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POLICIES FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

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FOREWORD

The Industry Committee met at Ministerial level on 3-4 February 1998. To help organise this meeting, a series of reports were prepared to provide background and information on recent business and industry developments and policy directions. As can be seen from this Compendium of notes describing the main evolution in Member countries' policies for industrial development and competitiveness, policy is increasingly directed to meet a set of high priority challenges. These are promoting economic growth, wealth creation, and employment.

To meet these challenges, strengthening the competitiveness of national economies has become a central issue. The increasing emphasis that is placed on the need to augment industrial performance reflects growing recognition that the role played by firms is pivotal for competitiveness.

The nature of government approaches towards enterprises has evolved over the past decade. This evolution is mirrored in the changed perception of, and approach to, industrial policy. Thus, there has been a pronounced shift from a perspective that focused primarily on articulating "policies for industrial development", to one that stresses "policies for industrial competitiveness". Furthermore, the primary goal of such a strategy is viewed increasingly as raising/achieving the *international* competitiveness of firms.

The notes contained in this Compendium reflect this evolution in policy approach. It should be read in conjunction with the Report co-ordinated and prepared by Graham Vickery of the Industry Division, Directorate for Science, Technology and Industry, entitled "Industrial Performance and Competitiveness in an Era of Globalisation and Technical Change".

The Industry Committee agreed to a wider circulation of both Reports at its meeting on 5 February 1998. It should however be stressed that the notes contained in this Compendium do not represent official statements by the governments of Member countries on their policies for industrial development and competitiveness.

TABLE OF CONTENTS

PAST, PRESENT AND FUTURE POLICIES FOR INDUSTRIAL DEVELOPMENT IN MEMBER COUNTRIES

AUSTRALIA

AUSTRALIAN INDUSTRY DEVELOPMENT POLICY: PAST AND FUTURE

by
Department of Industry, Science and Tourism

Priorities of the Past Decade

The main objective of industry policy in Australia has been to raise international competitiveness by:

- significantly reducing border protection to increase international competitive pressure;
- implementing a comprehensive competition policy to impose competitive pressure on the non-tradable sectors;
- pursuing a wide range of microeconomics reform measures to enhance the business operating environment; and
- assisting industry to become more innovative and export oriented.

Internationalisation

Measures to internationalise the Australian economy and expand two-way trade include:

- reduction in import tariffs, quotas and other barriers to trade;
- better market access through Asia-Pacific Economic Cooperation (APEC) and Australia-New Zealand Closer Economic Relations Trade Agreement (CER) initiatives;
- mutual recognition agreements on standards with EU;
- establishing the investment promotion program;
- improved access to export finance and insurance.

Business environment

Measures to lower the costs of and improve the returns from doing business in Australia include:

- reduction in taxation on corporate income and targeted broadening of the tax base;
- introduction of taxation imputation on dividends;
- wage and industrial relations system reform;
- reform of telecommunication, energy, water, rail, coastal shipping and waterfront sectors;

- further deregulation of the financial market;
- simplification of corporate and taxation law;
- competitive neutrality for the public sector to compete with the private sector.

Technology

Measures to encourage more R&D (particularly by the private sector), more commercialisation and better skills base include:

- introduction of 150 per cent tax deduction for R&D expenditure;
- establishment of the Australian Technology Group for equity finance to high technology firms;
- improved linkages between public sector research facilities and private entrepreneurs;
- training levy to raise skill levels in firms.

Small business

Measures to assist the establishment and growth of small business include:

- extension services to improve management and marketing skills;
- established AusIndustry as a co-ordinated access point to State and Federal programmes;
- improved access to risk equity finance with Pooled Development Fund and business angels programmes;
- developed strategic networking amongst small- and medium-sized enterprises;
- provided support for developing a code of conduct and self regulation in franchising;
- rationalised business licensing.

Government purchasing

Policy development in this area recognised the opportunity to promote the development of Australian industry, without compromising on quality or price objectives. Initiatives included:

- reform of purchasing policies to ensure best value for money and industry development;
- partnerships for development in the information technology sector; and
- pharmaceutical industry development program.

