforce. This migration of international companies has been combined with a migration of supply chain providers.

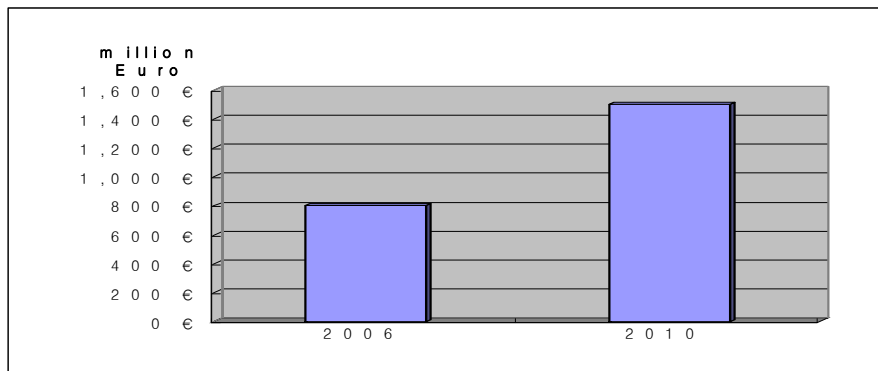
In most of the CEE countries there is typically a strong local logistics presence, which serves the needs of the small indigenous businesses and the large providers such as DHL and TNT, by providing

the logistics for the international "incomers". In addition to the major international companies who operate in the CEE countries, there are also a number of companies who trade in several countries in this region and offer comprehensive services across the region.

It seems likely that there will be a continuous process of re-structuring in logistics provision. A few of the local firms will group together and emerge as significant providers on a European scale through M&A, joint ventures, and strategic alliances; others will remain as small operations, some will become service providers to the international logistics companies, and some will fail⁴³⁾.

Due to the limited size of the consumer markets and the fragmented nature of the region, the logistics market in CEE is still relatively small. However, it is growing rapidly as investment into the region increases. Forecasts are based inter alia on levels of investment, economic growth, trade, and out-sourcing assumptions. (Figure 3-7) shows the CEE logistics market size and forecast. In 2006, the estimated value of the CEE logistics market was 798 million euros, and by 2010 the market size is expected to increase up to 1,498 million euros, an increase of almost double.

〈Figure 3-8〉 CEE Contract Logistics Market Size and Forecast



Source: TI, Global Logistics Strategies 2006, 2006, 3

43) TI, Global Logistics Strategies 2006, 2006. 3.

Chapter 4 Launching Process of Global Logistics Companies in CEE

1. Logistics Market in Gateway Countries of CEE

1.1. Poland Logistics Market

The largest Polish Baltic seaports are located in Gdansk, Gdynia, Szczecin, and Swinoujscie. Gdansk is one of three principal sea ports. It is situated on both banks of the Martwa Wisla, to the west branch of the Wisla River at its estuary in to the Gulf of Gdansk.

Gdynia Port is one of the largest and most modern ports in the Baltic Sea. The town and port are situated on the North West coast of the Bay of Gdansk. Significant smaller seaports are located in Darlowo, Elblqg, Kolobrzeg, Leba, Police, Wladystawowo, Ustka, and Stepnica. The Polish maritime economy produces 2.5% of GDP, and the sector's share in exports is 6%. The main Polish seaports have transport connections with the most important international seaports in the world. Maritime ferry transport routes lead from Polish ports to Sweden, Germany, and Denmark. The largest number of passengers traveled on the routes between Poland and Sweden (73.3%), Poland and Germany (15.6%), and Poland and Denmark (7.8%)⁴⁴).

As mentioned earlier, only Gdansk, Gdynia, and Szczecin/Swinoujscie play a pivotal role in terms of the national transport economy. These ports have long term strategies which aim to improve and expand their capacities, and will enable them to handle container ships, ro-ro

⁴⁴) Gdynia Port Authority, Annual Report 2006, 2007 and Interview with marketing manager.

vessels, ferries, and passenger traffic.

In Poland, the Act on Sea Ports and Harbours of 1996 forms the basis of port policy. The Act stresses the public function of ports, and puts forward a number of rules on cooperative and transparent relations between the Polish Government and the port authorities. Currently, there are three port authorities: the Port of Gdansk Authority SA, the Port of Gdynia Authority SA, and the Authority of Szczecin/Swinoujscie Seaports SA. Other ports remain under the responsibility of the governing communes or Maritime Offices.

At the moment, a major investment project is being developed, which includes the construction of a new container terminal in the Port of Gdansk that will have good access to the Adriatic and Mediterranean area. In January 2004, the Port of Gdansk Authority SA signed a lease contract with the British consortium Deepwater Container Terminal Gdansk SA to design, build, and operate a new container terminal in the Northern Port of the Port of Gdansk with an investment total of 175 million USDs. The estimated throughput capacity after completion of phase I of the project amounts to 500,000 teu per annum. Eventually, a cargo handling capacity of up to 1 million teu annually is expected to be achieved with continued expansion. The on-going investment will enable further revitalization of the port and a better quality of port services, something which is very important for attracting more cargoes, mainly containers and ferries.

Also, in the port of Szczecin, construction of infrastructure for a container terminal at Ostrow Grabowski is to embrace a rapidly growing volume of cargoes in the Baltic Sea region. It is estimated that by 2010, Baltic Sea trade will increase by 3%, and that its unitized and containerized cargo traffic will be significantly increased as well. The share of container transshipment in the port of Szczecin is also growing.

In June 2006, Hutchison started operations at Gdynia Container Terminal S.A. (GCT) at the Port of Gdynia, Poland, located on the

Southern coast of the Baltic Sea. The World's largest port operator has been working since the end of 2004 to develop the 550-meter (1,804 feet)-long former general cargo terminal into one able to handle containerships. The company aims to support the emergence of GCT as a major container facility in the Baltic region. The port of Gdynia handles 90 percent of Polish seaborne containerized cargoes⁴⁵⁾.

Since the beginning of the 1990s the Port of Gdynia has undergone major changes, developing from its role as a point in the transport corridor into an intermodal junction and logistics platform. The Port as the main link of a transport chain has been transformed into a logistics center. The Port of Gdynia's strategic plan defines the necessity to strengthen its position by promoting investments and launching new projects in co-operation with international companies.

The Port of Gdynia Development Strategy up to 2015 was approved on 28 August 2003. The port's vision is to sustain a stable and strong position in the Baltic Sea region. Major projects aim to create obstacle-free road access from the hinterland to the cargo handling areas of the port, and to connect the transport network of the port to the national and international road system in a better way. The Pomeranian region is a crossroads for international transport routes, and will play a key role in the development of the EU's trans European transport network. The Pomeranian routes link the region with southern Europe and western Europe via Germany. Construction of the A-1 highway will influence the region's economic activity, and will connect Scandinavia with southern Europe via the ports of Gdynia and Gdansk.

In June 2007, a 1,400-teu feeder vessel of CMA CGM started calling at the new DCT Gdansk terminal as work on the Polish terminal, which is linked directly to the Polish rail system, was completed earlier than expected. A logistics park is expected to be constructed in the next

45) Gdynia Port Authority, Gdynia Port Handbook 2006-2007, 2007.

phase of Gdansk North Port's development. The DCT Gdansk, Poland's new 500,000-teu capacity deepwater container terminal can accommodate and handle two 600-meter (1,968.5 feet) block trains at a time.

Inland navigation is an important mode of transport. The total length of the navigable waterways in Poland is 3,983km, but only 1,600km are exploited or about 40% of the total length. The longest of the exploited Polish rivers are the Vistula, the Oder, and the Warta. The length of the Vistula is 1,047km. The length of the Oder in Polish territory is 742km, and the Warta 808km. Although the Vistula is the longest river in Poland, it is equipped with no freight navigation.

There are 16 main river ports in Poland. Most of them are equipped with required port infrastructures like lifts, stock squares, and warehouses. These ports are adapted to service cargoes such as coal, iron ore, general cargo, fertilizers, grains, and the like.

〈Table 4-1〉 **Main River Ports in Poland**

Port	Types of freight	Location	Infrastructure of ports(m ²)			Load capacity of barge		Flow capacity (Tmillion)
			Lift	Stocks	Warehouse	T/S	laybay	
Gliwice	Coal, iron ore, general cargo, container	39.3-41.2km of Gliwicki Channel	T2x17.5, 20 ; T4x8;T1x7	27,300	14,039	30	10	4.5
Kozle	Coal, iron ore, others	98.0km of Oder River	T1x10.0, 8; T3x7	5,130	800	16	10	1
Wroclaw-municipal port	bulk cargo, coal, general cargo, containers	250.6km of Oder	T1x10, 20, 5	4,400	10,100	20	-1.06	1.2
Wroclaw Popowice	General cargo, coal, cement for silos	266.2km of Oder	T1x8, 2; T2x3	6,470	1,570	6	6	1.1
Cigacice	General cargo, cement, materials	471.8km of Oder	T1x1.5	3,230	1,570	6	6	0.5
Bydgoszcz	General cargo, bulk cargo, boats repair	5.10km of Brda	T2x3, 2; T1x6, 3, 12, 5, 15	3,800	1,430			1.06
Sandomierz	Slag, steel products, general cargo	269.2km of Vistula	T2x16	5,500		4	4	1.2
Warsaw Zeran	Slag, steel products cargo boats repair	520km of Vistula	T7x16	35,000		10	10	2.7

Source : TI, Central and Eastern Europe Logistics Report 2007, 2006.

In 2005, the total tonnage of transported goods was 1,443 thousand tonnes. The majority of goods were carried by road transport, which accounted for 76%.

〈Table 4-2〉 **Transport of Goods by Type in 2005**

Transport of goods	Transported goods volume	
	2004	2005
in thousand tonnes	1,324,511	1,422,585
railway transport	282,919	269,562
road transport	956,939	1,079,761
transport for hire	452,202	563,584
including road transport entities	370,205	442,746
transport on own account	504,737	516,177
pipeline transport	53,378	54,259
maritime transport	22,499	9,362
inland waterway transport	8,747	9,607
air transport	29	34

Source : Polish government, Central Statistical Office(GUS), 2006.

Transportation in Poland is still dominated by local/regional players in the road freight sector. Some western logistics companies, namely Kuehne&Nagel, FM Logistics, Allport, DHL, Flextronics, Vos Logistics, Maersk Logistics, Schenker, and Hellmann are already operating within the Polish market. However, these foreign companies currently operate on a small scale compared to the local/regional main players. Recently, Austrian transport and logistics group Cargo-Partner has expanded its presence in Eastern European with two new offices in Poland and one in Ukraine. They believe that Poland has developed into an extremely important market, particularly in the logistics industry. Not only has air freight transport increased constantly, but also the sea freight business has developed significantly. In June 2007, Kuehne & Nagel signed a contract with Danone to operate its new second distribution center for fresh dairy products at Chorzow, in

the south of Poland. Kuehne & Nagel expects to provide goods receiving services, storage, picking, co-packing, and just-in-time order preparation with the distribution center⁴⁶⁾. Also, in early April of this year, the Macquarie Goodman Group began the development of a 254,028 square-foot warehouse for NYK Logistics in the central city of Torun, Poland. The facility will improve the management of NYK's production and storage activities for key clients in Poland.

In Poland contract logistics is still in its infancy compared with the EU. However, it is more developed than the other CEE countries. The market size was estimated at €184 mil in 2003. CAGR between 2003 and 2007 is estimated to be 24.4% in this sector. This growth is due to the following factors:

- The high influx of FDI as multinationals enter the Polish market and out-source their logistics to an increasingly sophisticated supply sector.
- Increasing levels of out-sourcing amongst domestic Polish manufacturers and retailers
- The growth of the market from a small base

The prospects for the logistics sector in Poland are optimistic. Poland is the leader in the CEE region in all fields. Poland has access to qualified human resources in logistics and transport.

However, Poland requires more investment in transport infrastructure, especially in roads and railways, as well as in the IT sector. Polish logistics companies have to meet customer requirements and adjust their offers to demand. This is especially needed in postal services and in preparing parcels for warehousing. It is predicted that the current tendency of consolidation in the Polish logistics market will continue. Small companies will remain in the market, and provide services for big logistics corporations.

46) American Shipper 2007. 6. 21.

In September 2007, Hyundai Merchant Marine established a new dedicated express rail service between Hamburg, Germany and Mława, Poland. Cargoes transported from Asia to Hamburg by ship are linked to Mława through the express rail service, which will cut the transit time from 36 days to 28 days. Customers with their factories in Poland will have more effective production systems, especially LG Electronics in Mława. Hyundai Merchant Marine anticipate the new express rail service will strengthen its intermodal service in Eastern Europe, which is a growing market for its customers.

In early November 2007, POSCO, Asia's biggest steel maker, announced the completion of its first European processing center, which will feed the high demand for steel from the region's electronics and auto manufacturers.⁴⁷⁾ As the locations of Europe's car manufacturing companies has undergone a shift from west to east in the past decade, Poland, Slovakia, and the Czech Republic have emerged as "Detroit" of Europe. The new \$14.8 million POS-PPC (POSCO-Poland Processing Center) near Wrocław, with a production capacity of 140,000 tons a year, will be a key steel supplier for this output. LG Electronics plans to build a \$103 million home appliance plant in Wrocław, a city in southwestern Poland, to produce refrigerators and liquid crystal display televisions targeting the CEE market⁴⁸⁾. Already in Poland, its affiliate LG Philips LCD, operates a television production facility there. To cut logistics costs, the Polish investment plan is to be carried out in conjunction with LG Philips LCD's liquid crystal display module plant construction project in Wrocław. A joint venture between LG Electronics and Royal Philips Electronics of the Netherlands, LG&Philips LCD announced its plan to invest a total of 429 million euros (\$535.5 million) in the plant by 2011.

47) Korea Times, 2007. 11. 2

48) Korea Times, 2007. 9. 12

With the Polish facilities, LG has become the first Korean electronics firm to establish a plant for white goods in Poland, which serves as a production base for the Eastern European market.

1.2. Slovenia Logistics Market

Slovenia joined the EU in May 2004, and adopted the Euro in January 2007. It is forecasted that the GDP growth of 4.4% seen in 2006, will decrease to 4.0% in 2008. The average annual rate of expansion in the period from 2007 to 2011 is projected at 4.2%. The picture is broadly positive for the industry. The road haulage business also benefits from strong foreign trade through Slovenia's Adriatic port of Koper.

Overall, the annual average growth of freight carried across all modes of transport was at 6.0% in the 2007 to 2011 period, driven by the effects of EU membership and strong trade flows. Apart from road haulage, rail freight carried will also rise, but it is expected that this will be at a much more modest annual average rate of 2.4%. As a result, road transport's share of total domestic and international freight carried will continue to edge up from 9% in 1999 to 12% in 2003, and a predicted 14% in 2011. The third and biggest contribution to the freight business, comes from maritime cargo moving through Koper. Given the progressive commercial outlook of the port authorities, tonnage passing through Koper is forecast to increase sharply. The Slovenian government is predicting that maritime freight carried will rise by an annual average of 6.3% in the forecast period. The construction of a new entrance to Koper port, and its connection with the new motorway between Koper and Ljubljana should further enhance the throughput of the port in relation to nearby competitors. The country has an attractive environment for the freight transport business mainly because of its lack of long-term political and

economic risk, recent infrastructure growth and the regulatory environment. Freight growth and transport intensity (a measure of the dynamism of foreign trade) are also satisfactory. There is, however, room for improvement in the competitive environment.

