I. INTRODUCTION: This work has been facilitated through the very co-operative spirit encountered on numerous visits in Poland among private sector operators and public sector representatives. In particular, Professor Polanski, Professor Dutkiewicz and Dr. Kuzbski of the Sea Fisheries Institute have been of great assistance. Representatives of the Polish Government and the Fisheries Administration have also been most helpful in volunteering information and background material. I also thank my colleagues at the FAO, Zbigniew Karcnicki, Grimur Valdimarsson, Izzat Feidi and Erhard Ruckes for valuable support. Special thanks to Jochen Nierentz of EASTFISH and Alberto Ramírez of Fundación Chile whose fact-finding mission to Central and Eastern Europe gave the impetus for this paper.

1999 marks the end of the first decade after the re-establishment of a free Poland and of the Polish market economy. Tremendous changes have been undertaken, and the seafood sector is no exception to the general rule; it has changed to an extent that no one could have foreseen at the start of this decade. The process of evolution will lead to significant changes also in the future, but it is my belief that, in a distant future, when observers study the history of Poland's fisheries and the seafood sector, the decade of major change will have been that of 1989-1999.

Rome, February 2000
Audun Lem

1.1. Background for choice of topic

The impetus for this work came from a fact-finding mission I undertook in late 1996 in Central and Eastern Europe. The specific purpose of the mission was to investigate the market possibilities for South American fishery products, but I quickly realised that the changes in the fisheries sector in Central and Eastern Europe had to be seen in the broader context of changes in the food sector in general and in the overall economy.

In the days of central planning the economies of Central and Eastern Europe all suffered from the suffocating presence of the state in the economy. After the breakdown of communism in the late 1980s, these countries chose very different strategies for economic revival. Poland chose from the very outset a policy of economic liberalism and became in 1997 the first country in Central and Eastern Europe to exceed 1989 output levels. As part of its integration into the world economy, Poland became a member of the WTO in 1995 and of the OECD in 1996. EU accession is planned in 2003.

Rapid change is evident also in the Polish food industry and its food distribution channels. Poland is a principal receiver of foreign direct investment among Eastern European countries and might thus serve as an interesting case study, especially when compared to other economies with inferior development rates. Lastly, in my daily work at the FAO Fisheries Department, I habitually deal with changes in trade and distribution on a global level. Most of these trends and changes are clearly present in Poland as well, but the pace of change is much faster than in most other countries. For this reason alone, Poland is worth a close study because the mostly positive developments we are observing in Poland's seafood sector can be implemented with similar policies in other transition economies as well.

1.2. Purpose of study

Whereas it is relatively straightforward to observe ongoing developments when expressed as trade statistics or investment figures, it is less clear how these changes actually have come about. It is my hope that by studying the Polish example, the causes of the observed changes will become clearer. Further, by illustrating the implications of some of the choices policymakers are facing such as the introduction of auctions or permitting the further expansion of modern distribution channels, the strategic nature of the decisions will be underlined. As such, they might serve a useful purpose in policy work on future industry structures.

1.3. Methodology

The methodology followed in this work is somewhat unorthodox with no systematic field research undertaken. The major reason is the very short time period in which the Polish fishery industry and related services have been operating. Most companies are also
only a few years old, at least in their present form as private companies.

During numerous visits in Poland, meetings were held with representatives on all levels in the Polish fishery sector. Likewise, most of the largest suppliers to the Polish market from Norway, Holland and Ireland have been interviewed as well as the foreign companies with processing operations in Poland.

A large amount of international literature on marketing in general and on seafood marketing and distribution in particular has been consulted, including statistics from EUROSTAT, the Sea Fisheries Institute, the Norwegian Seafood Export Council and PAIZ, the Polish investment agency. However, lack of specific information on foreign direct investment (FDI) in the fishery sector has caused difficulties in determining the exact distribution of foreign capital in the food processing industry.

Calculation of elasticities of demand would also have been quite useful, but lack of meaningful economic data and high inflation in the past did not make this feasible.

The shortcomings in statistics and economic data, although regrettable, are over-shadowed by the magnitude of observed changes in the Polish economy and its fishery sector. The changes from the situation before 1989 are so important and so evident that the lack of elasticities, precise economic data on FDI in the sector or of complete statistics does not to any significant degree invalidate the conclusions of this work.