Transition programmes

Temporary structural adjustment measures (*e.g.* labour market programmes) to facilitate adjustment in key sectors.

Recent Initiatives

More recent initiatives include:

- revised assistance to the pharmaceutical industry;
- extension of the shipbuilding bounty;
- telecommunications industry development plans;
- small Business Statement and package of initiatives;
- strategic assistance for research and development;
- supermarket to Asia strategy;
- revised tariff and export facilitation arrangements for the motor vehicle industry; and
- review of activities and competitive tendering and contracting, by public sector agencies.

Priorities for the next five years

Over the next period, the key priority is to position Australia for the challenges and opportunities of free trade under APEC. The priorities are to provide a business environment which will make Australia a preferred investment location in the Asia Pacific, and to lift our growth rates to fully utilise available resources. A key to this latter priority is investment.

Industry policy will increasingly be seen within the context of the overall economic policy framework designed to achieve higher investment and growth with low inflation and lower interest rates.

Internationalisation

Continue the process of internationalisation of the economy through:

- active participation in APEC and WTO activities;
- continue with the tariff reform program;
- cease existing production bounties; and
- push for freer trade and investment liberalisation.

Business environment

While there have been significant positive changes in the business environment, further improvements are still required in key areas. The process of microeconomic reform will continue with attention to key areas such as:

- the labour market;
- the taxation system;
- vocational education and training;
- the waterfront;
- competition reform in the public sector; and
- regulation reform.

Technology

The focus to encourage firms to become more innovative and productive will remain. Priority areas include:

- maintaining support for innovation and R&D;
- creating better links between public sector research and industry;
- encouraging more commercialisation of domestic R&D; and
- improving access to risk capital and information for high growth firms.

Small business

The importance of smaller firms to economic growth, employment generation, exports and innovation is well recognised. Particular issues that need to be addressed include:

- lower regulation compliance costs and paperwork burden;
- better availability of venture capital including alternative equity markets;
- enhanced networks and clusters; and
- access to government markets.

Industry programmes

Implementing a more strategic approach to business programmes to promote economic growth and sustainable employment, including by:

- reviewing the appropriateness, efficiency and effectiveness of existing programmes;
- focusing on key generic areas such as investment, innovation, productivity, exports and adjustment; and
- utilising sectoral programmes where appropriate.

AUSTRIA

MAIN ORIENTATIONS OF AUSTRIAN POLICIES FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

by
Federal Ministry of Economic Affairs
Department for Industrial Policy

Priorities of the past decade and recent initiatives

Austria is a small, open and export-oriented economy. The growing globalisation of economic activities and the opening up of the Central and Eastern European Countries at the end of the 1980s have intensified the competitive pressure on the Austrian industry. Structural changes and adjustment difficulties occurred. Forged by the experiences of the past, there was a consensus that a positive and offensive approach to industrial adjustment is needed: A horizontal policy, which is based on the recognition that the industrial sector is confronted with a permanent need for structural adjustment. Because of their relatively large share SMEs play an important role in the economic development process and policy makers devote particular attention to them. The over-all relatively good economic performance in the last decade was based on a strong labour productivity growth (especially in the industry sector), a low unemployment rate and relatively moderate inflation. In the last decade the Federal Minister for Economic Affairs played an essential role in the process of strengthening industrial competitiveness.

Internationalisation/Globalisation

Measures to integrate the Austrian economy into the world economy include:

- EEA (European Economic Area) entered into effect on 1 January 1994, and created the legal basis for conditions similar to those of an internal market for -- at that time -- twelve EU-Members and five EFTA-Members;

- EU: Austria's accession to the EU on 1 January 1995; integration effects: customs barriers vis-à-vis other EU countries and requirements for certificates of origins and other restrictions are eliminated; sunken prices for pre-products and consumer goods;

- bilateral trade agreements with Eastern European countries;

- WTO -- further trade liberalisation;

- cross border co-operation, especially by direct investment, has become a vital and dynamic element of the economy (the flow of FDI into Eastern Europe has increased from almost zero in 1989 to US$ 7.2 billion in 1993 and a total of US$ 13.3 billion in 1995; in an international comparison the Austrian share of invested capital in the Eastern countries in 1995 is, for example in the Slovak Republic 22 per cent, in Slovenia and Hungary 17 per cent);

- further improvement of export promotion measures like the system of export financing and export guarantees -- as well as others -- in accordance with international practice.