Because Koper port is the only international cargo port in the Republic of Slovenia, the primary port infrastructure belongs to the State.

The total value of transport and communications GDP will rise to 3.8 billion US dollars in nominal terms by 2011, representing 7.3% of Slovenia's GDP. The transport and communications sector employed 59,000 people, or 6.6% of the labour force, in 2005.

The main transport players in Slovenia are very small companies like in most of the CEE countries. Some Western European companies such as Frans Maas, Gebruder Weiss, General Parcel, P&O Transport, and Schenker are also operating in the Slovenian market, however, they do not operate on a significantly large scale.

The total value of the road freight market is estimated at around 120 million euros. Compared with the other logistics sectors in Slovenia, contract logistics is only just starting to develop. Outsourcing in the country is still widely unrecognized, but is anticipated to expand rapidly once more western retailers and manufacturers move into the region.

1.3. Bulgaria Logistics Market

In October 2006, the Bulgarian Government announced that it will receive loans and provide guarantees for 815 million euros in 2007, its first year of EU membership, in order to finance infrastructure projects. Five of the eight projects are part of a 7.6 billion euros investment plan aimed at fixing Bulgaria's dilapidated roads, railways, sewage and waste disposal sites, and other infrastructure until 2015.

One of the biggest projects is a road upgrade for which Bulgaria will receive 380 million euros. Other projects will include repairs to roads systems in small towns across the country.

Bulgaria's EU accession on January 1 2007, will clearly be supportive in helping to link the country more closely with continental road networks. Public-private partnership (PPP) models will help unlock additional investment funds for motorway construction. In addition, plans are well advanced for a second 303 million US dollar bridge over the Danube River, which will link the country's port of Vidin with Romania's Calafat by mid-2010. Furthermore, the outlook for Bulgarian economic growth is encouraging, with GDP set to expand by an annual average of 5.5% over the next five years.

In March 2007, the Japan Bank for International Cooperation announced that it is to provide around 175 million euros for the construction of cargo terminals at two Black Sea ports in Bulgaria. The Varna project will cost US\$118 million, and the Burgas project will cost about US\$92 million. These projects are both part of the development plan for the transport infrastructure in Bulgaria.

Looking across all freight transport modes, airfreight is predicted to grow at the fastest pace (8.2% per annum), followed by inland waterways freight traffic (8.1%), oil and gas pipelines (7.2%), road haulage (7.0%), maritime freight (6.4%), and rail (6.2%). Taken together, all freight, measured in million tons per km, will grow by an annual average of 6.5% per annum in the period from 2007 to 2011, ahead of GDP.

The total value of transport and communications GDP will rise to 6.82 billion US dollars in nominal terms by 2011, representing 14.4% of Bulgaria's GDP. The transport and communications sector employed 198,400 people, or 7.4% of the labour force, in 2006. Against the backdrop of a falling population, we see that figure holding at a steady level up to 2011.

In the Bulgarian port sector, there are 5 ports of national importance; the Ports of Varna, Bourgas, Russe, Lom, and Vidin. In addition, there are 24 ports of regional importance. Bulgarian ports have a total handling capacity of more than 50M tons. Furthermore, the largest port development project to date is currently on-going in the Port of Bourgas. The main aim of the project is to construct a modern and highly diversified port, which fully responds to the challenges of the new cargo traffic trends. Among other plans, is one for a 2 berth container terminal which will have an aggregate length of 450m, and will be built to have an estimated annual capacity up to 150,000 teu. The project started thanks to the joint efforts of the Bulgarian Government and the management of the Port of Bourgas. Bourgas and Varna are Bulgaria's principal ports. Varna, the largest, handled more than 8M tons last year. Its facilities include two container terminals, and it has a ferry link to the Ukraine and Georgia.

The logistics market in Bulgaria remained undeveloped for many years. However, since 2005, there have been some dynamic changes. Although supply is still lagging behind demand, large speculative projects are currently in the pipeline and an increasing number of developers are turning their attention to the industrial and logistics sector.

The main transport players in Bulgaria are very small companies like most of the CEE countries. Some of the Western European companies, such as Schenker, Danzas, and Kuehne&Nagel are also participating in the Bulgarian market.

The road freight market is estimated to have a value of 100 M€ in 2004.⁴⁹⁾ in 2004. The contract logistics market is extremely underdeveloped, although some global manufacturers and retailers have recently started to move into the country.

49) TI, Central and Eastern Europe Logistics Report, 2004. 3, p.157.

When Bulgaria and Romania acceded to the EU, the two former Soviet bloc nations agreed to meet strict reform conditions which are imposed by the European Commission. These conditions will eventually promote efficiency and transparency, and lead to improvements in their competitiveness. Bulgaria and Romania already have well-established maritime industries, including significant port, shipping, shipbuilding, and repair sectors. The privatization of run-down, state-owned facilities in these sectors, especially shipyards, has already begun to transform them, but the pace of market-driven change will need to accelerate to keep pace with fellow EU members.

The Port of Varna-East infrastructure programme is underway. The project will contribute to the development not only of Varna, but that of the whole country. Japan is providing the loans for the port project. The century-old port badly needs modernization and experts have calculated that building a new port is more feasible than upgrading the existing facilities. A container terminal is to be built as part of the new port. The privatization of Navigation Maritime Bulgare (NMB) is also being considered. The best strategy for the de-nationalization of NMB has under discussion for a long time.

The JBIC will provide a \$100 million loan for the construction of containerized cargo terminals at the Bulgarian Black Sea ports of Varna and Burgas. The loan agreements need to be approved by the Bulgarian Government, before they are signed in March 2008. The construction of the terminals will be preceded by the adoption of a general development plan and an environmental impact study. Containerized cargo traffic which passes through Bulgarian territory is expected to double over the next 12 years. The construction of the 29 million euro intermodal cargo terminal at the Poduyane train station in Sofia will begin in 2008. The conceptual idea for the terminal is ready and is being reviewed by the Sofia municipality. The

national infrastructure development strategy envisages intermodal cargo terminals in Ruse and Plovdiv as well.

Bulgaria ranked 55th in a World Bank index that covers 150 countries. The index pinpoints the places where it's easy or difficult to ship goods across countries, into and out of ports, and over borders. The bank's new index is based on answers to a questionnaire, submitted by 800 freight-forwarders and express carriers working in the international logistics business⁵⁰).

Countries with "higher overall logistics costs are more likely to miss the opportunities of globalization," according to leading authors Jean Francois Arvis and Monica Alina Mustra.

"The biggest source of costs is not really transportation costs, port and handling charges, procedural fees (such as bonds), or even agent fees, and side payments, it is the predictability, the reliability, and the quality of services that are much more important than the cost," writes Arvis. Major transport hub Singapore ranked top with a score of 4.19 out of 5, and landlocked Afghanistan was last with a score of 1.21. Bulgaria scored 2.87 points and ranked 55th, above Croatia, Serbia, and Macedonia, but below Romania and other Eastern European EU member states. The overall index is broken down into seven more sub-indexes, namely customs, infrastructure, international shipments, logistics competence, tracking, domestic logistics costs, and timeliness. Bulgaria scored highest in tracking and tracing, where it ranked 39th, and timeliness, where it ranked 43rd. It scored worst in infrastructure (64th), customs (66th), and domestic logistics costs (81st).

Bulgaria expects to receive around 4.7 billion euros of foreign direct investment for 2008. In addition, in the next 7 years, it is predicted that Bulgaria will have the chance to absorb about 7 billion euros from the European funds available on different operative programs.

50) World Bank Logistics Performance 2007, www.worldbank.org, retrieved on 2007. 11. 12.

1.4. Romania Logistics Market

The country's biggest port is Constanza, which is also a free trade area. More than 60% of Romania's exports and imports are handled through Constanza, and considerable investments are being made to develop the Constanza Sud (south) harbor.

The Danube stretches over 1,075 km in Romania, and its river traffic is almost exclusively conducted on this river. In the maritime and inland waterway transport sector, similar principals have been adopted as in Bulgaria where state owned bodies or entities are in charge of the port infrastructure (quays, breakwaters, landfill, etc.) and award concessions to private bodies for port operations. The port and navigation infrastructure are administered by the APM-SA Constanza National Company, CAN-SA Constanza National Company, APDF-SA Giurgiu National Company, APDM-SA Galati National Company, and AFDJ-SA Galati Autonomous Regie.

In 2002, Romania traded a total of 10.2 million tonnes of goods with EU member states, worth around €20.2 billion. Of this, 3.4 million tonnes was import traffic (valued at €10.8 billion), while 6.7 million tonnes was exported to the EU.

Goods transported by sea were 50.8% of the total, while cargo moved by road accounted for 40.3%. Rail and other transport modes, including inland waterways, accounted for 8.5%. Only 0.3% of the volume of goods traded between Romania and the EU were moved by air. The volume of goods carried by maritime transport was 3.5 million tonnes in 2001. Two thirds of this was export traffic (2.3 million tonnes), while the remainder of 1.2 million tonnes was inbound traffic.

Romania gives the EU a significant new port in Constantza, the Black Sea's largest and an important gateway into the area. It handled more than 60 million tonnes last year, a 20% increase from 2004. Oil

and related products accounted for 14 million tonnes, and iron ore 12.6 million tonnes. The port has direct access to the Danube, so is a gateway for traffic to and from the Central European states through which the river also passes. The European Bank for Reconstruction & Development has stated that Constantza has become more important for European trade, as traffic congestion has worsened in central Europe.

There are several development projects underway :

- Development of rail capacity; The investment is based on the construction of a systematized railroad yard, designed to insure optimum efficiency and unitary operations. The estimated value of the project is 10 million euros.
- Road bridge over the Danube-Black Sea Canal and other access infrastructure; The bridge is meant to insure a better connection of the southern area of the Constanza port to the national road network.
- Constanza North breakwater; Due to the expansion of activities in the southern area of the port, especially of the container business, the container terminals need to have a higher safety standard of navigation in the port area. The existing North breakwater will be extended with another 1,050 m until it reaches the South breakwater.
- Bridge over the connection canal in the river-maritime area; The completion of a metallic road bridge of 105 m in length will connect the river-maritime basin area and the artificial island.
- Pier III specialized terminals; The development of specialized terminals will provide bigger quay depths, permitting the mooring of large capacity vessels. This project requires fillings and embankments with an estimated value of 70 million euros.

The development of modern transport infrastructures is the key to regional and international mobility. Constanza port forms a central

and vital link in the network of multimodal transport. Pan-European transport Corridor VII (the waterway route along the Danube to the Black Sea which connects up with the North Sea via the Rhin-Maine route) is a shorter trade route, and a solution for countries with no access to the sea. For goods in transit from the Far East to destinations in Central Europe, the link between Constanza and Corridor VII via the Danube-Black Sea Canal offers a transport alternative that is 4,000 km shorter.

The inauguration of the Danube-Black Sea Canal transformed the Danube ports into Constanza's hinterland ports. The development of highly integrated logistic centers which benefit from Constanza's transshipment facilities, and from the connection with the Danube-Black Sea Canal, is in line with the European Union's strategy regarding regional development and cooperation between EU member states and its non-EU neighbors.

Romania is also a significant shipbuilding nation, with transnationals such as Aker, Daewoo, and Damen having investments there. In 2005, Romanian yards delivered 66 vessels totalling 640,018 dwt.

The total of Romanian exports handled by road transport companies amounted to 2 million tonnes in 2002. Of this, local companies handled 81% of the total. EU haulage companies accounted for 15.7% (314,000 tonnes), while other companies (non-Romanian and non-EU) controlled the rest (75,000 tonnes). The total for imports handled by road was 2.5 million tonnes in 2002, of which Romanian companies handled 71%. The percentage of goods transported by EU hauliers was 22%. However, the proportion of goods handled by non-EU and non-Romanian operators was only 6.9%.

The main transport players in Romania are also very small companies. Some of the Western European companies such as DHL, Kuehne&Nagel, Maersk Logistics, and Frans Maas are also operating in

the market. In March 2007, Kuehne & Nagel acquired Censped d.o.o., a forwarder in the Slovenian Port of Koper. The deal is expected to enable the Swiss company to expand its sea freight activities in the Balkans, as Koper links business centers in CEE with the Mediterranean countries and the North East Asia.

The road freight market is estimated to be at valued €293m, the fourth largest in the region. The Romanian economy is quite well developed by CEE standards. A number of major Western European, and Global manufacturers and retailers already operate in the country, and as such have attracted the notice of numerous logistics specialists including Tibbett & Britten.

The growth of the express and logistics markets in CEE is set to continue, especially with the accession of Bulgaria and Romania into the European Union in January 2007. Although the markets of Bulgaria and Romania are relatively small, many manufacturers, especially in the automotive and textile industries, have already been attracted to these low-cost countries, which will be rapidly assimilated into European supply chains. In line with this, Davies Turner, a UK based freight forwarder, is increasing its services to Romania and Bulgaria. The company believes that the UK is one of the most important trading partners for both Romania and Bulgaria, and that the EU accession will provide further opportunities for two-way trade. In particular, they anticipate that Romania's textile, footwear, and furniture industries will continue to grow.

1.5. Croatia Logistics Market

It is expected that Croatia will be accepted into the EU in 2009, and it's government plans to promote the country as a leading maritime nation in Europe. Because of Croatia's vast Adriatic coast line, there are many potential opportunities. Although the country has many

ports, it is considered that there is a lack of good intermodal connections, well developed cargo handling equipment, and well trained staff. Furthermore, the rail connections between Croatia and its neighboring countries to the east are poor⁵¹⁾. The Croatian shipping market is expected to grow at a faster rate than the average for market growth in the Balkans, and a growth rate of around 20% is expected for 2008.

The project which is underway to connect Croatia's largest seaport with its capital city, envisages the construction of 11 bridges, nine tunnels, and facilities. The main section is expected to be opened for traffic in late 2008, and will complete the construction of the Rijeka–Zagreb highway, which began about 30 years ago. In other words, despite a fiscal squeeze, with EU help, Croatia is moving ahead with motorway investments to improve the road haulage network across the country. Business Monitor International concludes that road freight tonnage will grow at an annual average of 5.0% over the next five years.

Croatian ports aim to increase their efficiency and productivity by cooperation or partnership with foreign operators. These alliances open new horizons in the revival of Croatia's economy, as transport and port business are crucial to the economy and a significant part of the country's integration with Europe.

By opening up its doors to foreign investors, Croatia aims to attract foreign investment to Rijeka and other ports. The country is looking into developing road and rail initiatives to help the country's competitive logistics position in the region. It has become clear that port business cannot grow without efficient rail and road conveyance, and efforts must be made to implement a radical reduction in transit time to allow Rijeka to exploit its potential as a transit port. Croatian ports are ideally positioned for ocean carriers serving central and

51) Cennmktintlin, 2007. 8. 31.

eastern Europe, especially in the Adriatic Line service. With the World Bank's loan of \$264 million for the Croatia Rijeka Gateway Project, container traffic is likely to grow rapidly. The Croatia Rijeka Gateway Project will modernize the entire port and road connections, including the complete upgrade of equipment, and the restructuring of facilities and infrastructure. The regional road and rail infrastructure will be connected, and the port itself will be greatly modernized and expanded. The project is expected to be completed by 2009. At the project's heart is the construction of a new deep-draught container terminal, projected to eventually reach a capacity of 1 million teu a year. The government is seeking a private operator to build and operate the facility. The port will eventually allow goods to move between eastern and south central Europe and world markets.