2. BRIEF OVERVIEW OF THE FISHERY INDUSTRY IN POLAND IN THE 1945-1989 PERIOD

The fishery sector of the Polish economy in the post-war era was organised as an integral part of the centrally planned economy. State-owned enterprises were predominant in fisheries and fishing services, in processing and in distribution and trade, including the wholesale and retail sectors. Co-operatives in fishing operations and fish processing operated together with state-owned companies whereas the private sector played only a very limited role.

Fish was among the cheapest sources of animal protein available. Until the mid-1980s, the state subsidised the fishing industry, and fish prices were low.

With the political changes in Central and Eastern Europe from 1989 onwards, the situation of the Polish economy and that of its fisheries sector was to change completely. On 1 January 1990, the Polish post-communist government introduced one of the most far-reaching and radical economic reform programs ever undertaken in any country this century.

The centralised structure in the fishery sector ceased to exist, and the private sector was allowed to operate with minimum limitations, resulting in a proliferation of new industry operators. However, the immediate effect of the break-down of the old system was a cut in domestic fish supplies.

3. BRIEF DESCRIPTION OF THE CURRENT SITUATION IN INDUSTRY

3.1. Marine Fisheries

3.1.1. High Sea fisheries

Historically, the Polish high-sea fisheries fleet was among the world’s largest with annual catches reaching several hundred thousand tonnes in the 1970s and 80s with about 50 % of total captured fish in Poland coming from these fisheries.

Fundamental changes in international fishing regimes coupled with the later cuts in domestic subsidies had drastic effects on fleet structure and production, and the shortfall in supplies led fish consumption to drop sharply in the early 1990s.

The fleet operators are still to be privatised and is very dependent upon the Alaska Pollock resources of the Sea of Okhotsk. Access-rights must be purchased at increasing prices, and a further build-down of the Polish distant-water fleet is expected, also in light of EU accession.

3.1.2. Baltic fisheries

The Polish cutter fleet operating in the Polish EEZ has been almost entirely privatised. Modernisation of the fleet is needed, but cutter owners have little capital available.

The problem of over-capacity must be dealt with as the sector can not count on EU subsidies for modernisation and restructuring if the capacity has not been significantly reduced before EU membership.

A positive factor for Baltic fisheries was the passing of the new Fisheries Law of 21 June 1996, which opens for the introduction of Individual Transferable Quotas (ITQ) in the Polish EEZ. The law introduces new management measures such as withdrawal of excess capacity, and stricter regulation of the fishing effort itself, including vessel licenses, and fees for fishing quotas.

3.2. Freshwater fisheries and aquaculture

Total production of freshwater fish in Poland is currently around 50 000 tons (1996). The bulk of production is carp and trout.

Further growth in fresh water aquaculture can be expected with increased exports of trout and eel to neighbouring countries including the German market.
3.3. Fish processing

The Polish fish processing sector has been undergoing major changes since 1989 and a substantial number of new fish processing plants has been established with private capital.

These companies employ qualified personnel, use modern production lines and employ high quality standards in their processing. Most of them are large firms with more than 300 employees, but some small enterprises are also found in this group.

Concentration is now under way in the industry, in part caused by the large capital requirements needed for upgrading the production facilities to EU standards but also as a response to the concentration in distribution channels.

The involvement of foreign companies in the Polish fish processing sector is part of a larger trend in which foreign direct investment has flowed into the Polish economy. The near completion of the privatisation process in the food industry with more than 90 % of companies on private hands was a necessary prerequisite for this development as was the decision to make the Polish currency freely convertible.

3.4. Domestic fish trade and distribution

Of all the changes in the Polish fishery industry, maybe the most remarkable change has taken place in fish trade and in distribution channels. Poland's fish trade is now characterised by a myriad of small and medium sized operators active in all segments.

The centralised structure of the past caused significant wastage of fish, was uneconomic and had to be subsidised by the state. There are still deficiencies in current seafood distribution as not all links in the marketing system are adequately joined together.

At the first sale at port, at the fish landing point, there is an insufficient link between fishermen and the rest of the value chain. There are no fish auctions that may play a role as clearing house between the fishermen, processing plants and trade, and a lack of large specialised wholesale markets in the big cities constrain fresh fish distribution.

A large number of international retailers is now active in Poland. The share of hyper- and supermarkets in the total distribution of fish and fish products in 1999 is estimated to be around 25 %.