Business environment

The most important elements to improve the business environment and competitiveness of the industry include:

- liberalisation of working hours and business opening hours;

- hard-currency policy which is creating a favourable background for economic activities;

- two tax reforms which reduced the tax burden for businesses (approximately from 50 per cent to 34 per cent);

- promotion of further training and education (*i.e.* tax deductions, work foundations, assistance provided by the Labour Market Service; development of "Fachhochschulen" -- 1993 Technical College Law; apprenticeship in the dual system);

- continued privatisation of state-owned industries (*i.e.* industrial holding company ÖIAG, Bank Austria, Salinen AG) has transferred substantial economic assets to private owners;

- information service for investors is assisting potential domestic and foreign investors with the provision of technical assistance and a 'Handbook for Investors' as well as through the Federal "Austrian Business Agency";

- European Competition Law which is directly applicable in Austria;

- modernisation and liberalisation of the telecommunications sector;

- amendments of the Business Law (last in 1997) which brought up a number of liberalisation steps (*i.e.* deregulation of permission to open business plants, expansion of the scope of licenses, eased entry);

- deregulation and liberalisation in many fields of the Austrian law.

Financing

Efforts to improve access to capital and equity financing include:

- investment support within the framework of the TOP campaign; promotion of highly innovative investment projects of successful entrepreneurs;
- promoting Venture Capital Funds and Companies;
- support for new business: "Gründungssparen" -- promoting saving for the creation of a company;
- "KMU-Förderungsgesetz" -- SME promotion act; is a uniform legal basis for all aid activities aimed to support SMEs;
- soft aid programme for SMEs; valid since 1 January 1996; implemented to realise the community initiative for SMEs;
- promotion of a network of business angels through co-operation with banks and other financial institutions and industry organisations;
- establishment of a new segment at the stock exchange for SMEs: "fit" (finance in time) improves the access to equity capital;
- additional business promotion plans, for example RETEX-initiative for textile regions.

Innovation and technology

Measures to increase the competitiveness and the innovative capacity of businesses, to promote technology diffusion and the exploitation of R&D and to foster applied research and industrial R&D strategies include:

- establishment of the Innovation and Technology Fund (ITF) which is stimulating business R&D and innovation;
- implementation of the new ITF programmes "Technology Transfer" and "Technologies for the Information Society";
- development of a comprehensive management consultancy service, in particular for SMEs, including training and manuals;
- establishment of the Seed financing scheme to support new businesses active in novel technologies and of the new programme of the innovation agency called I^2 (= idea x investment);
- improvement of the co-operative research institutes and industry related research.

Priorities for the next five years

In mid- and long-term the Minister for Economic Affairs will promote competitiveness by creating a favourable environment for industry to operate in, while it is up to businesses to exploit the opportunities opened up in this way. The capability of firms to develop, apply and absorb technological know-how and new technologies is essential for a good performance of the economy. The main priorities when creating a favourable environment for industry as well as for job creation, are

- improve the quality of regulations and remove bureaucratic obstacles to promote innovative entrepreneurial activities;
- systematic efforts to conquer the world’s growth markets (*e.g.* markets where the country is under-represented);
- using the opportunities of international markets;
- strengthening of competition (improve the functioning of markets);
- liberalisation of the energy sector;
- increasing the expenditures for research and development;
- membership in the EMU;
- promotion of intangible investment (such as training and R&D);
- upgrading skills and competencies;
- appropriate measures to improve performance on domestic and foreign markets;
- execution of an “export offensive” (with elements such as: enlargement of financial instruments, new services for the enterprises, strengthening of institutional procedures);
- increasing the effectiveness of governmental measures;
- stimulating the creation of new enterprises;
- focusing on programmes to improve the equity and venture capital basis of the businesses;
- facilitating the access to risk capital for enterprises, especially SMEs;
- additional instruments to increase the equity capital rate in the Austrian industry;
- supporting horizontal, vertical and diagonal relationships between suppliers and customers, larger and smaller firms, manufacturers and service providers;
- developing better links between public sector research (universities, Fachhochschulen etc.) and industry;
- supporting the diffusion and application of information and communication technologies.