In addition, last year the World Bank decided to give a loan to the Port of Ploce in the south, worth \$58.5 million, for the expansion of Croatia's second largest port⁵²⁾. The European Bank for Reconstruction and Development also contributed by providing a 11.2 million euro loan. The aim of the project is to link Ploce with Sarajevo, Osijek, and Budapest. The project includes the expansion of the existing bulk terminal, and the creation of a new container facility capable of handling vessels up to 3,000 teu. In Croatia, the fastest port development is expected in Ploce which acts as an entry gate to Bosnia and Herzegovina. It is expected that in the next year the port will reach the volumes that Rijeka is processing this year. In 2006, Ploce's throughput grew by 11% on a year-on-year basis, from 9,378 teu in 2005 to 10,374 teu in 2006 (full container only). This year the traffic is expected to grow by around 15%.

The development of the feeder service as a modern way of organizing the transport of goods in the Adriatic ports, is considered the best way to connect the container terminals in the area in order

52) Lloyd's List, 2007. 7. 27.

to improve efficiency and strengthen competitiveness. The Port of Rijeka is attempting to become a hub port by introducing the feeder service. This involves the collection of containers from the Brajdica terminal for further distribution to the Bar and Ploce, and other North Adriatic ports.

Container traffic in Rijeka has been increasing, especially due to the expanded weekly services of feeder connections by CMA-CGM⁵³⁾. Furthermore, in 2003, Zim Line started to operate a mother ship route to Rijeka on a weekly basis. After this historical development, other major lines followed suit. In connection with these changes, a weekly container rail service from Rijeka to Budapest was initiated for the first time. Maersk has operated in Croatia from the beginning of 2005. Rijeka shipped 94,340 teu last year which is an increase of 24% from 2005. Croatia's imports come mainly from the Far East, and account for about 85% of the total volume. The main export routes are to the Middle East and North America. Currently CMA-CGM, Evergreen, Maersk, MSC, Hapag-Lloyd, UASC, China Shipping, Zim, Senator, and Norasia are main liners in the market.

BMI is forecasting a period of steady growth in Croatia as the country focuses on EU accession over the rest of this decade. GDP will rise at an annual average of 4.6% for the next five years, a solid rate that will nevertheless be marginally lower than the 4.7% figure achieved over the preceding five years. This pace of development will be favorable for freight transport industry development, as multi-modal links to the EU are improved, and the east-west pipeline opportunities are developed. Croatia's development pattern will rely on the role of the country's freight transit.

Total freight carried fell as a result of the regional wars in the 1990s and has been recovering in subsequent years. Road freight is now dominant, with a 47.3% share of the total, followed by maritime

53) Cromkt, 2007. 9. 7.

freight with 31.6%. Rail is in third place with 11.0% of the total, followed by pipeline throughput in fourth, with 9.1%. Looking forward, it is forecasted that overall Croatian freight tonnage will grow by an average of 4.8% per annum, a little ahead of GDP growth. Growth will be led by airfreight (5.7%), road haulage (5.0%), rail (4.7%), and pipelines (4.6%), in that order. Croatia scores a total of 35 in our freight business operating environment rating out of a theoretical maximum of 70, which places it at the lower end of the ranking among its European peers. For comparison, the average score for the emerging European economies we covered is 39.1.

For the 2006 to 2010 forecast period, it is expected that the transport and communications sector will continue to outpace the economy as a whole. It will achieve average annual growth of 5.2%, compared with only 4.6% for overall GDP. The total value of transport and communications GDP will increase to 5.4 billion US dollars in nominal terms by 2010, representing 8.8% of Croatia's GDP. Shipbuilding is also a key source of the country's export revenues.

2. Container Market in Gateway countries of CEE

2.1. Growth of Container Market in Europe

⟨Table 4-3⟩ gives an overview of the actual figures for 2006, and the forecast figures for the period between 2007 and 2008, of full container trade on the three arterial East–West trade routes. As this table points out, both the East–Europe and Transpacific trade routes experienced growth of between 8 and 9% in 2006, and this is expected to continue throughout the period of 2007 and 2008. Compared to these two trade routes, the Transatlantic market is significantly smaller, and has much lower annual growth rates⁵⁴).

Along with the arterial East–West trade routes, the container trade routes between Europe and Latin America (including Central America, the Caribbean, and South America) also involve significant volumes. According to Global Insight, volumes on this trade route increased from about 2.85 M teu in 2004 to 3.30 M teu in 2006, representing an increase of nearly 16% in two years. As with the North East Asia–Europe and Transpacific trade routes, trade between Europe and Latin America is characterized by a major imbalance: the northbound volumes (2.32 M teu) were more than double the southbound volumes (0.98 M teu) in 2006⁵⁵). In addition, the total Europe–Africa trade was 2.98 M teu in 2006 (some 17% higher than in 2004), of which 1.71 M teu was southbound and 12.7 M teu was northbound. Similarly, trade between Europe and Middle East Asia increased from 2.30 M teu in 2004 to 2.65M teu in 2006 (+15%), of which 1.83 M teu was eastbound and 0.82 million teu was westbound. Therefore, in contrast to the N.E. Asia–Europe trade routes, the eastbound leg is the dominant leg on the trade routes between Europe and Middle East Asia.

The total intra–European containerized trade (including shortsea and feeder) was 7.72 M teu in 2006, some 19% higher than in 2004. The volumes between North Europe and the Mediterranean reached 2.44 M teu in 2006, of which 1.33 M teu was southbound and 1.12 M teu was northbound⁵⁶).

54) ESPO, ANNUAL REPORT 2006-2007, 2007, European Sea Ports Organisation.

55) A large part of the Europe–Latin America trade involves trade with Brazil. As an example, the North Europe–Brazil trade is estimated at 712,000 full teu in 2006, of which 447,000 teu northbound and 265,000 teu southbound.

56) ESPO, ANNUAL REPORT 2006-2007, 2007, European Sea Ports Organisation, pp. 19–20.

Overview of main East-West container trade routes (full teu)

〈Table 4-3〉

Categories	2006	2007	2008
N.E Asia/Europe			
westbound	12,240,000	13,916,000	15,347,000
eastbound	5,747,000	5,995,000	6,235,000
total	17,987,000	19,911,000	21,582,000
growth	9%	11%	8%
Transatlantic			
westbound	4,250,000	4,240,000	4,260,000
eastbound	2,670,000	2,870,000	3,030,000
total	6,920,000	7,110,000	7,290,000
growth	5%	3%	3%
Transpacific			
westbound	4,720,000	5,040,000	5,330,000
eastbound	15,340,000	16,900,000	18,510,000
total	20,060,000	21,940,000	23,840,000
growth	8%	9%	9%

Source: Global Insight, 2007

〈Table 4-4〉 provides an overview of container throughput handled in selected geographical areas in Europe. The total sample consists of 132 individual seaports⁵⁷⁾, which together handled 73.7 million teu in 2005. At an estimated average weight of 11 tonnes per teu, this works out as 800 million tonnes. The figure of 73.7 million teu represents about 18% of the estimated world container port traffic of 399.2 million teu for 2005, as mentioned above. The first part of the table covers Northern Range ports (including Northern Europe and Scandinavia/Baltic), while the second part of the table focuses on Southern Range ports (including the Western Med, Iberian Peninsular and Eastern Med/ Black Sea).

57) 〈Table 4-4〉 only includes ports with an annual throughput of at least 3,000teu, but does not take into account ports along inland waterways. Some of these latter ports, however, handled substantial volumes of container traffic in 2005. The inland port of Duisburg (Germany) is a prime example of this. With a throughput of 712,000 teu it outperformed most seaports listed in 〈Table 4-4〉. In addition, the inland ports of Vienna, Garmersheim, Mannheim and Dortmund each handled well in excess of 100,000 teu in 2005 (ESPO, 2007).

2.1.1 Northern Range ports

About 56% of the European container traffic was handled by ports in Northern Europe (37 ports in total), registering a combined throughput of 41.7 M teu in 2005. Rotterdam, Hamburg and Antwerp handled a staggering 23.9 M teu in 2005, or 32% of the European total and nearly 60% of the Northern European container throughput. In 2006 their combined throughput increased further to 25.6 M teu (+7.2%). The main volume drivers were intra-European flows and Chinese traffic, mainly in Rotterdam and Hamburg. Chinese cargo (including Hong Kong) in Hamburg far exceeded 2 M teu in 2005, with Rotterdam also approaching the 2 M teu mark. Hamburg continues to develop in its role as a major hub for the Baltic and CEE, while Rotterdam and Antwerp are capitalizing on cargo generating centers in the extending "blue banana" of Western European and the high density of European distribution centers in the Benelux, Northern France and parts of Germany⁵⁸).

Besides these three main ports, Northern Europe also contains five other "teu millionaires". The 29 remaining small and mid-sized ports handled a combined throughput of 6.3 M teu in 2005. Most of them handled less than half a million teu.

Although the Scandinavia/Baltic region has 45 container ports, the volumes handled are far less than in Northern Europe. The total throughput in 2005 reached 6.44 M teu, more than half of which was handled by the top-5 ports St-Petersburg, Aarhus, Gothenburg, Helsinki, and Gdynia. However, many ports in the Scandinavia/Baltic region have grown considerably faster than their big counterparts in Northern Europe in recent years. A prime example is St-Petersburg, which handled only 0.58 M teu in 2002, but almost double this in 2005. A similar trend applies to Aarhus (0.40 M teu in 2002), Gdynia (0.25 M teu), and Klaipeda (0.07 M teu).

58) Ibid., pp. 21~22.

Hence, the total Northern Range (82 ports) accounted for 48.1 M teu in 2005, about 65% of the total port sample included in <Table 4-4>.

2.1.2 Southern Range ports

The second biggest container port region in Europe is the West-Mediterranean (27 ports), which accounted for 19.32 M teu in 2005, and consists predominantly of Spanish and Italian ports. Three Spanish, three Italian, and one Maltese port handled in excess of 1 M teu, with Marseilles (Southern France) following closely behind. The 19 remaining small and mid-sized ports together handled about 3.6 M teu. Most of them handled less than half a million teu.

The third biggest port region is the East-Mediterranean/Black Sea region (excluding ports in Egypt, Israel, Turkey, and Lebanon) which has 15 ports and handled a combined throughput of 4.62 M teu in 2005. Only Piraeus handled in excess of 1 M teu.

Finally, the 8 ports on the Atlantic Coast of the Iberian Peninsular accounted for only 1.66 M teu in 2005. The biggest of them (Lisbon and Bilbao) handled about half a million teu each. Hence, the total Southern Range of 50 ports accounted for 25.6 M teu in 2005, i.e., about 35% of the total port sample included in <Table 4-4>.

The West-Mediterranean has experienced remarkable development since the mid 1990s. Since that time, transshipment hubs have emerged in the region (e.g., Algeciras, Gioia Tauro, Marsaxlokk, Taranto, and Cagliari) providing incentives for shipping lines to reconfigure their service networks, and to have more services calling in Mediterranean ports. The increases in Mediterranean trade volumes have generated a great amount interest amongst shipping lines, who now aim to have direct calls at mainland Mediterranean ports, supported by dedicated Asia/China to Mediterranean liner services. An example is the successful development of the Spanish ports of Valencia and Barcelona. These developments have made some transshipment hubs rethink their focus towards feeder flows in the East Mediterranean⁵⁹).

〈Table 4-4〉 Container port throughput for European ports (2005)

Unit: thousand teu

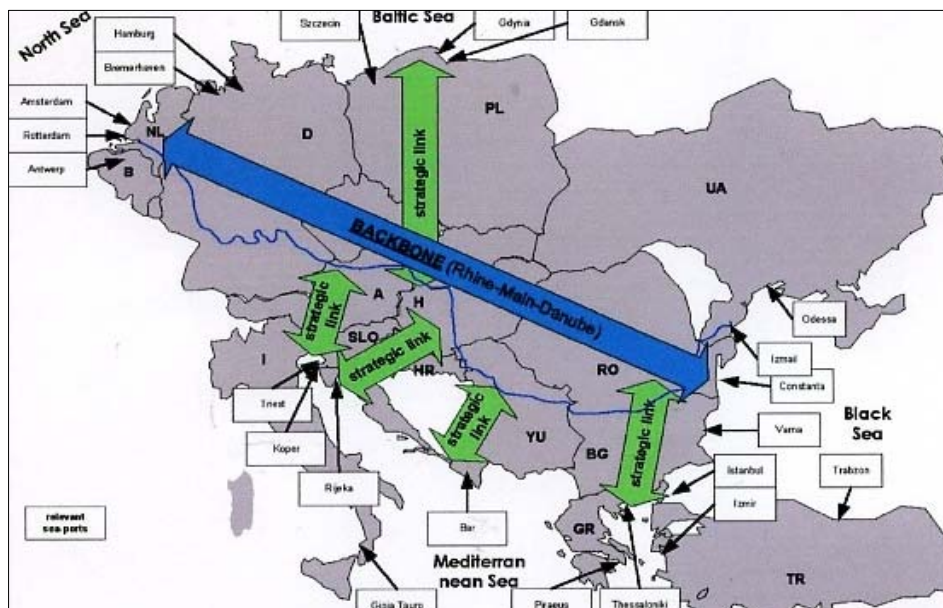
Area	Port	Total	Area	Port	Total	Area	Port	Total	Area	Port	Total
Northern European	Rotterdam	9,288	Scandinavia / Baltic	St Petersburg	1,119	West - Med	Algeciras	3,180	East - Med / Black Sea	Piraeus	1,395
	Hamburg	8,088		Aarhus	803		Gioia Tauro	3,161		Constantza	771
	Antwerp	6,482		Gothenburg	772		Valencia	2,410		Taranto	717
	Bremen	3,736		Helsinki	460		Barcelona	2,071		Thessaloniki	366
	Felixstowe	2,730		Gdynia	400		Genoa	1,625		Limassol	320
	Le Havre	2,119		Kotka	367		Marsaxlokk	1,321		Venice	290
	Zeebrugge	1,408		Esbjerg	295		La Spezia	1,024		Trieste	198
	Southampton	1,375		Klaipeda	214		Marseilles	908		Koper	180
	Tilbury	678		Oslo	176		Leghorn	659		Ravenna	169
	Thamesport	650		Riga	169		Cagliari	631		Varna	84
	Liverpool	626		Helsingborg	162		Salerno	418		Rijeka	76
	Dublin	590		Hamina	160		Naples	374		Bourgas	26
	Dartford	495		Copenhagen	155		Malaga	247		Heraklion	19
	Immingham	434		Tallinn	128		Vado Ligure	223		Bari	10
	Hull	361		Rauma	119		Savona	220		Lamaca	5
	Teesport	318		Kaliningrad	113		Alicante	160			
	Belfast	270		Gavle/Bergen	85/72		Palma Mallorca	156			
	Reykjavik	269		Gdansk	70		Cadiz	138	(15)	4,625	
	Gangemouth	224		Pori/Aalborg	61/56		Seville	116	Iberian Peninsula	Lisbon	513
	Dunkirk	205		Hanko	52		Valletta	61		Bilbao	504
	Rouen	202		Norrkoping	43		Civitavecchia	45		Leixoes	341
	Waterford	181		Fredrikstad	42		Castellon Piana	44		Vigo	205
	Cork	164		Kristiansand	39		Cartagena	37		Sines	51
	Nantes St-Nazaire	125		Stockholm	38		Palermo	28		Marin	32
	Goole	116		S-Swinoujscie	36		Mahon	23		Aviles	11
	Bristol	114		Kemi/Halmstad	29/22		Ibiza	13		Gijon	5
	Ipswich	75		Oulu/Kiel	20/19		Tarragona	10			
	Amsterdam	66		Ahus	19						
	Harwich	62		Wallhamn	18						
	Cardiff	55		Sodertalje	18						
	Bordeaux	50		Turku/Varberg	17/14						
	Drogheda	48		Fredericia	12						
	Warrenpoint	41		Umea/Tornio	11/10						
	Ghent	31		Raahe/Lysekil	8/7						
	Limerick	9		Lappeenranta	6						
	Ostend	9		Skelleftea	5						
	Dover	6		Kokkola	4						
				Liepaja	3						
Sum	(37)	41,698	Sum	(45)	6,442	Sum	(27)	19,302	Sum	(8)	1,662
Northern Range Ports (82) 48,140						Southern Range Ports (50) 25,589					
TOTAL EUROPEAN PORTS (132) 73,729											

Source: Containerisation International and respective port authorities

2.2. The Emergence of CEE Container Ports

As mentioned earlier in section 3.2, as a part of the future strategy for coping with the changes caused by globalization, the Trans Europe Network (TEN) connections with maritime basins were extended and strengthened after 1997. The TEN was strategically extended into the 3 axes, which are the main scope of this study; to Koper in the south, to Constanza in the east and to Gdynia in the north as shown in <Figure 4-1>. This strategy is related to the heavy congestion of the west European ports like Rotterdam and Hamburg⁶⁰). This is the main reason why CEE ports are growing rapidly in global logistics markets. Logistics companies are eager to cut down their costs in global supply chain processes. CEE ports provide the solution for them in terms of geographical location.