Although the purchasing power of the population in most transition countries has been rising quickly, it is still quite low when compared to Western European averages. The presence of large consumers groups with limited spending power creates a market for low price food, including fish and fish products. Food constitutes a large part of their total spending and, in these cases, the elasticity of prices is high.

Current seafood consumption figures in Poland of around 14-15 kg (live weight) per kaput are below international averages and historic national levels. With economic growth, future consumption levels should approach average European levels at between 15 and 20 kilos live weight. Expansion of supermarket chains is leading to improved distribution and more consumption of fresh fish.

4. INTERNATIONAL TRADE

4.1. Imports

Poland's imports of fish and fish products reached 253 000 mt in 1999 (US$ 261 million). Raw material for the processing industry is the dominant item.

Norway is still the dominant supplier to Poland with a market share in 1999 close to 60 % in volume (value 46 %).

4.2. Exports

1999 exports of fish and fish products amounted to 133 000 mt (US$ 240 million). Value added products such as marinades, smoked fish and fillets are exported to Germany, France, Netherlands and Great Britain. This sector will grow as more companies take advantage of the possibilities of producing in Poland.

The major fish species exported from Poland is processed herring (31 000 mt) and fresh sprat (35 000 mt).

The trade balance in fish and fish products showed a deficit of US$ 21 million in 1999, a reduction from US$ 50 million in 1998 and 32 US$ million in 1997. In the short to medium term, Polish consumers will increase their purchases of imported fish products, a consequence of increasing disposable income. The effect of increasing imports for domestic consumption will to some extent be mitigated by growing exports of processed products to neighbouring countries.

4.3. The Mackerel and Herring Trade

After the demise of the Russian market Poland has become the largest importer in Central and Eastern Europe for mackerel and herring species. The major suppliers are Norway and EU countries.

4.4. The Baltic states: The peril of single-market dependence

Estonia, Latvia and Lithuania import frozen fish for processing. The export share of total output of canned products is estimated at 70-75 %. Raw material is mostly imported from Norway and the EU.
The situation is the Baltic countries changed dramatically in 1998 after the Russian devaluation. In the long run, the crash of the Russian market will force Baltic processors to develop new products and markets.

5. THEORY OF ECONOMICS AND MARKETING

5.1. Fisheries management

5.1.1. Economics and fisheries management

Fisheries is normally divided into aquaculture and capture fisheries. Whereas aquaculture is inherently a farming operation with management problems not very different from those of agriculture or forestry, capture fisheries is a hunting or gathering operation with very different management problems.

Capture fishery resources present very complex management problems. Catch capacity has increased globally after enormous investments in new technology, and over-capitalisation, excessive fishing effort and resource over-exploitation have become severe problems. The problems are exacerbated by ill-defined property rights to many marine resources leading to over-exploitation of the resource.

In most countries, open access or regulated open access fisheries have had negative effects on the resource and on industry profitability. New approaches have been sought in international fisheries management, including the introduction of Individual Transferable Quotas (ITQs). ITQ schemes differ considerably from country to country but share a common rationale. Individual fishing rights are assigned to fishermen or vessels within the set TAC and become their property. The fishermen will thus have a long term interest in the sustainability and the value of the resource.

Poland’s new fisheries law of 1996 introduces new management measures which, if applied, can deal effectively with overcapacity as well as overcapitalisation in Poland’s EEZ.

The long-term effect of ITQs would be a reduced fleet. ITQs are not much used in the EU, and it is not clear if they will be given a larger scope in the future.

5.1.2. Property rights, trade in fisheries services and fisheries management

The rationale for international trade in fish and fish products is well established and accepted, but trade in fishery services has been more controversial. In the last decade international trade in fisheries services has become of major importance to many coastal countries. Likewise, developed countries with diminished access to fishery resources, have been forced to rely upon fisheries services in order to utilise the capacity of distant water fleets or supply local demand.

The ability of a state to extract rent in the form of traded fisheries services depends on its ability to enforce its title to ownership.

In general, the coastal state will be better off if it allows the identity of providers of services to be determined by cost rather than nationality. Comparative advantage should be allowed to determine participation in fisheries, and where distortions are identified, these should be analysed in order to determine the best long-term solution for the state.

The Polish distant water fishing fleet is a large supplier of fishery services to many countries. In Poland, as in the EU, the distant water fishing fleet pays only a part of the licence fees with the remainder paid for by the government. Subsidies do not promote long-term profitability and hinder necessary fleet restructuring. The rationale given for the subsidies is the strong dependence of coastal communities upon fisheries for employment.