BELGIUM

MAIN ORIENTATIONS OF BELGIAN POLICIES FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

by
Ministry of Economic Affairs

Industry in Belgium

The regional governments now have responsibility for industry in Belgium. The federal government is responsible for setting framework conditions for the overall competitiveness of the economy. As part of this framework, an Act on competitiveness was introduced in July 1996. This Act sets a maximum margin on wage formation. In addition, it attempts to align the burden of employer contributions with those of Belgium's main trading partners (Germany, France, the Netherlands). A comparative report must be submitted twice a year by the Central Economic Council and the National Labour Council.

An initial report has been drafted and makes the following observations:

- unlike Germany and the Netherlands, but like France, Belgium has high levels of youth unemployment;
- Belgium has a particularly high percentage of long-term unemployed compared with Germany and the Netherlands;
- the level of part-time employment is much lower in Belgium, France and Germany compared with that in the Netherlands;
- overall productivity in Belgium is at a record level compared with the above-mentioned three countries.

With regard to public policy on employment, the report draws attention to:

- the comparability of the systems used to promote job creation in the four countries (measures to lower labour costs, training efforts, measures aimed specifically at disadvantaged social groups, flexibility);
- the lack of coherence and continuity, leading to loss of transparency and legal security.

The report recommends that the following avenues be explored:

- improved industrial specialisation (exports are always concentrated in low or medium growth sectors with regard to world demand);
- more systematic use of domestic clusters of activity.

CANADA

INDUSTRIAL POLICY ORIENTATIONS IN CANADA

by
Strategic Policy Branch
Industry Canada

Introduction

This paper outlines the main orientations of Canadian industrial development policy in the last decade, and looks ahead to the direction of policy in the next century.

There have been considerable shifts in the direction and focus of the federal government's industrial policy since the 1980s. Prior to this period, there was greater reliance on direct subsidies to business to achieve government objectives, fewer concerns about either market distortions caused by subsidies or the risk of countervailing measures imposed by other countries, and less attention paid to the twin forces of technological change and globalisation. However in the early 1980s, partly as a result of the debates around the Free Trade Agreement with the US, there was an increasing awareness of the importance and inevitability of technological change and globalisation. Combined with growing fiscal difficulties, this brought about a fundamental re-examination of the role of government generally, including industrial policy specifically. The focus of industrial policy changed from direct intervention to creating the conditions for private sector growth, and from trying to set the directions for trade and technology, to accepting and adapting to globalisation and technological change.

Organisational changes in 1987 and then again in 1993 illustrate the changing views regarding industrial policy. These changes brought the major elements of the government's industrial and science and technology policy into a single department, in keeping with the realisation that these policies are complementary. Concurrent shifts in policy directions, which were consolidated and confirmed by a new government in 1993, showed the importance of building linkages between policy areas, and a realisation that traditional subsidy programmes do not work. Industrial policy was re-shaped to help build the framework conditions for private sector growth. The government-wide examination of the role of government known as Programme Review brought about major cuts to the federal government's subsidies to business. Subsequent actions set out a new approach to industrial policy which emphasised innovation and building the information highway, providing information services to business, reforming marketplace framework laws to encourage competition and lower the costs of doing business, and working in partnership with small and medium-sized enterprises.

Looking into 1997 and beyond, the new industrial policy in Canada stresses not only adapting to globalisation and technological change and providing the best possible framework for private sector growth, but also the rise of the knowledge-based economy and the need to integrate industrial policies with human resource development.