<Figure 4-1> CEE Ports Strategic position in TEN



Source: Interim, Integration in the intermodal goods transport of non-EU states, Report, 2007.

60) An interview with Hanjin shipping co. in Korea and PSA corp. in Europe, 2007. 10. 23.

As a result, the growth of the CEE container trade between Europe and N.E. Asia is rapidly increasing as shown in <Table 4-5>. In 2001, the proportion of Med-N.E. Asia container trade was 22.6% of the total Europe-N.E. Asia trade. However, Med-N.E. Asia container trade jumped up to 30.5% in 2005. The share of W. Europe-N.E. Asia to Med-N.E. Asia trade has increased by almost a 7.8% per year since 2001. Maersk and Evergreen are the key players in the development of the Med-N.E. Asia trade routes. The majority of the trade is focused on a route to the South Med and Black sea.

Changes in EU-N.E. Asia Trade between 2001 and 2005
<Table 4-5>

2005	N. Europe-N.E. Asia				Med-E. Asia				%MED1)
	EB	WB	TOTAL	%	EB	WB	TOTAL	%	
CKYH Alliance	1,363	1,530	2,893	22.4	371	544	915	16.1	24.0
Grand Alliance	1,269	1,555	2,825	21.9	288	315	603	10.6	17.6
Maersk-Sealand	766	929	1,695	13.1	309	483	792	14.0	31.8
New World Alliance	674	802	1,476	11.4			-		0.0
Evergreen/LloydTriestino	373	429	802	6.2	256	306	560	9.9	41.1
CMA-CGM Norasia, etc.	487	630	1,117	8.6	477	709	1,186	20.9	51.5
China Shipping&others	434	499	932	7.2	50	58	108	1.9	10.4
MSC	298	549	847	6.6	232	531	763	13.4	47.4
ZIM/Norasia				0.0	113	146	259	4.6	100.0
others	158	169	328	2.5	212	277	488	8.6	59.9
TOTAL	5,823	7,092	12,915		2,305	3,368	5,673		30.5
2001	N. Europe-N.E. Asia				Med-N.E. Asia				%MED
	EB	WB	TOTAL	%	EB	WB	TOTAL	%	
CKYH Alliance	1,032	1,284	2,316	24.8	201	330	531	19.5	18.6
Grand Alliance	1,000	1,301	2,301	24.6	217	271	489	17.9	17.5
Maersk-Sealand	671	842	1,513	16.2	75	114	189	6.9	11.1
New World Alliance	643	823	1,466	15.7	109	151	259	9.5	15.0
Evergreen/LloydTriestino	355	410	766	8.2	135	169	303	11.1	28.4
CMA-CGM Norasia, etc.	160	302	462	4.9	177	238	415	15.2	47.3
China Shipping&others	105	131	237	2.5	71	89	159	5.8	40.2
MSC	63	118	180	1.9	47	78	125	4.6	41.0
others	24	80	104	1.1	85	170	256	9.4	71.0
TOTAL	4,054	5,291	9,346		1,116	1,610	2,726		22.6

Source: Drewry Shipping Consulting Report, 2007

Note: 1) It is the share of Med-N.E. trade against Med-N.E. trade

The comparative advantages of the geographic locations of CEE ports (notably, Rijeka in Croatia) in comparison to their competitors for the traffic route from North East Asia to CEE are described by indicators in <Figure 4-2>. The ports in CEE can save around 5 to 7 days from the lead time. As a result, the container throughput of the CEE ports has rapidly increased since the end of the 1990s as mentioned above.

<Figure 4-2> CEE Ports Advantages Transit Time from N.E.Asia to CEE



Source: Interim, Integration in the intermodal goods transport of non-EU states, Report, 2007.

In 2006, the European seaports included in <Table 4-6> handled a combined throughput of 66 million teu. When compared to the 61 million teu of the year before, this represents a significant 8.6% increase. Ports in the East Mediterranean/Black Sea region and the Scandinavia/Baltic region experienced the biggest percentage increases. The major cause of this was the economic growth in these

regions due to FDI. Ports in the Scandinavia/Baltic region handled a combined throughput of 4.97 million teu. This is a significant increase of 15.1% compared to the year before. Ports in the East Mediterranean/Black Sea region handled a combined throughput of 3.55 million teu. This is also a significant 12.9% increase compared to the year before.

〈Table 4-6〉 **Emergence of Main Container Ports in CEE**
Unit: thousand teu

Categories	2006	2005	Growth
Northern EU	39,374	36,046	9.3%
West Med	18,237	17,399	4.8%
East Med/Black sea	3,547	3,142	12.9%
Scandinavia/Baltic sea	4,966	4,313	15.1%
Total Port	66,130	60,900	8.6%

Source: Containerisation International and respective port authorities

The sea ports at the end of 3 axes have grown rapidly because of their excellent geographical locations, their innovation of transport networks, and thanks to economic growth in the surrounding countries. The growth rate of ports in the five countries, which are located on the 3 axes, are much higher than those of the Northern EU and West Mediterranean as shown in 〈Table 4-6〉. 〈Table 4-7〉 indicates the CAGR of the five countries and their main ports container throughput. The growth rates of the other countries and their ports are higher than the average growth rate of the region and Europe as a whole.

〈Table 4-7〉 **The 5 Countries Container Throughput 2000-2006**

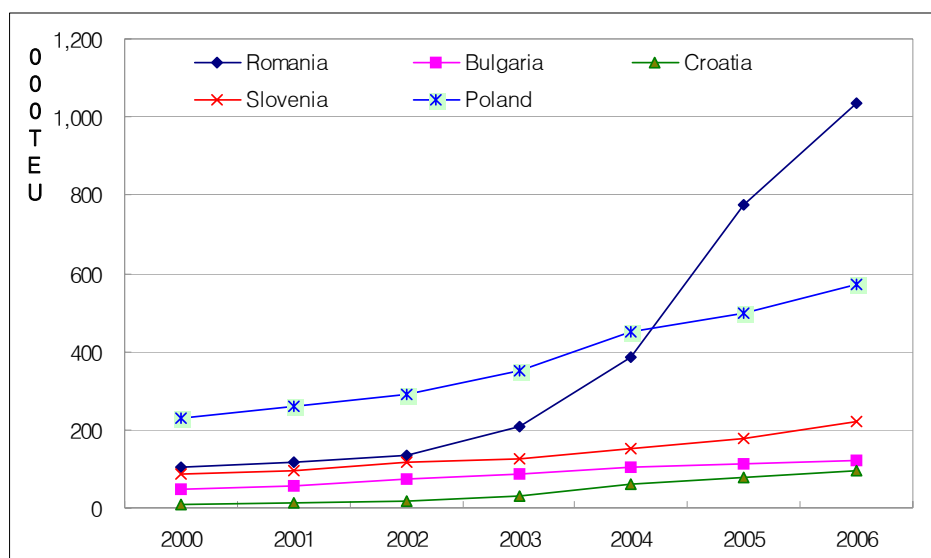
Country	2000	2001	2002	2003	2004	2005	2006	00~06
Romania	106.0	118.6	136.3	206.4	386.3	776.6	1,037.1	46.2
Constanza	106.0	118.6	136.3	206.4	386.3	776.6	1,037.1	46.2
Bulgaria	48.7	57.3	73.0	85.3	105.2			21.3
Varna	37.3	45.5	59.1	65.1	78.6	84.0		17.7
Burgas	11.4	11.8	13.9	20.2	26.6			23.6
Croatia	7.1	12.7	15.5	28.2	60.9	76.3	94.4	53.9
Rijeka	7.1	12.7	15.5	28.2	60.9	76.3	94.4	53.9
Slovenia	86.7	93.2	114.9	126.2	153.3	179.7	219.0	16.7
Kopper	86.7	93.2	114.9	126.2	153.3	179.7	219.0	16.7
Poland	228.2	261.6	291.8	352.8	448.7			18.4
Gdynia	188.3	217.0	252.2	308.6	377.2	400.2	461.2	16.1
Gdansk	18.0	24.4	20.1	22.5	43.7	70.0	78.4	27.7
Szczecin	21.9	20.2	19.4	21.6	27.7			6.0

Source: modified from various sources

Note: 1) Bulgaria: Burgas, Poland: Szczecin CAGR is between '00~'04; 2) Varna CAGR is between '00~'05

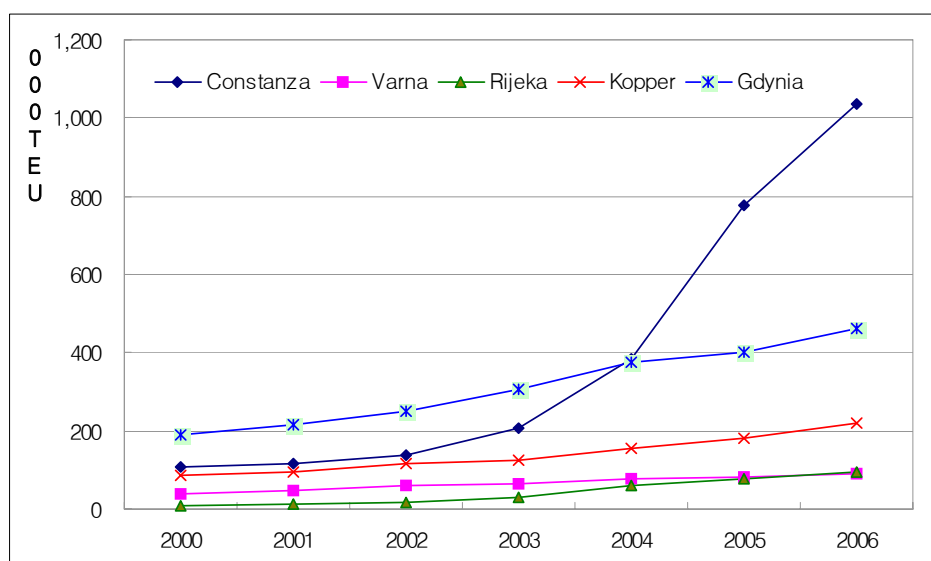
Of these countries, Croatia has the highest container throughput growth rate of 53.9% in the period between 2000 and 2006. Romania achieved a growth rate of 46.2% in the same period. A comparison between the countries and their ports, reveals a trend that is basically similar to that shown in 〈Figure 4-3〉 and 〈Figure 4-4〉. Constanza Port in Romania is emerging as a major transshipment port in the Black Sea area, and it has recently shown a 200% yearly container throughput growth rate. This trend is unlikely to cease for some time, considering the port development plans for Phase 3 and 4.

〈Figure 4-3〉

CAGR of The 5 Countries since 2000

Source: drawn by authors

〈Figure 4-4〉

CAGR of The 5 Ports since 2000

Source: drawn by authors

2.3. The Launching Processes in the CEE Market

2.3.1 Current Launching Situation of Shipping liners

1) Global situation

As far as the shipping lines are concerned, Maersk line started the current wave of consolidation with a successful 2.3 billion euro takeover bid for P&O Nedlloyd in 2005, adding nearly half a million teu capacity to its fleet. As <Table 4-8> indicates, the acquisition of P&O Nedlloyd enabled Maersk to substantially increase its market share from about 12.4% at the beginning of 2005, to more than 18% at the beginning of 2006. Its cellular fleet capacity of nearly 1.7 million teu was more than double the fleet size of the second and third largest companies, MSC and CMA CGM. The three carriers controlled about 20% of the cellular ships in service, and more than 30% of the cellular teu capacity at the beginning of 2006 in the world market. Similarly, the take-over of CP Ships more than doubled the size of the Hapag-Lloyd cellular fleet and catapulted the German shipping line from 17th to 5th position in the global league⁶¹⁾.

<Table 4-8> also shows that during 2006 and the first quarter of 2007, the cellular fleet of Maersk (+5.6%) has grown considerably slower than that of its nearest rivals. This is significantly less than the fleet increases of MSC (+37.8%) and CMA CGM (+46.9%). Maersk witnessed the lowest percentage increase of the entire top-25 during the period considered. As a result, its market share decreased to 16.4% in March 2007.

Although on a much smaller scale than in the two years before, the consolidation trend continued in 2007. In Feb. 2007, it was announced that CMA CGM had made it's offer for the CNC Line for a reported \$ 159 million⁶²⁾. The acquisition was primarily aimed at giving CMA

61) ESPO, ANNUAL REPORT 2006-2007, 2007, pp. 28-29.

62) Ibid, p. 31.

CGM a stronghold in the fast-growing intra-Asia feeder and short-sea trades.

〈Table 4-8〉 also reveals, that following the consolidation activity in 2005 and the massive organic growth during 2006, the top-10 container shipping lines controlled 60.2% of the total teu-capacity deployed on worldwide trade routes in March 2007. This obviously gives them enormous bargaining power with port governors and operators.