5.2. Applied marketing theory

Successful companies set marketing strategies geared to the needs of consumers taking into consideration the strategies of competitors. Based on size and industry position, the individual company decides how to place itself relative to competitors in order to gain the maximum competitive advantage.

The details of the company’s marketing planning are found in the marketing mix. The marketing mix consists of everything a firm can do to influence the demand for its output and is commonly grouped into four sets of variables known as the “four Ps”: Product, Price, Place and Promotion. Modern economic literature focuses on the dynamic nature of the marketing process and the need for long term viability or sustainability of a marketing strategy.

Numerous international studies document the increasing power exercised by retail chains. Despite the obvious negative consequences for suppliers and small retailers, one must not neglect positive effects such as competitive prices, a large offer of fresh produce and high quality standards.

5.3. Studies of income and demand elasticities for seafood

According to Poland’s Central Statistical Office, household expenditures on food increased by 3.2 % in real terms in 1997. Consumption of fish and fish products rose from 6.6 kg edible weight per caput in 1996 to 6.9 kg in 1997. The increases are linked to the impressive economic growth achieved by the Polish economy in the 1990s. Food expenditure constitutes a substantial part of average disposable income, making product prices of vital importance to households and price elasticities quite high.
Studies of demand changes in Poland based on income and price elasticities have been constrained by several factors. Prices did not reflect neither cost nor demand changes, and high inflation rates distorted most information conveyed through price changes. As trade and distribution of fish products has been completely liberalised and inflation is in single figures new elasticity studies in Poland should be carried out.

5.4. Markets and market failure

Economic theory refers to markets as marketing systems. A marketing system is the chain of links between producers/suppliers and consumers/users, and which determines the relationships between producer earnings and the supply of the physical product. Flows through a well functioning marketing system include information on prices, market situation, trends, consumer preferences etc. as well as flows of physical product, and of money, credit and property rights.

The potential economic benefits of well functioning marketing systems are immense. By facilitating specialisation and exchange, dynamic and creative forces are released with large potential benefits for economic development, employment and higher income for producers, suppliers and consumers. However, the extent to which effective market signals about consumers actually reach the producers and suppliers and the responsiveness of producers/suppliers depend to a large degree upon the efficiency and design of the marketing system.

Experience from many economies has shown that there are certain important roles and functions which private sector operators may not spontaneously provide or be able to supply in the short run. The overall result of this may be that the potential benefits of the marketing system are not fulfilled. Important examples are lack of information dissemination, quality control, commodity exchanges and auctions but also the frequent absence of an enabling environment; lack of necessary legal and regulatory framework, educational programmes, research and development, etc.

Some of the key elements of a well functioning marketing system are the following:

1) Information

The availability of reliable, accurate, and timely information on prices, supply and demand, trade, inventory holdings, consumer preferences, competitive situation, etc. allows operators to adapt to changes in market conditions. The degree to which information flows freely through the marketing system and the extent to which it is widely available to all players determine the overall efficiency of the marketing system.

In Poland, the collection and dissemination of fisheries relevant information has room for improvement. Lack of auctions hinders the formation of transparent prices on the first hand level with damage to fishermen. Lack of wholesale markets hinders the formation of transparent prices in urban markets and hinder distribution.

2) Logistics and infrastructure

Efficient logistics and low cost transportation increase competition in the market place. They prevent formation of local monopolies and permit industry operators to compete in distant markets.

3) Quality assurance and control

Mandatory quality control systems such as Hazard Analysis and Critical Control Points (HACCP) are now needed for seafood exports to all important markets, including the EU. The aim of the system is to ensure consumer safety and effects on seafood consumption should be positive through increased consumer confidence. HACCP systems generate substantial cost savings through better quality, less waste and spoilage on all levels.

In the Polish seafood processing industry, the first companies have now received ISO 9000 certification. In addition to improving product safety and quality of products, ISO 9000 certification gives the individual company important competitive advantages.

4) Market places-product exchange systems

Liberalisation foresees an efficient, low-cost and flexible system for transactions. Auctions facilitate the exchange of goods and yield substantial benefits in terms of increased transparency, information flows and transaction standardisation.