Organisational Changes

Significant organisational changes show how the approach to industrial policy in Canada has changed. First, in mid-1987, the Department of Industry, Science and Technology (ISTC) was formed. The new department integrated the Ministry of State for Science and Technology, and the Department of Regional Industrial Expansion. Responsibility for regional development in Atlantic and Western Canada was shifted elsewhere, but ISTC was responsible for regional development in central Canada[1] and for aboriginal economic development throughout the country.

ISTC was charged with ensuring Canada's international competitiveness by integrating scientific, technological and industrial strategies and activities. The Department was given a strong advocacy role within government with respect to economic framework policies, science and technology policies, and trade policies where they affect its clientele. This included responsibility to assist in co-ordinating the science activities of federal departments, boards and agencies, and in providing strategic advice to the government on science. A commitment was made to shift away from financial support for individual firms and towards providing selective programme assistance to support pre-competitive research and technology development in areas with broad applications and benefits.

In June 1993 the next major reorganisation reduced the number of federal departments from 32 to 23 and created the Department of Industry and Science, which soon became Industry Canada. The trend towards increased policy integration as set out by the 1987 reorganisation was confirmed, and deepened. Industry Canada brought together the previous responsibilities of ISTC with the telecommunications policy and programmes from the Department of Communications, the market and business framework responsibilities from Consumer and Corporate Affairs Canada, and the investment research, policy and review functions from Investment Canada. The Minister of Industry also became responsible for the following organisations: the Competition Tribunal, the Copyright Board of Canada and the Standards Council of Canada. With these additional responsibilities, the Industry Minister became a lead figure for microeconomic policy in the federal government. (As part of the same reorganisation, responsibility for most of the human resource development policies and programmes of the federal government were consolidated under the federal department of Human Resource Development, so that this department also had a key role in micro-economic policies).

Industry Canada was directed to change from a department which was known primarily for its provision of financial assistance programmes, to one known for the quality and influence of its information and services to business, especially to small and medium-sized enterprises (SMEs). The new department was also tasked with increasing collaboration with other federal departments on issues and policies affecting industrial competitiveness. This new mandate and organisational structure made the new department well placed to deliver on policy developments in 1993 and beyond.

Lastly in 1996 all of the regional development agencies were transferred to the Industry Portfolio under the responsibility of the Industry Minister. This brought the key departments and agencies responsible for S&T, regional development, marketplace services and micro-economic policies even closer together, and created new capacities for partnership and innovation, both within the Portfolio and externally. Most importantly, the Industry Portfolio is well positioned to work closely with Human Resources Development Canada on developing the government's micro-economic strategy for jobs and growth into the next century. This is essential given recent analysis which indicates that the knowledge-based economy is essential for future growth, and that the knowledge-based economy will require industrial and human resource policies to be closely linked.

In summary, the organisational changes which began in 1987 and continued until 1996 have shown that well integrated micro-economic policies are essential to the government's jobs and growth strategy. The Industry Portfolio has a key role to play in this strategy, both alone and in partnership with other federal departments, especially Human Resources Development.

Shifting Policy Directions

The platform[2] of the government elected in 1993 stated that it is the job of government to "create the best conditions and institutions to allow entrepreneurs to get on with the job". The platform stressed innovation and the role of SMEs in creating jobs and growth. Specific elements of this action plan relevant for the Industry Minister included reviewing the delivery of programmes for SMEs, increasing SME access to capital, and establishing a Canadian Technology Network between universities, industry associations and governments. Furthermore, a commitment was made to reduce subsidies to business by $225 million annually. These actions were consistent with the general policy directions of the previous organisational changes.

Following from the government's 1993 platform, the 1994 Budget emphasised innovations, information, partnerships and SMEs as key elements of Canada's industrial policy. For example, a task force was set up to work with private sector banks to develop a code of conduct for small business lending, the network of Canada Business Centres was expanded to provide increased one-stop access to government information on programmes and services to small business, and commitments were made to develop an information highway strategy and to conduct a major review of how the federal government spends $5.5 billion annually in direct investment in science and technology. Lastly, in keeping with the view that government's role should be to create a positive climate in which firms and industries can flourish, the 1994 budget also announced a further 60 per cent cut in subsidies to business over three years.