〈Table 4-8〉 **Top-25 Container Shipping Lines for Selected Dates**

Situation as at 01/'05		ships	'000teu	share	Situation as at 03/'07		ships	'000teu	share
1	Masersk-Sealand	377	1,016	12.4%	Masersk-Sealand	539	1,759	16.4%	
2	MSC	245	637	7.8%	MSC	332	1,081	10.1%	
3	Evergreen Group	153	444	5.4%	CMA CGM Group	310	746	6.9%	
4	P&O Nedlloyd	155	429	5.2%	Evergreen Group	166	566	5.3%	
5	CMA CGM Group	182	408	5.0%	Hapag-Lloyd	138	467	4.3%	
6	APL	99	311	3.8%	CSCL	135	417	3.9%	
7	Hanjin/Senator	77	284	3.5%	COSCO	131	392	3.6%	
8	NYK	103	279	3.4%	NYK	127	354	3.3%	
9	COSCO	115	277	3.4%	Hanjin/Senator	87	345	3.2%	
10	CSCL	105	254	3.1%	APL	107	343	3.2%	
11	OOCL	65	218	2.7%	OOCL	75	304	2.8%	
12	K-Line	73	208	2.5%	K-Line	88	283	2.6%	
13	ZIM	89	202	2.5%	MOL	93	281	2.6%	
14	MOL	64	200	2.4%	Yang Ming Line	82	253	2.4%	
15	CSAV Group	77	199	2.4%	CSAV Group	85	250	2.3%	
16	CP Ships Group	78		0.0%	ZIM	103	249	2.3%	
17	Hapag-Lloyd	50	190	2.3%	Hamburg-Sud Group	96	223	2.1%	
18	Yang Ming Line	62	182	2.2%	HMM	39	169	1.6%	
19	Hamburg-Sud Group	79	153	1.9%	PIL	104	146	1.4%	
20	HMM	39	149	1.8%	Wan Hai Lines	71	116	1.1%	
Top-10		1,611	4,338	53.1%	Top-10	2,072	6,470	60.2%	
TOTAL		5,107	8,168	100%	TOTAL	5,768	10,747	100%	

Source: ESPO, ANNUAL REPORT 2006-2007, 2007

2) CEE market situation

In the CEE market, the launching processes of global shipping lines have been carried out since the 1990s, and after 2000 the trend has been reinforced. The current situation in the 3 axes is as follows:

① South Axis

The number of shipping lines calling at Koper port was 24 in 2000 and 30 in 2005. The number of calling shipping lines has been increasing and the members of this axis have successfully restructured themselves to become global players. Despite its role as a local trading port, Koper attracted many global players, notably global Asian players such as Hanjin, Evergreen, COSCO, MOL, K Line, and NYK, because of its good geo-traffic location. This reflects the increasing trade between CEE and N.E. Asia, and the rapid industrialization of CEE.

〈Table 4-9〉 **Shipping liners in the South axis**

Country&Port	2000년	2005년
Slovenia Koper	CMA CGM, Zim, Maersk, CNAN, Contship, CSX, Blue Con', ENC, Llood Triestino, CSCL, MFL, MSC, Hapag-Lloyd, Neptunia, Norasia, PONL, Senator, Rova, Safmarine, UFS, Setramar, SM, UASC, UDSC	APL, CMA CGM, CSAV Norasia, ECL, Maersk Line, Hatsu, Zim, CSCL, Grimaldi, Hanjin, COSCO, IRISL, ITS, Evergreen, K Line, LP, Hapag-Lloyd, Senator, MSC, MCL, MOL, NYK, Sermar, UASE, UFS, Mitsui, Metz Group, Lošinjska, Italia Marittima
	24	30
Croatia Rijeka	CMA CGM, Jadroplov, Losinjska Plovidba	CMA CGM, CSAV, Norasia, Evergreen, Hapag-Lloyd, Hatsu, ITS, Jadreplov, LP, Maersk Line, Senator, UASC, Zim
	3	13

Source: respective PAs home page, CI Year book and OSC, selected years

In Rijeka port, the trend is similar to that of Koper port. The figures for the port of Rijeka have changed dramatically between 2000 and 2005. In 2000, it had only 3 shipping lines, but now it has 13 calling at the port, including a number of global players. This is the

main reason why the port has the biggest percentage growth as mentioned before. However, the growth of the port in terms of the number of shipping lines and the container throughput volume was subject to limitations, because Rijeka has only two berth container terminal. However, the development plans are implemented and remove the limitation, the growth will continue as before.

② North axis

The number of shipping lines calling at Gdynia port was 9 in 2000 and 10 in 2005. Due to the extensive local market and good connections with developed western Europe, Gdynia port attracted many global players, such as APL and CMA CGM. In addition, the Polish Government has developed an efficient modern transportation network between the capital city, the main industrial area and the port. This will help the port to grow rapidly. Also, Gdynia and Gdansk ports have attracted a number of multinational port operators such as ICTSI and HPH in Gdynia, and PGASA and DCT in Gdansk, in order to improve port capacity and efficiency.

〈Table 4-10〉

Shipping liners in North axis

Country & Port	2000년	2005년
Poland Gdynia	AWS, Balt Con, Euroafrica, IMTC, Maersk Sealand, MSC, POL-levant, Stena Line, Team Lines	APL, CMA CGM, Balt Con, ESL Euroafrica, IMCL, Maersk Line, Mann, MSC, Teamline, MacAndrews
	9	10

Source: respective PAs home page, CI Year book and OSC, selected years

③ East axis

The number of shipping lines calling at Constanza port was 11 in 2000 and 9 in 2005. Although the number of shipping liners which called at the port decreased, the members have restructured as global

players. It means that the global shipping lines have high expectations for these ports. At present, some global shipping liners use the port as a regional transshipment hub for the Black sea, resulting in the rapidly increasing container throughput.

At Varna port in 2005, 8 shipping lines called. The majority of them were global shipping liners. The key players, such as Maesk, Evergreen, and CMA CGM play a great role in boosting the container market of CEE and have already launched into the two ports.

〈Table 4-11〉 **Shipping liners in the East axis**

Country & Port	2000년	2005년
Romania Constanza	CMA CGM, Maersk Sealand, Navibulgar, Zim, Blue Container, COSCO, CSCL, Evergreen, Hapag-Lloyd, PONL, Senator	CMA CGM, Maersk Line Zim, COSCO, CSCL, Evergreen, Hapag-Lloyd, Senator, MSC
	11	9
Bulgaria Varna	–	CMA CGM, CMN, CSAV Norasia, Evergreen, Hapag-Lloyd, Maersk Line, MSC, Navibulgar
	–	8

Source: respective PAs home page, CI Year book and OSC, selected years

The main characteristics of these can be summarized as follows:

First, global shipping lines have conspicuously launched into the three CEE gateways. Most notably, the trend is clear in the South and East Axis. This is because of an increase in sea trade between CEE and N.E. Asia, and the costs saved for the global logistics services.

Second, the concept of Hub & Spoke has been reinforced in this region. Many feeder liners have launched into the ports, together with the launching of main global shipping liners. In these circumstances, Constanza port has been able to play a major role as a regional hub in the Black sea region.

Third, the market power of global shipping lines has become much more significant than before. The number of global shipping lines has

not increased, but there has been a substantial increase in their market shares in CEE. This is because global players have taken over local competitors in order to quickly adjust to the local markets.

2.3.2 Current Launching Situation of Container Terminal Operators

1) Global situation

The global container terminal operators have reinforced their market share since 2000. A pioneer in this respect was DPW (Dubai Ports World) through the acquisition of the terminal portfolios of CSX (2005) and P&O Ports (2006) for a total price of more than USD 8 billion. These two M&As have given DPW a significant presence in the global container handling business. In fact, DPW now has a very balanced terminal portfolio covering most of the world's trading regions, which should protect it against the risk of a downturn in any particular region⁶³). Another major deal was PSA's M&A of a 20% stake in HPH's global terminal portfolio, for a reported USD 4.93 billion, following its earlier purchase of strategic shareholdings in a number of Hong Kong operations in 2005. In addition, a significant number of other terminal operators took shareholdings since 2000.

This has meant that, whereas a few years ago the container terminal operating business was still rather fragmented and characterized by about 10 big players, the picture is currently very different. <Table 4-11> provides an overview of the top-10 global terminal operators for the years 2001 and 2005. The volume handled by the top-10 players amounted to 103 million teu in 2001, accounting for a market share of 42%. By 2005 these figures had risen to about 220 million teu and 55%, respectively.

As <Table 4-11> indicates, a significant throughput gap existed between the top-3 players and the rest of the league in 2005. As

63) Ibid., p. 36; Drewry, Annual Review of Global Container Terminal Operators, 2006, pp. 67-68.

stated before, this situation was compounded by the take-over of P&O Ports by DPW in early 2006, meaning that the container handling industry is currently dominated by 4 worldwide operating companies who have an enormous lead over their rivals in terms of throughput. When the P&O Ports portfolio is added to DPW's, the combined throughput of the top-4 operators amounted to nearly 170 million teu in 2005, representing some 42% of total worldwide container handling. To put this in perspective, in 2001 the market share of the top-4 operators was still below 30%. As far as the concentration of market power is concerned, the current situation in the terminal operating sector⁶⁴⁾ is somewhat comparable to that of the shipping liner industry, where the 4 largest shipping lines also control some 40% of the market⁶⁵⁾.

〈Table 4-12〉 **Throughput of the top-10 GTOs for selected years**
Unit: million teu

Operator	2001	share	Operator	2005	share
Hutchison	29.3	11.8%	Hutchison	51.8	13.0%
PSA	19.5	7.9%	APMT	40.4	10.1%
APMT	13.5	5.5%	PSA	40.3	10.1%
P&O Ports	10.0	4.0%	P&O Ports	23.8	6.0%
Eurogate	8.6	3.5%	Cosco	14.7	3.7%
DPA	4.7	1.9%	DP World	12.9	3.2%
Evergreen	4.5	1.8%	Eurogate	12.1	3.0%
Cosco	4.4	1.8%	Evergreen	8.7	2.2%
Hanjin	4.2	1.7%	MSC	7.8	2.0%
SSA Marine	4.0	1.6%	SSA Marine	7.3	1.8%
Top-10	102.7	41.5%	Top-10	219.8	55.1%

Source: Drewry Shipping Consultants, 2003; 2006

Given the fact that there are no really "big" companies left to

64) Dynamar, Dynaliner-weekly news summary, analysis and commentary on liner shipping, various issues, 2007; Dynamar estimates the combined throughput of the top-4 operators at more than 192 M teu in 2006. It is 43% of the estimated 441.8M teu world container port throughput the year.

65) ESPO, ANNUAL REPORT 2006-2007, 2007, pp. 35~37.

acquire nowadays, it can be expected that the top-4 players will maintain their lead over the other operators for quite a number of years to come. As a matter of fact, some industry observers even predict that, spurred by the shortage of port capacity to handle the ever-growing volumes of container traffic, as well as by the high profitability levels enjoyed by terminal operators⁶⁶⁾, M&A activities in the container handling sector are likely to continue in the years to come. In this respect, one should not forget that building or extending container terminal capacity nowadays requires huge capital investments, which only very few players can afford. Moreover, while their business has so far grown mainly organically, APMT announced in mid-2006 that they were seeking the M&As of existing facilities, in order to reduce dependency on Maersk and strengthen their common-user business. It is believed that Maersk traffic currently accounts for about 65% of APMT business worldwide, down from 90% some five years ago.

2) CEE market situation

The current European and CEE portfolio of leading container terminal operators is presented in <Figure 4-5>.

Global terminal operators have successfully advanced into European markets. APMT is the number one player in this market. In addition, HPH has particularly strong market power in the northern range ports of Europe and Eurogate in the southern range ports of Europe. On the other hand, the portfolios of DPW and PSA (Port of Singapore Authority) have been extended to cover the whole European market as shown in <Figure 4-5>.

Initially the major GTOs focused on developed countries, locating in

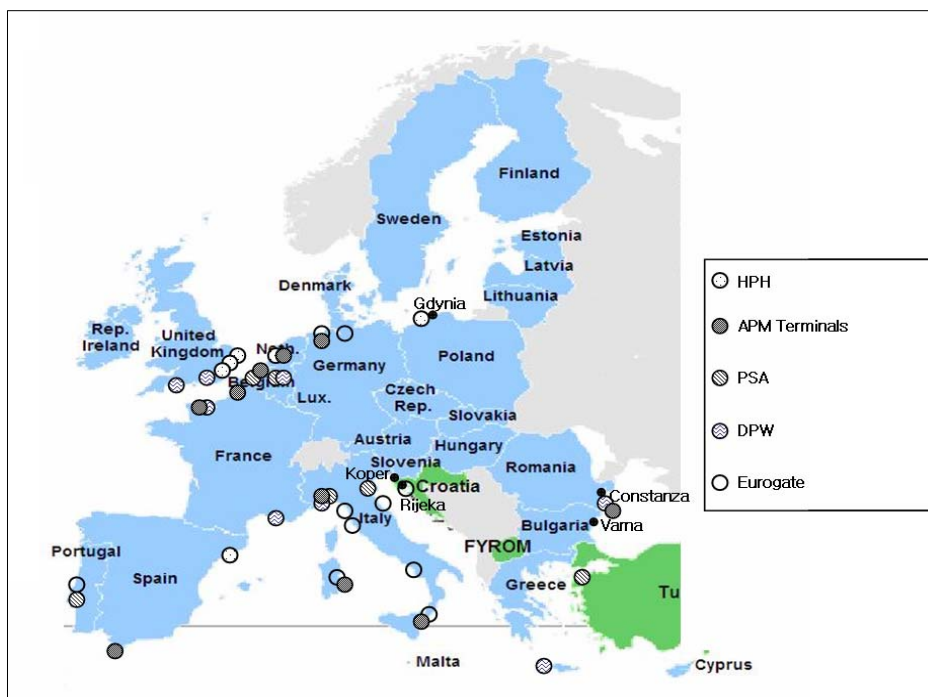
66) According to American Shipper (2006: 22), "terminal operators can enjoy a 15% or more internal rate of return on any project (depending on the risk), with typical profit margin targets of about 20%. This is dramatically different from the liner shipping industry, which has more downs than ups".

the western European and UK ports. These days, the main players have changed their focus onto CEE ports. HPH(Hutchison Port Holdings) launched into Gdynia port in 2006, and APMT and DPW launched into Constanza port in 2002 and 2006 respectively. Eurogate acquired a small stock share of Rijeka port in 2007. In the case of Koper, global players found it hard to launch in the port because the government wanted to keep its role as the main operator.

In comparison to the main shipping companies, the launching of global companies in this market has been weak. This means that the business of the GTO is still dependent on global shippers. However, this trend will be reinforced and the competition severed, because the trend in the container terminal operator market is in line with the trend of the shipping market

Terminal portfolio of global terminal operators in Europe

〈Figure 4-5〉



2.3.3 Current Launching Situation of 3Party Logistics Companies

1) Global situation

Although consolidation has been a constant factor in the freight forwarding, logistics, and express industries, the last five years have seen unprecedented levels of M&A activity. Railways, freight forwarders, integrators, and road hauliers have all begun to offer integrated services in order to capture the enhanced value which can be attained through building scale operations and extensive portfolios. This has emerged as one of the most important reasons for consolidation⁶⁷⁾.

The global 3PL industry has witnessed an increase of consolidations since 2000. Global 3PL companies are likely to launch into new foreign markets through M&A of local 3PLs. However, although global 3PL players have reinforced their market powers, the degree of strength is weaker than in the cases of shipping lines and container terminal operators. A number of big players are still competing with local players and each other, because of the diversity of markets and the difficulty of integration between different fields.