5) Legal and regulatory enabling framework

Legal and regulatory obstacles may hinder the development of a well functioning industry sector. In most countries, the obstacles are not limited to a specific industry but effect the entire economy. For example, a strong presence of the state or state owned companies in the economy or in a specific industry may leave little space for small private operators. The existence of well defined property rights, and a well functioning judicial system, including commercial law, are of extreme importance.

The legal and regulatory framework in Poland is now quite conductive to the well functioning of the fishery industry sector. The state's role is limited to a few companies, mostly in the harvest sector. However, the state is still dominant in harbour services, warehousing, etc.

6) Finance and financial services
Access to capital is important as is a well functioning banking system. In the Polish seafood industry one major problem has been lack of capital for investments as well as working capital. Privatisation of the banking sector combined with an influx of foreign banks should lower borrowing costs as well as stimulate lending to niche industry sectors.

7. Presence of industry representational bodies and associations

The existence of representational bodies is necessary for presenting the industry's views and interests to the government and state authorities. In addition, they serve an important role in creating industry standards as well as quick and low-cost mechanisms for solving disputes, such as industry arbitration panels.

8) Individual company skills and competitive situation

A specific industry is the sum of all the operators within it. Individual characteristics, skills and experience are developed through daily interaction with suppliers, customers and competitors. A high degree of competition stimulates industry creativity, leads to lower costs and to increased economic efficiency.

In the Polish fishery industry, private companies have shown impressive dynamism and vigour. Especially, the post-harvest sector including processors have shown remarkable innovative skills. Although the sector will continue to grow along with the general growth in the economy, competitive pressure will increase, not the least because of concentration on the demand side. Companies will need access to more capital, and individual skills will not suffice.

5.5. Price formation and auction systems - Futures markets and ITQs

In a market economy, the price formation mechanism is of fundamental importance. In order to guarantee economic efficiency and efficient allocation of resources, available prices must reflect the actual costs of products and services but also the propensity of buyers to demand and of producers to produce and offer for sale. In order to achieve this, prices must be formed in a mechanism that gives voice to both the supply and the demand side.

The possibility for successful auction sales of agricultural commodities or product groups such as seafood is determined by market structure and product specifics.

For most goods and services in a market economy, prices are formed freely in a continuing negotiation process between buyers and sellers. In this way, any supply or demand change is immediately transferred into a change in price. Only prices that are formed in this manner fully reflect all information available in the market and guarantee the correct allocation of scarce resources in the economy.

There are, not surprisingly, many instances in which this process of free price formation is not allowed to function properly. For example, the negotiating power of supply and demand may be skewed in such a way that one of the sides may enjoy monopoly or oligopoly powers.

Unpredictable market volatility destabilises the fishery sector and tends to reduce consumer demand. This lowers expected price, making market innovation and product development more difficult.

The presence of high transaction costs impedes the price mechanism to function efficiently as the distance between demand and supply is increased.

A problem observed in Polish fish harbours is the large fluctuations in prices. Fluctuations reflect sudden increases in supply or the incapacity of a harbour to receive or process the offered quantities. With the establishment of fish auctions, one would see less extreme price fluctuations as auction prices would reflect the supply and demand situation in each harbour.

At present, there are no fish auctions operating in Poland with the exception of an auction-like operation run by Szkuner. This is not an auction in the true sense of the term but it performs a useful role in setting reference prices for operators in the other Polish harbours as well. However, the operation is not independent as Szkuner is an active operator in the fisheries sector.

Electronic auctions are frequently introduced to improve the competitive situation of the specific harbour. Experience in the UK shows that auctions bring higher volumes and better quality, and therefore increase the attractiveness of the harbour to buyers. When this leads to higher prices, the harbour attracts more catch as well. Higher prices in Poland's fishing harbours would likewise lead to higher landed volumes, as today many Polish fishermen deliver in Swedish and Danish ports.

The establishment of independent companies to run the auctions is a prerequisite for the successful operation of the auction itself. Of course, this would be facilitated by privatisation of the Polish fishing harbours and of the companies that are operating there.

A relatively simple and low cost electronic auctioning system could be employed in Polish harbours. As in Iceland, voice operated electronic systems could link the markets together. Alternately, clock auctions using radio beepers and a clock projected onto a screen or wall can be used. The more sophisticated set-up would be to go for a separate auditorium type structure and facilitating remote bidding.
A soft way into the system would be to promote improved ship-to-shore communication of catches and expected landings. Another would be to improve the dissemination of volume and value information, giving sellers and buyers more information on flows through the various markets.