Following the 1994 budget, two concurrent government-wide exercises set out policy directions. First, Programme Review, which will be discussed in detail in the following section, was a major review of all government policies which set out some basic policy principles for all departments in the government, including Industry Canada. Second, the new approach to industrial policy was summarised for the first time in the 1994 document *"Building a More Innovative Economy"* (BMIE). BMIE showed the government's acceptance of globalisation and technological development as key to jobs and growth, and also confirmed key policy principles such as recognition of the importance of small and medium-sized enterprises (SMEs) and the move away from direct subsidies to business.

BMIE was a government-wide effort co-ordinated by Industry Canada. It set out 57 specific action items involving 15 federal departments and a number of agencies. The action items were grouped under four pillars: marketplace climate, trade, infrastructure and technology. The marketplace climate initiatives included help for SMEs, not in the form of subsidies, but by cutting paper burden, increasing access to capital, and improving access to information. For example, pilot programmes were launched under the Canada Community Investment Plan to help community-based investment groups match informal investors and other local sources of venture capital with local firms looking for small amounts of equity. Another example of a programme or policy change, in conformity with the move towards cost recovery, was making loans under the Small Business Loans Act (SBLA) subject to a 1 per cent lenders' fee. (The SBLA provides loan guarantees to small businesses, giving them access to needed capital.)

The BMIE infrastructure initiatives were aimed at the infrastructure of the future, and included regulatory reform in telecommunications and plans to develop the information highway faster. The trade initiatives included reducing overlap between different levels of government, and focusing on SMEs. In regards to technology, specific initiatives were announced the following year as part of the S&T Review. However, BMIE set out the government's commitment to fostering greater linkages between all participants in the national system of innovation, and setting priorities with measurable goals.

Programme Review, Downsizing and the Reduction of Subsidies to Business

As previously mentioned, concurrent with the development of *Building a More Innovative Economy* was a government wide exercise known as Programme Review. Under Programme Review all government activities were re-examined and evaluated according to six basic tests:

1. Public Interest: does this programme area or activity continue to serve the public interest?

2. Role of government: is there a legitimate and necessary role for government in this programme area or activity.

3. Federalism: is the current role of the federal government appropriate, or is the programme a candidate for realignment with the provinces?

4. Partnership: what activities or programmes should or could be transferred in whole or in part to the private or voluntary sector?

5. Efficiency: if the programme or activity continues, how could its efficiency be improved?

6. Affordability: is the resultant package of programmes and activities affordable within fiscal restraint? If not, what programmes or activities should be abandoned?

Programme Review set overall savings targets for programme spending for the government, and each Minister was asked to prepare departmental action plans outlining strategic priorities and proposals.

As a result of Programme Review, Industry Canada was restructured along three lines of business: micro-economic policy, marketplace rules and services, and industry sector development. These lines of business represented the department's priorities in managing key micro-economic policies. Subsequently, in the 1995 Budget, the department terminated or did not renew over 40 programmes representing nearly 80 per cent of the programme portfolio. Furthermore, Industry Canada's financial resources were projected to decline by more than 50 per cent, with a decline in staff of more than 20 per cent.

Recent Policy Directions

Following from Programme Review, new industrial policy initiatives in 1995 and 1996 emphasised new joint private/public initiatives in high growth sectors, framework policies and the provision of strategic information and advice. The regional development agencies were given new mandates and regional development support to business was decreased by 26 per cent. Support was refocused on loans and repayable contributions to SMEs rather than subsidies. Generally, programme assistance for business development was put on more commercial terms, involving the use of repayable forms of assistance and more risk sharing with the private sector. Assistance was targeted to areas previously recognised as key engines of economic growth -- trade, innovation and SMEs. For example, in the 1996 Budget, the Business Development Bank of Canada received an equity injection of $50 million to increase its lending program, especially to technology and knowledge intensive businesses, by up to $350 million.