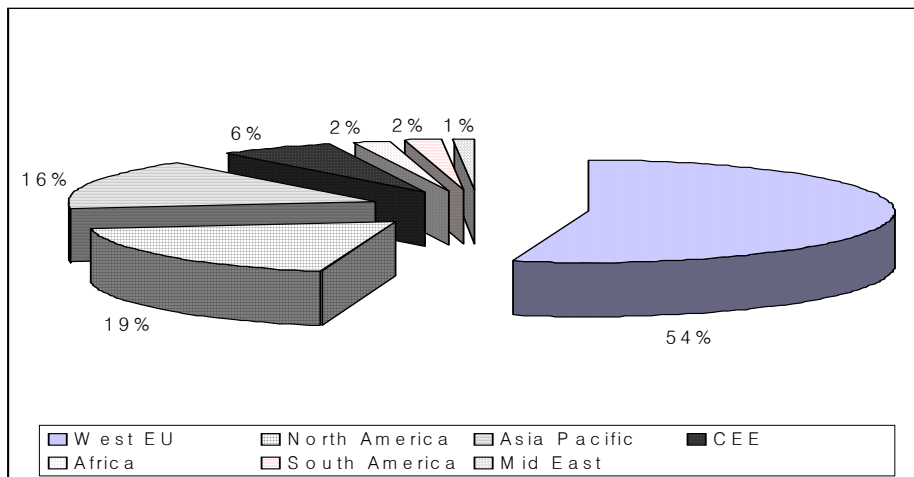
According to the TI survey, out of 2,750 deals over the past eight years in the global logistics industry, a quarter of deals in the survey involved the acquisition of warehousing and distribution companies. This trend is in line with the CEE logistics market⁶⁸⁾.

The majority of the logistics companies that were targeted for M&A's were located in Western Europe, and accounted for over half of all deals as shown in <Figure 4-6>. This trend also extends to other markets. The CEE market has become major target for global logistics companies since 2000.

67) TI, Global logistics Strategies 2006, p. 11.

68) Ibid, p. 32.

〈Figure 4-6〉 **Logistics M&A by target company region location**



2) CEE market situation

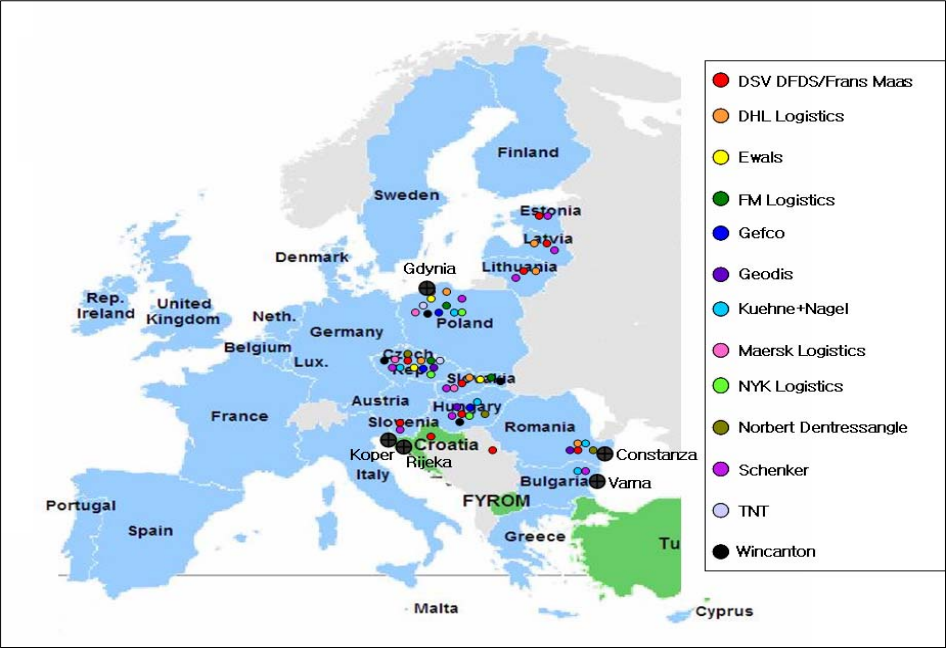
The enlargement of the EU has many significant implications for the CEE region. Of the 12 new EU countries, most are situated in this region. Because of limitations in physical distribution many Global 3PLs have recently launched into this market. Since most of the current European distribution centers are located in the Benelux region, France, or Germany, many 3PLs have established an additional satellite warehouse or regional distribution center in the CEE market, because these regions cannot be reached in a reasonable time frame from the European distribution centers in the Benelux, France and Germany.

In terms of the locations of the CEE countries, the rankings from best to worst are as follows: Poland, Hungary, Czech, Bulgaria, Slovakia, Romania, Slovenia and others⁶⁹⁾. The real location of global 3PLs also matched the ranking of attractiveness as shown in 〈Figure 4-7〉. Many global 3PLs have concentrated on Poland, Hungary, and the Czech market. This trend is related to the locations of industrial

69) Ernst & Young, European Distribution Centres on the move, 2004.

complexes in CEE. In an attempt to target the entire EU market a number of multinational manufacturing corporations have launched into Poland, Czech, Hungary and Slovakia. Meanwhile, this trend has extended in the direction of Romania, Bulgaria and Slovenia. Due to global supply chain management, entire logistics functions, companies, and spaces have integrated and connected with each other. Against this background, the trend will be reinforced in the 3 axes.

〈Figure 4-7〉 Portfolio of 3PL global logistics players in CEE



Chapter 5 Launching Strategy for Korean Logistics Companies in CEE Markets

1. Options for Launching in New Markets

1.1. Organic Growth

The safest method for developing a presence in new markets is by organic growth. The available options for launching into new markets are quite stable and continuous. However, a great deal of time is required for many of these options to become established in the market. For many companies launching into dynamic new markets this has proved to be a major obstacle. This is the main reason why M&As are a popular strategy for launching into new markets. M&As provide immediate revenue streams, and an operational presence which organic growth cannot.

However, a reduction in the number of appropriate target companies in the near future is expected, meaning that companies are now increasingly focusing on organic growth to deliver sustainable revenues and profits. This is a direct side effect of the numerous M&As that have taken place in recent years. Organic growth can sometimes be a good launching strategy for corporations into new markets, depending on the characteristics of the market. The main weakness of organic growth is that a lot of time is required for the company to settle into the new market.

1.2. Strategic Alliances

In the mid-1990s, strategic alliances became important as a quick and easy way to offer clients enhanced services in different geographical areas. It has been an especially popular way for mega shipping liners to extend their networks. At present, alliances are applied by vertical integration in different fields, such as those between shipping lines and GTOs, and between shipping lines and 3PLs. Alliances work best in stable, conservative markets where the threat of competitors acquiring an alliance agreement is low. This is one of the reasons why many logistics companies use alliances, to extend their networks into new markets where competition is low⁷⁰⁾.

The major weakness of the alliance model is the potential lack of strategic direction, and a lack of connectivity and loyalty. Individual members may have their own distinct corporate priorities and identity, as well as different opinions on the future of the alliance. This regularly inhibits investment in the network infrastructure, both physical and information technology based. If this is the case, the alliance will have little chance of competing against fully owned and integrated companies, and can leave the partners vulnerable to M&A.

1.3. Joint Ventures

A joint venture is a formal relationship in which two or more parties create an entity with a shared stock ownership. JVs are typically used by companies which have complementary services or attributes to exploit in a particular market. When entering into a foreign market, a joint venture can be used to reduce risks, share information and experiences, and raise the necessary capital.

For example, joint ventures have been essential in the Chinese logistics market, where legislation has forced foreign investing companies to partner with local companies. When China joined the

70) TI, *Global Logistics Strategies* 2006, 2006. p. 17.

WTO in 2004, and de-regulated its markets, this was no longer an obligation and many companies have chosen to establish completely foreign owned enterprises (WOFE), or to buy out their JV partners (such as UPS buying out Sinotrans and FedEx in their JV)⁷¹⁾. However, many companies still believe there are advantages from JVs, as they provide local market knowledge, contacts with local officials, and a knowledge of regulations, especially in big markets like China and India, which involve a lot of risk.

1.4. Piggy-backing

Piggy-backing is a method which is used for launching into a local market, together with a stronger company that operates in different fields. Expansion by piggy-backing involves developing services geographically, on the back of the needs of a key client. This has become a frequently used mode of expansion thanks to the internationalization of manufacturing.

One advantage is that there is already a relationship in place which provides a level of trust, that otherwise would need to be developed if an unknown supplier was contracted. There is often a shared business culture between senior management of both companies. In addition, the obvious benefits of piggy-backing are the immediate revenue streams that it brings, along with the potential leverage over investment costs it provides in operations across a range of other clients⁷²⁾. For example, Japanese electronics companies must launch into foreign markets together with their home logistics partners when they settle down in new markets.

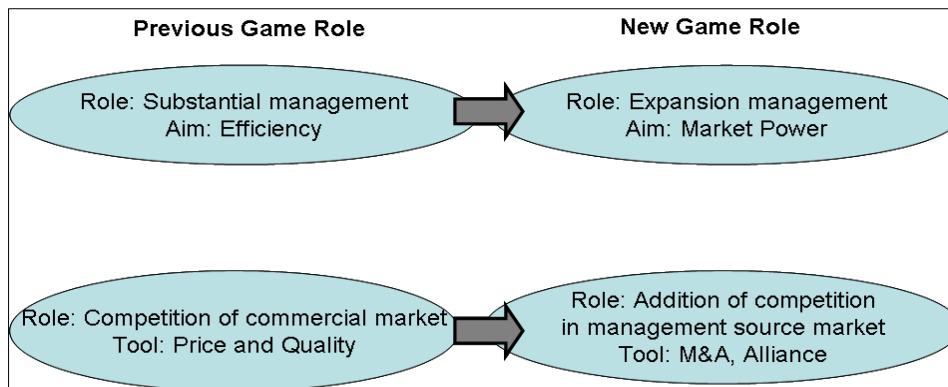
1.5. M&A (Merger & Acquisition)

71) Ibid, p. 16.

72) Ibid, pp. 19~21.

The key principle behind buying a company is to create shareholder value over and above that of the sum of the two companies. Two companies together are more valuable than two separate companies – at least, that's the reasoning behind M&A. This rationale is particularly alluring to companies when they are experiencing economic difficulties. Strong companies will act to buy other companies, in order to create a more competitive, cost-efficient company⁷³⁾. The companies will come together hoping to gain a greater market share or to achieve greater efficiency. Because of these potential benefits and changes of the game role in the global market as shown in <Figure 5-1>, target companies will often agree to be purchased when they know that they cannot survive alone.

<Figure 5-1> **Changing Game Role in the Global Market**



Source: modified from Seri, Global Industry restructure and characteristics M&A of Global leading corporation, Research Report, 2007.9.

In the logistics industry, a number of European logistics companies have undertaken one or more significant deals to acquire immediate scale. The acquisition of TNT by the Dutch Post Office, or DPWN's acquisition of Danzas, AEI, Airborne, and Exel are examples of these types of deals. They also proceeded to 'in-fill' gaps in their

73) Investopedia, retrieved from <http://www.investopedia.com/university/merger>, 2007.10.

capabilities or geographical scope with a sequence of smaller acquisitions⁷⁴⁾.

The advantage of this approach is that it gives the company market presence and immediate scale, therefore providing a competitive advantage over the smaller players. It also reduces the amount of M&A activity required in identifying potential targets, as well as approaching them, negotiating with them, and eventually integrating them into the parent company. It may also reduce cultural barriers if the acquisition is from a similar business background.

However, there are many disadvantages too. Even the largest scale player does not have a consistent scope of services across all geographical scales and segments. Small, focused acquisitions can identify high quality players who can easily be integrated into a larger company, but large scale acquisitions can leave buyers with on-going management problems due to weak or badly performing business units.

〈Table 5-1〉

Current Large M&A deals

Year	Acquirer	Target	Capability	Geography	Approx cost
2006	DPW	P&O	Port, Ferries	Global	5.72 bn Euro
2005	Deutsche Bahn	Bax Global	Freight forwarding	Global	\$1.1 bn
2005	UPS	Overnite	Trucking	US	\$1.25 bn
2005	Kuehne + Nagel	ACR Logistics	Logistics	Europe	440 m Euro
2005	DPWN	Exel	Logistics/ Forwarding	Global	5.6 bn Euro
2005	Maersk	P&O Nedlloyd	Shipping	Global	2.3 bn Euro
2004	Exel	Tibbitt&Britten	Logistics	Global	480 m Euro
2004	FedEx	Kinko's	Retail services	US	\$2.4bn

Source: TI, Global Logistics Strategies 2006, 2006

74) Ibid, p. 19.

An alternative to the large M&A is the evolution model. The early stages of an expansion strategy usually focus on increasing presence in the home market, and consolidating the market position in a core competence. When this has been achieved, the company develops into associated competences and into markets in close proximity or with similar attributes, through a range of alliances, joint ventures or focused M&A. In this way, a portfolio of capabilities and markets can be built, without the risks involved in a large scale acquisition into areas where the company has no prior experience or skills.

In this respect Post Offices have a natural advantage over competitors in other logistics fields. They already have market dominance in their own sectors, due to the fact that in most cases they have monopoly or near-monopoly positions. They have no need to focus on building or protecting their own core businesses, and can diversify by using the profits they have gained in their home market to fund the scale acquisitions.

Some companies have found that there is a high level of risk in building a major global presence without solid foundations. One of the major risks involved in acquisition is the migration of key employees and clients. This is most notably the case with freight forwarding companies, where client reliability often revolves around personal contacts rather than corporate relationships. In addition, another risk can be financial problems caused by the under performance of acquired companies.

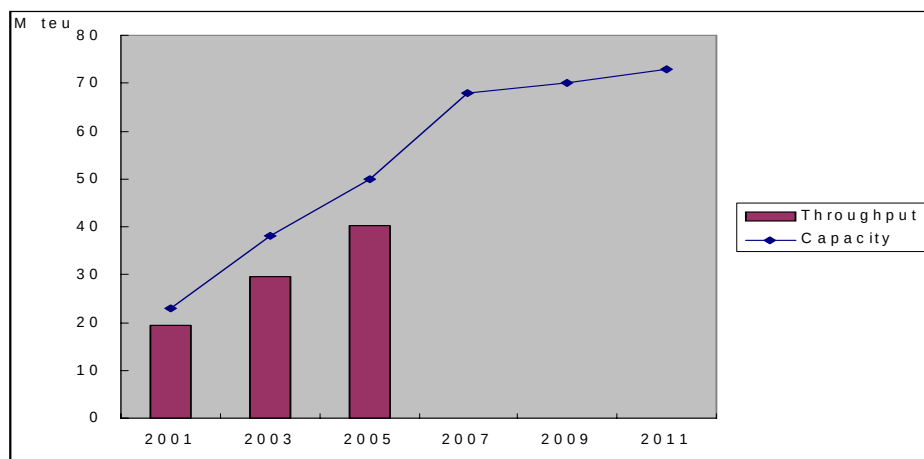
2. Case Studies of Launches into CEE Markets

2.1. APM Terminal

The APMT achieved an impressive result in it's container throughput

in 2005. The 40.4 million teu handled by the company worldwide represented a growth rate of more than 26% compared with 2004, and 19.9% per year since 2001, when its terminals registered a combined volume of 31.9 million teu. As a result of the surge in activity in 2005, APMT ranked as the second biggest international terminal operator, with a global market share of 10.1%⁷⁵⁾.