As part of Poland's preparation for integration into the EU prior to its formal membership, the establishment of auction systems in the fisheries sector is foreseen. Marsource, part of the MARIS initiative has also been set up to promote electronic information systems in EU member countries and applies to prospective members as well.

It is my opinion, that given the characteristics of the Polish fisheries and the situation in the Baltic fishing harbours, electronic auctions should be established in Poland. The auctions should allow for remote participation and be operated by independent companies. The introduction of auctions, whether electronic or not, must be part of a strategic plan developed for each harbour.

5.6. Restructuring and privatisation of the Polish fishery sector

In market economies it is taken for granted that private companies are superior to state-owned companies in terms of economic performance. The rationale for this is that shareholders or owners of private capital demand an economic return which is higher than on alternative investments. The state, on the other hand, rarely sets specific requirements for return on capital, and where it does, these can frequently be overruled by political considerations.

In sectors with large numbers of competing companies, competition will force companies to become efficient; if not, they lose out to more efficient companies or go bankrupt.

In Poland, most of the economy has been privatised although important industries remain. It is of key importance to keep up the momentum in the privatisation process as the value of state owned companies will deteriorate as the markets for the companies' output are penetrated by imported goods or by other Polish companies.

In the fishery sector, the three distant water fishing fleet companies remain in state hands. The state should aim to privatisate the remaining processing companies to take advantage of the current favourable investment climate.

Harbour facilities and services are also to a large extent operated by state owned companies although they are now being separated into formally independent companies. These companies control large areas in key ports and should be easy to privatisate as private investors already are evaluating the development possibilities for the valuable land areas.

The main problem lies with the distant water fishing fleet. With less resources available and decreasing subsidies from the state, the economic situation for these companies is not likely to improve. In view of future Polish EU membership, the fleet must be restructured and reduced along the line of the distant water fishing fleets of other EU members.

It is the uncertainty regarding the future of the distant water fishing fleet that has so far slowed the privatisation process for the fleet operators. In the short run, the government should try to negotiate access to third-country waters. The government should also try to reach an agreement with the EU on the future size of the fleet in order to implement the necessary restructuring before accession. Of course, this will not prove easy as the EU will prefer that Poland restructures the fleet before accession and on its own expense. However, a reduction of the size of the Polish fleet improves the levels of sustainability of the EU's own fleet and help from the EU would be in the EU's own interest.

5.7. Industry structure and the role of large companies in the fishery sector

Industry structure frequently develops from an initial situation of fragmentation through a phase of concentration until only a few companies remain as active operators. As the number declines, the few firms remaining, or possibly a single firm, end up with an overwhelming market share. Economic theory suggests then that prices paid by consumers tend to be higher, and quantities lower, than if there were more competition. In addition, concentration on the distribution level may lead to lower prices paid to the producers. Both of these results decrease market efficiency and reduce social welfare.

On the other hand, an atomistic, fragmented, intensely competing sector is not necessarily efficient either. An industry composed of large numbers of participants frequently has little vertical integration and high transaction costs. This tends to inhibit market development and product innovation.

The optimal concentration for a segment of the fisheries industry is difficult to define. However, given industry characteristics and constraints, neither high concentration nor high disaggregation is likely to maximise returns.

Economies of scale are present in processing where large companies can spread fixed costs from capital investments in machinery and buildings on larger sales volumes. Economies of scale also exist in fisheries where larger vessels or fleets can catch more fish than smaller vessels. Economies of scale are reaped by...
strong brands when marketing and advertising costs are spread on large sales volumes.

The growth in market share of the leading brands has been facilitated by more concentration in the retail chains with the larger chains now operating internationally. The growing strength in chain negotiating power leads to increasing demands on suppliers which only the strongest brands are able to satisfy.

One possible strategy for Poland's processing industry is to aim for cost leadership. Poland has a steady supply of relatively skilled low-cost labour, and has close access to sources of raw material from the Baltic and Nordic countries. With close distance to major EU markets, Poland can become the first choice of location for the EU's seafood processing industry.

5.8 The future of small companies in the Polish fishery industry

With the continuing internationalisation of the Polish economy, foreign companies have established themselves in most industry sectors. In the fishery industry foreign companies are active in processing, distribution, retailing, consumer research and in most of the services relevant to the industry.

International companies establishing themselves in Poland are for the most part large companies with substantial financial and human resources. Expertise in management, marketing, finance, product and market development are skills that international companies have developed in competitive domestic markets or in global export markets, whereas domestic companies have only recently started to discover the importance of marketing strategies.

Increased investment needs highlight the problem of access to financial resources. Most companies do not generate enough funds from normal operations to finance capital investment and have to rely on domestic banks. International companies are able to draw on a number of financial sources and have access to cheaper capital as political and economic risks are considered lower than for local companies. However, successful domestic companies may attract foreign capital through joint-ventures or partnerships.

Lack of skills in management and marketing may in the short term, prove a larger obstacle than lack of financial capital. With the ongoing concentration in the retail sector, Polish companies have limited time available to get the necessary skills and experience for selling to the supermarket channels. In addition to the production requirements and specifications, suppliers must be able to give sales support, and marketing strategies must be elaborated taking into account the purchasing parameters of the modern chains. For companies lacking these skills, access to the growing supermarket channel will not be possible, and future sales will be limited.

6. INTERNATIONAL DEVELOPMENTS AND THEIR RELEVANCE TO POLAND

Globalisation of trade and internationalisation of the Polish fishing industry, expose Poland strongly to international developments. Preparing for EU membership places the Polish fishing industry on the same trajectory as the fishing industry of the EU, and national policy and planning will at one point in the future converge with EU policy. Recent policy changes approved by the European Commission on markets for fish and aquaculture products are therefore relevant for Polish and Polish companies as well.

Poland and its fishing industry are also influenced by global trends. Globalization and increasing international fish trade cause developments in one market to have rapid repercussions in other markets. In addition, long-term global trends in supply and demand, including consumption trends have broad implications for the domestic industry and for consumers.

6.1. Poland and the European Community

The Common Fisheries Policy (CFP) of the European Community covers catch and farming as well as the processing and marketing sectors. It deals specifically with conservation of stocks, structural measures, international agreements and organization of markets. The Community has sole responsibility for international relations in the field of fisheries, including the negotiation of fisheries agreements with non-member countries. This will have implications for future negotiations over the fishing rights of the Polish distant water fishing fleet as well as the quotas in the Baltic and North Atlantic.

The common organization of markets in fishery products has been an integral part of the CFP since 1970. Market developments for fishery products together with the accession of new Member states made adjustments and reforms necessary over the years. The new basic Regulation establishing the common organization of the market in fishery products came into force on 1 January 1993. In order to carry out the Community objectives, the Community has created a system of common marketing standards, producers' organizations (POs) to which most fishermen belong, a floor price system and a regime for trade with non-member countries.

A CFP based on these principles has been criticised for its anti-market bias. Partly in response to this criticism, a reform was approved in 1999; the Common Organization of the Markets in Fishery and Aquaculture Products (CMO). Its aim is to gear fishing activities more closely to supply and demand and to encourage long term planning. Its long-term objective is to make the entire sector more independent economically.
6.2. **Summary of main features of international trade in fishery products**

40% of global fish production was exported in 1998. The trade flows of fishery products are mainly from developing to developed countries and from the Southern to the Northern hemisphere.

In value terms, total fish exports exceeded US$ 50 000 million in 1998.

In general, fish exports concentrate on the higher end of the price scale and are often produced exclusively for exports. In addition, fish processing is important as a source of employment in many areas, and net foreign currency earnings from fish trade enable countries to import less expensive protein.

6.3. **Liberalism or corporatism**

Accession to the EU will have a profound impact on Poland's economy and on the state's role in the economy. The EU accession criteria and pre-accession partnerships broadly prescribe a corporatist model typical for Western Europe. Thus, the post-communist model of "transformative" neo-liberal corporatism will gradually converge with the Western European model, along the lines of similar transformative trends.

In post-communist Poland, due to shifts in policy after changes in governments combined with the strong negotiating base of unions, neo-liberalism has not been able to fully surplace corporatism and statism. Thus, a special hybrid of corporatism and neo-liberalism developed, despite increasing pressures of globalisation and the establishment of economic and monetary union in the EU. In addition, the accession criteria and EU common law have put a definite end to the process of post-communist transformation. Thus, the integration process that started in the early 1990s has become a fundamental component of the political, economic and social transformation of Polish society.

Economic criteria continue to play an important role in the integration process, but the strong social dimension of EU legislation and of social and structural policies, will reinforce the corporatist solution in the transition period of accession.