〈Figure 5-2〉 **Forecast development of APMT capacity**



APMT remains committed to having a broad international portfolio, embracing both established markets, as well as challenging and emerging sectors. As an examples of the latter case, during 2005, APMT acquired a 50% shareholding in the Brazilian operator, Teconvi, a 60% stake in a joint venture that will operate Apapa Container Terminal in Lagos, and a 40% stake in the Vridi Container Terminal, on the Ivory Coast. The company is also the preferred bidder for the Luanda Container Terminal, in Angola⁷⁶⁾. In addition, APMT has further enhanced its portfolio in China, the Middle East, and America, following its global strategy.

75) Ibid, pp. 46~47.

76) Drewry, Annual Review of Global Container Terminal Operators, 2006, p. 46.

APMT has mainly used joint ventures (18), leases (25), and M&As, for taking operating rights from owners as shown in <Table 5-2> and <Table 5-3>. It reflects the characteristics of inter-dependency between shipping lines and local logistics companies. Generally, they prefer JVs with shipping lines and local port authorities, leases rather than greenfield type investments, and M&A for risk taking. However, APMT has started using M&As as a strategic way for taking over new facilities, in order to rapidly reinforce its global network.

<Table 5-2> **APMT portfolio in EU**

Facilities	Nature of Involvement	2005 Throughput ('000 teu)	Shareholding (%)	Equity teu T'put ('000 teu)
Aarhus (Denmark)	Lease	280	100	280
Bremerhaven (Germany)	JV	2,067	50	1,034
Rotterdam (Netherlands)	Lease	1,750	100	1,750
Gioia Tauro (Italy)	P&A	3,161	33.3	1,053
Algeciras (Spain)	Lease	2,937	100	2,937
Constanza (Romania)	Lease	100	100	100
Zeebrugge (Belgium)	JV	–	–	–
Le Havre (France)	JV	–	–	–

Source: modified from Drewry, 2006.

<Table 5-3> **Nature of involvement of APMT portfolio in the World**

Area	Nature of Involvement			
	JV	P&A	Lease	total
Asia	6	6	3	15
Middle east	2	2	1	5
Europe	2	2	5	9
North America	1	–	14	15
Latin America	1	1	1	3
Africa	6	1	1	8
Total	18	12	25	55

Source: modified from Drewry, 2006

In Europe, APMT took a container terminal concession from Constanza port authority in 2002. The terminal has a 238m berth with 10.6m depth. APMT was redeveloping the old Flanders Container Terminal in Zeebrugge, and this facility started operations in early 2006. The company's share of the Northern European market is also increasing as a result of the Dunkirk Port Authority selecting the company to take over the management of the NPTI-ou container terminal in the port. In addition, Terminal Port Oceande, a joint venture between APMT and the Perrigault group, signed a concession agreement with the Port Autonome du Havre in the first half of 2006 to operate and manage a new two berth container terminal in the Port 2000 project after agreement on the employment status of gantry crane drivers was finally reached. This was agreed in autumn 2007.

Looking to the future, APMT has taken two key decisions which will extend their global network and focus on their common-user business. APMT is now managing the container terminal portfolio previously operated by P&O Nedlloyd, as a result of the acquisition of P&O Nedlloyd by Maersk Line⁷⁷⁾. This includes interests in terminals in America, Sri Lanka, India, Belgium, and Japan. The company announced in mid-2006 that they were looking at the acquisition of existing facilities, in order to reduce dependency on Maersk and reinforce their common-user business.

APMT has rapidly expanded its operations in CEE. Most notably, when it launched into the CEE market the company preferred leases to other methods. Because of an early launch into the market, it is related to a kind of risk taking method. This example can provide valuable lessons for later participants in the market.

2.2. Schenker

77) APMT, website, retrieved on 2007. 9.

With its headquarters now in Hamburg, Germany, Schenker has achieved an impressive growth rate since 2000. Schenker is a business unit of Deutsche Bahn (DB), the state owned German rail operator. DB acquired the Stinnes Group in 2002, which at that time was the parent company of Schenker.

In 2005 the company underwent a restructuring. After DB's acquisition of the logistics group, the logistics corporate division had overall responsibility for the freight and intermodal businesses.

Schenker operates as an independent service brand providing ground, air, and sea freight forwarding products. It is one of the largest logistics players in the world, but most of its revenues (80%) are generated in European operations. Schenker's overall sales turnover was 8,024 million euros in 2004, with an EBIT (Earnings Before Interest and Tax) of 282 million euros⁷⁸⁾.

From the time that Schenker was acquired by DB, its future was inevitably going to be influenced by wider political concerns. At present the management of DB wants to keep the rail and logistics group together, even after privatization. However, there are other parties who may prefer to see the group broken up.

The strategy of Schenker, both prior to and following its acquisition by DB, has been to build a global shared user network that will allow for consistent levels of service to multiple clients across numerous geographical scales. In order to achieve this, the company has continued to strengthen its capabilities in regions that extend and reinforce its network. DB, in the wake of Stinnes acquisition, has instigated additional focus on intensifying integration between its EU mainland rail-based freight operations and Schenker's value-added logistics business model. DB holds the opinion that rail-based freight has the potential to capture a large share of the growth, which is likely to be transferred from road-based transportation across the

78) TI, *Global Logistics Strategies* 2006, 2006, pp. 140~144.

European mainland.

However, Schenker has two problems that were caused by the DB acquisition. Formerly, Germany's federal court pushed DB to split the rail operations away from the logistics business. Later, a number of political constraints influenced the corporate strategy. Schenker has to face these obstacles because DB, its parent company, is a state owned corporation.

Schenker's strategy has a slightly different focus than many of its peer companies, in that it concentrates on the development of a network rather than alternative solutions. Schenker believes that it can integrate new contract logistics operations into its network, rather than build them from scratch.

However, a purely network-based business model may not always entirely suit a client with large and complex traffic volumes. The other disadvantage is that networks are vulnerable to weakening volumes, as they require a critical mass to function efficiently.

Turning to the CEE logistics market, CEE is a region of key interest to Schenker where it already has large scale operations, and is the market leader in many of the countries. Its expansion has taken the form of both acquisitive and organic growth. In 2004, it acquired a further stake in Polish logistics provider, Spedpol, taking its stake to 99.2% with the remaining 0.8% of shares held by individual shareholders. Spedpol is one of the largest players in the Polish market. It has a turnover of around 52 million euros, employs about 1,000 staff and claims to be growing at 20% per year. It specializes in group consignments and has in place a comprehensive network throughout Poland. It also feeds into Schenker's European Land Transport network. At the end of 2004, it was integrated with Schenker's own operation in the country.

Elsewhere in the region, over the past two years it has expanded organically in Slovakia, the Czech Rep., Poland, Hungary, Latvia, and

Romania, mainly by opening up terminals which are then linked into it's European road freight network. In this year, Schenker has tried to acquire Koper port in Slovenia, together with two big national logistics companies⁷⁹⁾. They also want to open a south corridor, in order to capitalize on the changing environment in sea trade between CEE and North East Asia.

〈Table 5-4〉 **Schenker's portfolio in the EU since 1990**

Type	Target	Date	Capability	Geography	Comment
Acquisition	Linjegods	1990	Freight forwarding	Norway	owned 61.4%share
Acquisition	Spedpol	1990	International transport	Poland	owned 69.4%share
Acquisition	Castelletti	1998	Freight forwarding	Swiss/Italy	100%
Acquisition	BTL	1999	Freight forwarding	Nordics	96.7% ownership
J.V.	Mansped	2000	International transport	Hungary	50:50
Acquisition	IDC Airfreight	2001	Air freight	Benelux	100%
Acquisition	Sotrama	2001	Freight forwarding	Germany	Majority shareholding
J.V.	Railon	2001	Rail freight	Europe	50:50
J.V.	Air France Exp.	2001	Express	Global	50:50
Acquisition	Intercontinental Cargo	2001	Logistics	Ireland	Majority shareholding
Acquisition	Joyau Group	2002	Domestic road freight	France	
Acquisition	Anterist&Schneider	2002	Distribution	Germany	
Acquisition	Biermann-Schneider	2002	Logistics	Portugal	100%
Acquisition	Siemens SPL	2003	Spare parts logistics	Germany	
P&A	Spedpol	2004	Logistics	Poland	P&A 29% share
P&A	Linjegods	2005	Logistics	Norway	
Acquisition	Bax Gloabl	2005	Freight forwarding	Global	48%

79) Interview for Koper Port Authority in September, 2007.

By analyzing Shenker's strategy, we can confirm that they are eager to extend their logistics network in CEE. In addition, they have quickly adjusted to changing environments in the logistics market. As a result, they have already established a main logistics network in CEE as mentioned above.

3. Obstacles to launching in CEE Markets

3.1. Launching obstacles in CEE countries

1) Poland

Labor costs in Poland are relatively high among the 10 CEE countries. The ratio of social security tax for employers ranges from 19.8% to 22.7% of the wage in the country. With the increase in labor costs, it is reaching 70% of what it is in the economically advanced European countries. However, with this trend, the economy on the whole became more transparent. This helps foreign companies launch their businesses in Poland. With the old customs of socialism and a streak of the Slavs in their culture, the Polish tend to be irresponsible and unpunctual. Therefore, it is highly recommended to have everything in a written form for business.

As Poland entered the EU earlier than the other CEE countries, its logistics infrastructure is in a good condition and is being improved at a rapid pace. However, it has strong labor unions in the ports and railway sectors. The social support infrastructures such as those which supply power are insufficient. The bureaucratic administration process can hinder business promotion at the early stage.

Current port labor cost is about 740 euros. This is rather high compared to other labor costs in different fields, but is not too high. In general, port authorities' unions are strong. But the trade union of

the container terminal operators, is more reasonable and moderate than the port authorities' unions.

2) Slovenia

Slovenia has one of the highest per capita incomes in Middle and Eastern Europe. It has shown steady economic growth of over 4% since 2004, when it became a EU member country. It adopted the euro currency in 2007. Currently, per capita GDP is up to 18,000 dollars. In 2006, it recorded 5.2% economic growth which is the highest it has been in the past 10 years.

Slovenia has the highest standard of living among the ex-Yugo countries. This is because its recent drive for economic growth has been supported by trading from the Yugoslavic era. From 1970, it gained advanced technology through license affiliations with the Western European countries, which made Slovenian manufacturers more competitive. Therefore, compared to other CEE countries, Slovenia is relatively passive in attracting foreign investment. Its strong unions, outward flow of workforce, high corporate tax, and small market have been barriers for foreign business in the country. An unreasonable operating system for the good social infrastructure is becoming problematic as well. Its labor cost is relatively high.

3) Croatia

Croatia's target is to become a EU member country in 2009, and it has been putting in great effort to meet up to the EU standards in every aspect of politics, the economy, and the judicial system. It has also sought to activate its economy, by improving the investment environment in order to attract more foreign direct investment and by improving the efficiency of its market economy through the privatization of the state-owned corporations.

Because of the states socialist background, bureaucracy and

corruption are still seen in society. Since Croatians are quite unpunctual, it is highly recommended to obtain everything in a written form for business. It takes a long time to settle disputes, due to the peculiarity of the legal system in Croatia.

Croatia established 'The Investment Promotion Law' in December 2006, to revitalize foreign investment. This law provides the investor with discriminatory incentives depending on the investment scale and the number of employees. Although PPP does not exist in the country, Croatia is amending its investment law in accordance with PPP. The only way for a private company to participate in the port business, is by obtaining a concession as described in the "Maritime Domain and Seaports Act" which was revised in 2003. To be approved as a concession business, the related port authority must submit a business proposal to the Ministry of Transport.

Croatia has relatively moderate unions. However, the labor cost is relatively high. Average monthly pay in 2006 was 880 euros, but productivity was quite low.

4) Romania

After becoming a EU member country, Romania faced a large scale emigration of workers leaving the country for employment opportunities elsewhere. As a result, Romania has sought to attract low wage workers from other countries. Romanians are not willing to work on holidays and the weekends. They have a strong streak of individualism in business, which leads to problems when the person in charge is absent at work. They do not seem to show strong commitment to appointments meaning that all business needs to be recorded in paper form. It is hard to find a swift solution for problems due to the local legal system. Relationships with the local corporations are fairly important for new companies entering into the market, because of illicit transactions in the underground economy

that account for up to 50% of the GDP. The higher stratum of society makes decisions, meaning that the working populations in big companies and state-owned corporations have significantly limited decision making powers.

Currently, foreign and domestic investments are not exactly distinguished in the country. Foreign businesses can enter into the market fairly easily, because the country is actively privatizing the state-owned corporations, in order to rebuild the country. It is revising the investment laws to provide various incentives to the companies that meet the qualifications. The conditions include any investments that are over 70 million euros, that generate employment, and are perspective businesses such as those in manufacturing, R&D, and Infrastructure development.

Romania is planning to open a highway that connects it with Hungary by 2012. There is only one highway that connects Bucharest, the capital city of Romania, to Constanza. Additional roads are going to be constructed in private business ventures.

Romanian unions are fairly strong, but since the tripartite agreement there has not been extreme union resistance. The minimum monthly wage is about 120 euros, 180 euros under the trade union standard. Wages are up to 400 euros in the port sector.

5) Bulgaria

The unemployment rate in Bulgaria is around 10%, and as a result labor costs in the country are rather low. It is fairly easy to do business in the country. Since becoming a EU member country, Bulgaria has been facing numerous problems such as a constant increase in real estate prices, and a population decrease due to falling birth rates and emigration of the qualified workforce. These factors have a negative influence on foreign businesses who are considering entry into the market. Bulgarians are not willing to work on the

weekends and holidays. They are not strongly committed to business appointments, so it is recommended that all business is recorded on paper. Due to the local legal system, disputes can not be resolved swiftly. Bureaucracy, which is entrenched in the country's history, makes business proceedings slow.

Currently, foreign and domestic investments are not exactly distinguished in the country. Foreign businesses can enter into the market fairly easily because the country is actively privatizing the state-owned corporations, in order to rebuild the country.

At present, EU funds are being used to improve the River Danube transport route, and the south and north highway that connects Bulgaria to Romania.

Bulgarian unions are relatively moderate and the labor cost is fairly low. The minimum monthly wage in 2005 was 75 euros, and an average worker's wage was 140 euros. However, the average monthly wage is between 170 and 200 euros for workers in public enterprises. Additional wages provided by social security schemes, are approximately 30.1% of the monthly wage⁸⁰).

3.2. Comparison of Entry Condition in CEE countries

The entry environments for foreign companies into the five subject countries are as shown in <Table 5-5> at the 2006 standard. Poland is the largest and Bulgaria is the smallest in terms of market scale. Per capita GDP is the highest in Slovenia, followed by Croatia, and the lowest is in Bulgaria. Labor costs are the lowest in Bulgaria, followed by Romania, and the highest in Slovenia. Labor productivity is the lowest in Romania, followed by Bulgaria, and the highest is in Slovenia. Corporate tax is the lowest in Bulgaria, followed by Romania, and the highest is in Slovenia. Oil tax is relatively low in

80) Interview for Constanza and Varna Port Authorities, 2007.11.