The accession criteria together with the established mechanisms of EU enlargement, assign most of the burden of enlargement to domestic actors and institutions of the applicant country. Thus, the structures and mechanisms established after 1989 will continue to play an important role in the domestic political arena in Poland as the country advances towards EU membership. The process of accession will accelerate structural change but subsequent social problems can only be solved by social consensus. As such, the corporatist solution will be reinforced.

However, the choice between a neo-liberal and a more corporatist model is not clear-cut. Slower growth resulting from a corporatist model burdened by the rules of the EU bureaucracy, is by most thought to be a short term price well worth paying for increased long term economic, social and cultural integration, and security.

7. **RECOMMENDATIONS FOR FUTURE POLICY**

The EU has identified a number of areas in which Poland will have to undertake changes in order to adapt to EU sectoral policy and organisational arrangements.

One major problem is the distant water fishing fleet which suffers from overcapacity and reduced fishing opportunities. The fleet requires a modernisation programme to respect the EU multiannual guidance programmes (MAGP) and new EU hygiene and safety regulations.

The Baltic cutter fleet will also have to adapt to the MAGP. This has become more feasible after privatisation although capital for modernisation is needed.

A system of ITQs would help, as would a system in which the remaining quota holders contribute to the cost of the buy-back or demolition programme.

Increased utilisation of Baltic resources can be achieved through new fishmeal production capacity.

The Polish fishing fleet is equivalent to 9% of the total EU fleet tonnage, and total Polish landings amount to 6% of EU catch volume and 2% of catch value. In terms of productivity based on landings and employment, Polish fishermen are 50% more productive than EU fishermen in volume terms but 50% less productive in value terms.

Poland will also have to set up Producer Organizations. The government is reportedly planning the introduction of a bill in year 2000 which lays down the legal framework for the establishment and operation of POs.

The transition from a centralised state system of fish distribution to the present free market system has been smooth and does not present large difficulties. However, there are still no auctions operating in the fisheries sector and these will have to be planned for and implemented.

A system of wholesale markets for fish is also lacking. Lack of wholesale markets causes food losses, hygiene and safety problems and is an obstacle to an efficient food marketing system. Wholesale markets should also have a beneficial effect on fish distribution in Poland in general.
The fragmented structure of the fish processing industry leaves room for restructuring and consolidation. The state owned processing companies should be privatised.

Poland's future accession to the EU means that Poland will adhere to the Common Fisheries Policy as well. This will put heavy demands on the national fisheries administration which will have to implement the Common Fisheries Policy in Poland. Poland will also have to establish a control system to match EU rules.

In particular, much work remains regarding the transposition of the EU acquis in the field of fisheries.

8. CONCLUSIONS

The Polish economy has been transformed into a dynamic and fast growing economy on its way to full integration into Europe and the world. Changes have been facilitated by inflows of foreign direct investment. Food distribution channels have been overhauled completely through the expansion of large retail chains. This has increased availability and consumption of seafood.

None of these developments would have been possible without the policy decisions taken by the Polish governments after 1989, and in particular, the Balcerowicz plan. Privatisation, cuts in subsidies, liberalisation of trade and processing activities have released entrepreneurial energies and qualities. The Balcerowicz plan and subsequent reforms liberated the Polish economy and made Poland attractive for foreign investments. Any other country wishing to obtain similar results in its economy including its fishery sector should study the reforms undertaken in Poland and implement similar policies of economic liberalisation.

Poland's fishery sector still has to confront several problem areas. At harvest level, the major problem is the size of the distant water fishing fleet with a very large overcapacity.

At post-harvest level, several levels in the value chain from the point of landing to the point where the product reaches the consumer must be strengthened. Lack of auctions and urban wholesale markets impede efficient pricing and distribution. The processing sector is fragmented and many undercapitalised companies have difficulties in producing to the required minimum quality levels. The state still owns many companies on the harvest as well as post-harvest level, and these companies should be privatised.

The Polish fishery industry faces an interesting future with many opportunities as Poland prepares for EU membership. The processing industry, in particular, is attracting capital from domestic and international investors. The retail distribution channel has grown helped by foreign direct investment and is improving access to fresh food in general and fresh seafood in particular.

As market prices and less inflation have made economic data more reliable, new economic research should be undertaken in the Polish seafood sector. Polish companies have found that marketing is of vital importance to their economic well-being and long-term sustainability, and new market and economic research is a integral part of this.