Bulgaria, and shows a similar figure in the other countries.

〈Table 5-5〉 **Comparison of entry conditions in the 5 countries**

Items	Unit	Poland ¹⁾	Croatia ²⁾	Slovenia ³⁾	Romania ⁴⁾	Bulgaria ⁵⁾
GDP	1Bn USD	341.7	42.9	37.3	121.9	31.5
Per Capita GDP	USD	8,963.2	9,419.5	18,642.4	5,661.4	4,092.4
Population	1,000	38,125.0	4,556.0	2,001.0	21,532.0	7,693.0
Labor Cost	USD	851.1	1,136.1	1,521.4	409.4	227.4
Labor Productivity	USD	23,667	23,331	34,994	10,196	16,218
Corporate Tax	Rate	19%	20%	23%	16%	10%
Oil Tax	USD	1.40	1.30	1.42	1.40	1.10
	Rate	56.7%				

Source: Global Insight, 2007; ILO, KILM, 2007; Country Watch, <http://www.countrywatch.com>, various countries information; KOTRA, respective countries homepages, 2007.11.

Notes : 1) investment subsidy, incentives in special economic zones, exemption from local tax; 2) subsidies for tax, employment, education, and training; 3) exemption from corporate tax, subsidies for investment and employment; 4) no special incentives for direct investment (but national treatment, no limit to foreign remittance) agreement with the eligible local government needed; 5) no special incentives for foreigners preferential treatment classified by three rates depending on the value of investment; information and administration service, exemption from corporate income tax and withholding tax

CEE including the five subject countries, has displayed a variety of efforts through rapid economic growth and market friendly policies. However, these countries still have potential obstacles for corporate activities. First of all, more and more of the workforce, especially the high-quality human resources and the youth, are leaving the country for Western Europe. Second, the more these countries depend on Western Europe, the harder it will become for them to be economically independent. Third, industrialization can worsen the environmental contamination. Fourth, rapid and sudden economic growth can increase the labor cost and cost of living, leading to economic insecurities. Companies need to consider these problems and come up with solutions before entering into foreign markets.

4. Suggestions for Korean Logistics Companies launching in CEE Markets

4.1. Understanding the Changing Environment

Up to a few years ago, several Korean companies faced numerous barriers with respect to macro economics, due to an insufficiency of capital that was caused by the devaluation of won centered exports, and by domestic market centered policies. However, current 800–900 revaluation of the won, plentiful company capital, and low loan interest rates have led to a better business environment for international launching of Korean companies. Slow domestic growth has also allowed companies to hold on to sufficient capital for their business as shown in <Figure 5–3>. At the same time, CEE markets have become more friendly towards Korean companies due to the privatization of state-owned companies and open market policies, such as deregulation and other policies to induce FDI. In addition, the Korea–EU FTA will provide many business opportunities for Korean manufacturing companies and Korean logistics companies.

It is under these circumstances, that Korean logistics companies will have to launch into the CEE market, with consideration for the entry obstacles as mentioned before.

<Figure 5–3> **The Changing Business Environment for Korean Firms**

	Past		Present
Capital	Domestic Deposit < Investment	➡	Abundant Foreign Exchange Holding
Incentive	Low Currency and Interest	➡	Revaluation, Low Interest
Business Environment	Local Competition	➡	Global Competition
Market Environment	High Growth in Local Market	➡	Low Growth in Local Market

Source: modified from Seri, Global Industry restructure and characteristics M&A of Global leading corporation, Research Report, 2007.9.

4.2. Suggestions for Korean Logistics companies

4.2.1 Establishment of a Globalization Strategy

For sustainable development and stable launching into markets, Korean logistics companies need to establish a globalization strategy with a long term perspective for growth.

Individual companies should focus on their own global logistics network strategy, without relying too much on the viable effects. To realize this, growth strategy, oligopoly strategy, and globalization strategy should be utilized in phases in connection with one another. Most importantly, they have to systemize strategic key components and characteristics. In the initial period, they need to prepare a road map, and then before and after strategies for launching into the market, together with considering key factors as shown in <Figure 5-4>.

<Figure 5-4> Process of Successful Launching into Foreign Markets



4.2.2 Achieving Critical Scale for Launching Companies

A number of Korean logistics companies are still not big enough to advance individually into foreign markets. They are relatively weak competitors in the global logistics league. Achieving critical scale should be a priority, before establishing a globalization strategy. In

order to compete with global companies, sufficient economies of scale should be secured first. After securing the sufficient economy of scale of through internal and external M&A deals, the prospect of advancing into global markets can be discussed. In addition, they should consider the trend of vertical and horizontal integration in the global logistics field. Learning from situations in the local market, they have to choose vertical or horizontal integration, while making a critical assessment of the characteristics of foreign markets. In this case, the Korean Government would be able to support Korean companies in the processes of market restructuring and integration, with administrative and financial assistance. In addition, the Korean Government should be able to provide local information, and indicators of launching methods to the companies who want to advance into new markets. This would also prevent Korean companies from competing with each other in the same market.

4.2.3 Establishment of Localization Strategy

Although in the past Korean companies have been quite successful at advancing into foreign markets, this is meaningless if they cannot adjust to local markets. Localization is most the important strategy when advancing into new markets.

Thus, various localization strategies should be established. Tesco⁸¹⁾, a renowned English retail company, used "*glocalization*" strategy to make effective progress into a new market and actively accepted the acquired local company's role and characteristics. This company has obtained excellent results by fully focusing on their strategy of "*globalization upstream and localization downstream*". In the upstream, the company has tried to reduce costs through global sourcing. It has adjusted well to local markets through strategies of

81) Seri, Global Industry restructure and characteristics M&A of Global leading corporation, Research Report, 2007.9, p. 74.

localization, by analyzing local preferences and inviting local CEO, for customers and staff.

4.2.4 Preparation of Globalization Tools

Various globalization tools need to be secured for successful launching into foreign markets. Korean companies are mainly propelled by organic growth when they establish new customers in foreign markets. However, Global companies prefer M&A and strategic alliances, to organic growth when they go into foreign markets. This is mainly because of the risks involved, their quickly extending market share, and the creation of a strong global network as shown in <Figure 5-5>⁸²⁾.

Methods such as M&A, Piggy-backing, Alliances, Joint Ventures and so on, should be properly utilized with variables in mind such as target areas, timescale, and risks. The most important aspect of new M&A, is previous experience of small scale domestic M&A trials. M&A task force application, M&A expert recruitment, and foreign culture management absorption programs⁸³⁾ are needed to maximize M&A effectiveness. Korean logistics companies should prioritize the processes and tools mentioned above in any future ventures.

Differences between Korean & Global firms in Globalization

<Figure 5-5>



Source: modified from Seri, 2006, p. 113.

82) Seri, A Study of M&A Trend of Global corporation and strategic implication, Research Paper, 2006.

83) Ibid, 2007, pp. 61~62

4.2.5 Prohibition of Me-too Strategy

Any advancements into the global market are useful for the growth of Korean logistics companies. However, they should prepare their own strategies and processes for a successful launch into the target market. They will face significant risk and severe competition in the market if they do not have their own strategy prepared

The "me-too" strategy, which involves simply following globalization trends in the same industry should be refrained from. Any company that adopts this strategy without thoroughly knowing the target market, the target M&A company, and the area's particular conditions is likely to experience a falling profit margin. Examples include the American motor companies Chrysler and GM. After they both adopted the "me-too" strategy, they suffered catastrophic economic damage.

Chapter 6 Conclusions and Implications

1. Conclusion

This study has closely examined the logistics system changes in the rapidly evolving CEE countries, through the expansion of global logistics companies into foreign target markets amid market integration processes in Europe, that are a result of the unification of the EU and the liberalization of the CEE countries.

Economic unification in the EU has led to an increase in intra-regional trade between the developed Western European countries and the underdeveloped CEE countries. Industrialization in the CEE countries has led to trade increases between Asian countries and CEE countries. This, in turn, has led to rapid development of ports in CEE, as well as logistics system changes across the whole continent.

Most notably, the ports in the Mediterranean and Black Sea areas, which are leading trade partners with Asian countries, have shown tremendous development accompanied by the rapid economic growth of Northeast European countries including Poland, the biggest country in CEE. This study has covered three groups of areas : the southern group including the port of Koper in Slovenia and the port of Rijeka in Croatia, the eastern group including the port of Constanza in Romania and the port of Varna in Bulgaria, and the northern group including the port of Gdynia in Poland and other northern European areas. This study analyzes the launching processes and characteristics of global logistics companies, such as shipping lines, stevedores, and

3PL companies with the ultimate aim of calculating the implications for Korean logistics companies and their future access to target markets overseas and global logistics networks.

The main conclusions of this research are as follows:

First, since the latter half of the 1990s, shipping lines and stevedores have expanded their markets into CEE ports to secure logistics posts, and the trend is becoming more and more intensive. Examples include MSC, APMT, and DPW in Constanza port of Romania, Eurogate in Rijeka port of Croatia, and HPH in Gdynia port of Poland.

Second, since the beginning of the 21st Century specialized logistics companies have also expanded into the target markets of CEE countries such as Romania, Slovenia, and Poland, and have started vigorously advancing into the surrounding countries such as Hungary, the Czech Republic, and Slovakia. It seems likely that this trend will continue into the foreseeable future and that it will not cease.

Third, as the TEN has been constructed in Europe, the logistics network of the three groups has been improved more and more by EU financing. This will allow global manufacturers to reduce their expenses, and the time required to establish themselves effectively in the targeted CEE based logistics networks.

Fourth, this report strongly recommends that Korean logistics companies invest aggressively in CEE, because the evidence suggests that the south axis of Croatia-based Corridor V and the east axis of Romania-based Corridor IV will be new logistics centers.

Fifth, global logistics companies seem to prefer M&A as their market advancing strategy for various reasons, such as easier M&A capital financing through global capital liquidity, reduced risk when advancing into new markets, an increase of M&A deals which involve the privatization of state owned companies in CEE, and the

deregulation of economies by European countries.

CEE will become more globalized because of interactions with Eastern Asian countries such as South Korea, China, and Japan. This will accelerate the industrialization of CEE and increase intra regional trade. Imports from Asia and other countries to the target markets, and exports to Mediterranean countries, Russia, CIS, and the Middle East from CEE countries will rapidly increase. As a result, the three axes mentioned in this research are expected to play a major role as trade gateways to CEE, and will grow as centers for the logistics industry.

Therefore, it is highly recommended that Korean logistics companies promptly invest in the target markets and expand their global logistics bases to gain an upper hand in the mentioned areas. Korean companies have faced numerous barriers with respect to macro economics, due to an insufficiency of funds caused by the export centered devaluation of the won and domestic market centered policies. However, the current 800–900 revaluation of the won and the free trade agreements with major economic regions, have led to a better business environment for Korean companies. Slow domestic growth has also allowed companies to with hold sufficient capital for their business. At the same time, CEE markets have become more friendly towards Korean logistics companies, due to the privatization of state-owned companies and open market policies such as deregulation and policies to induce FDI.

Thus, to make the most of this environment, Korean logistics companies need to accelerate the expansion of their Southeast Asia and China based advancing strategies. This will allow them to enter into business with CEE, Russia, and South America, taking the initiative amid fierce international competition.

Finally, this study was unable to integrate all the logistics related information between existing EU members, new members, and

candidate countries. This was because of a poor environment for the compilation of reliable statistics. Because of limited access to information, econo-metric analysis of the competitiveness of the three axes based on types of logistics, the logistics companies, and the advancing strategies of each company could not be well produced. However, once all the target areas are integrated into the EU, new research should be able to develop a method for providing integrated information, overcoming the current limitations, and leading to a more detailed understanding of the future implications for the market expansion of Korean logistics companies.

2. Policy Implications

The conclusions of this research indicate various appropriate policy proposals for the Korean Government and companies in terms of market expansion abroad.

Policy proposals for Korean companies are as follows:

First, they need to establish a globalization strategy with a long term perspective for growth. Individual companies should focus on their own global logistics network strategy, without relying too much on the viable effects. To realize this, growth strategy, oligopoly strategy, and globalization strategy should be utilized in phases in connection with one another.

Second, critical assessment should be a priority before establishing a globalization strategy. To compete with global companies, sufficient economies of scale should be secured first. After securing the sufficient critical scale of economy through internal and external M&A deals, advancing to global markets can be discussed.

Third, various localization strategies should be established. Tesco, a global retail company, used "glocalization" strategy to establish a strong market and actively accepted the acquired local company's role and characteristics. This company has obtained excellent results by fully focusing on their unique strategy.

Fourth, various globalization tools need to be utilized. All methods such as M&A, Piggy-backing, strategic alliances, and so on should be properly utilized with variables such as areas, points of time, and risks. The most important aspects of M&A are previous experiences of small scale domestic M&A trials, M&A task force application, M&A expert recruitment, and foreign culture management absorption programs which are needed to maximize M&A effectiveness.

Fifth, the "me-too" strategy, which is simply following a globalization trend in the same industry should be refrained from. Any company that adopts this strategy without thoroughly knowing the target market, the target M&A company, and the area's given conditions is likely to experience a falling profit margin.

Suggested policy proposals for the Korean government derived from this study are as follows:

First, policy and system foundations need to be reinforced so that domestic logistics companies can secure an economy of scale. The investment of surplus capital, and the utilization of management experiences of global logistics facilities, are vital components in securing global logistics bases and expanding the global networks. Therefore, except for Hanjin Shipping and Hyundai Merchant Marine, no domestic company is free from such global competition. Taking this into consideration, the Korean Government needs to take serious steps so that Korean logistics companies can secure economies of critical scale.

Second, the Korean government needs to shift its current focus of general support for some industries, to supporting certain competitive companies. The generation of competitive global logistics companies can eventually lead to general growth of the Korean logistics industry as a whole. Recent growth of Deutsche Bank and DPW eventually led to total logistics industry growth in Germany and the United Arab Emirates, and as a result companies from these countries receive preferential treatment in global markets.

Third, inter-country free trade agreements should be actively utilized in logistics markets. Once the free trade agreement with the EU has been established, EU logistics companies' market expansion into the Korean logistics market will be inevitable and vice versa. Therefore, Korean logistics companies must pursue an active role in securing an economy of scale in the EU logistics market. They also need to diversify their advancing strategies and improve their fund raising abilities, with the full utilization of various tools such as M&A, alliances, share purchases, joint ventures, and piggy-backing.

Fourth, finance related infrastructure needs to be improved to enable globalization strategies such as international M&A and share purchase. Financial institutions' help is vital in international M&A since they provide global funds and financial advice. Therefore, the global logistics fund needs to be expanded promptly to include plans regarding stable fund management in the years ahead. The establishment of a 'global logistics analysis team', which consists of experts in logistics, legal matters, finance, strategy, accounting, and local issues, should go side by side with this process.

Finally, the global logistics network strategy should continue. Even if a company secures critical economy of scale, it cannot obtain every detail of recent global logistics developments and new information. Therefore, the government should continue to promote the global logistics network strategy and provide companies with information on

a diverse range of global logistics developments and strategies. This will contribute to the rapid growth of the Korean logistics industry and its successful globalization.

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