Shortly after the 1996 budget, the government's S&T strategy *Science and Technology for the New Century* was released. The main theme of the strategy was partnerships with the private sector, academic institutions and other governments to build a stronger Canadian system of innovation. As part of the strategy, a new system of governance for S&T was announced. A Science and Technology Advisory Council was established to advise the Prime Minister and Cabinet on critical innovation issues, and federal departments and agencies were required to report annually to Parliament on their S&T expenditures, activities, and priorities.

Central to the S&T strategy was Technology Partnerships Canada (TPC), a programme which illustrates the Canadian government's new approach to policy. This programme affirmed the government's commitment to working in partnership with the private sector to help firms grow and create jobs. It addresses what the OECD has called Canada's "innovation gap" -- a lag behind other countries in ability to translate knowledge into commercially successful products and services. TPC departs from previous support programmes in that it takes an investment rather than a subsidy approach, sharing both risk and upside rewards. Highly successful projects could, for example, return two to three fold the original amount invested by the government. At maturity, a significant proportion of on-going funding for TPC will be derived from royalties from successful projects. The government's share of project funding is restricted to 30 per cent, except in exceptional cases. A private sector-led board advises the Minister on strategic priorities to ensure that the programme remains dynamic and capable of responding to the rapid rate of technological change.

TPC supports technology development and commercialisation in the aerospace and defence industries, enabling technologies such as advanced manufacturing, biotechnology, selected areas of information technology, and advanced materials. These sectors have an impact on the industrial competitiveness of all sectors of the Canadian economy, both now and in the long-term. Innovative firms, both large and small, from across Canada have access to the program. Lastly, and important for the new approach to policy, TPC is closely co-ordinated with the programmes of other government agencies.

Another indication of the new direction for industrial policy in Canada, in particular the emphasis on building the framework for private sector job creation, was the release in May 1996 of a report on the Information Highway. This report, *Building the Information Society: Moving Canada into the 21st Century* was both a progress report on Canada's transition to an information society and the government's response to the recommendations put forward by the private sector led Information Highway Advisory Council which was formed in 1994. The report outlines government wide actions to help Canada take its place in the knowledge driven global economy. The report stresses encouraging competition and providing choice for businesses and consumers. Canada aims to have one of the world's most pro-competitive, forward looking and user driven information highway frameworks in place by 1998.

As well as the release of framework documents for S&T and the Information Highway in 1996, other actions also indicated the new direction of industrial policy in Canada. There was increased development of Industry Canada's role as a provider of information with the launch of Strategis, the largest business Internet Site in Canada and a comprehensive source of business information and intelligence targeted to the needs of Canadian entrepreneurs. Industry Canada has also updated, proposed amendments or is reviewing most major marketplace framework laws and policies, including the

Competition Act, the Bankruptcy Act, The Standards Council of Canada Act, the Copyright Act and the Canada Business Corporations Act.

The 1997 Budget

The 1997 budget, released on February 18, highlighted the need for a competitive economy. It confirms a two-track approach to economic policy. First, the government is building a foundation of macro-economic stability by improving its fiscal situation, keeping inflation low and lowering interest rates. Second, the government is building on this foundation by taking targeted micro-economic actions to ensure that Canada benefits from the knowledge-based and global economy of the 21st century. Industry Canada's work remains at the centre of the micro-economic element of the government's economic game plan, with an emphasis on science and technology and small business, which were once more recognised as crucial for job creation and growth.

The budget built on the themes of the S&T strategy with a series of new and innovative initiatives. Perhaps the most important among these is the new Canada Foundation for Innovation. This independent organisation, operating at arm's length from government, will invest $800 million over five years (to be levered through partner's contributions up to $2 billion) in modernising research infrastructure at Canadian post-secondary education institutions and research hospitals in the area of health, environment science and engineering. The budget also renews the Networks of Centres of Excellence Program, which encourages universities and other partners to work together on major research priorities and strengthens the National Research Council's Industrial Research Assistance Programme which provides technical support to small business.

The budget once more recognised the importance of small business to job creation. The ceiling under the Small Business Loans ACT (SBLA) was increased from $12 billion to $14 billion. When the programme was put on a cost recovery footing, there was some concern expressed that demand would be reduced. Instead, demand has continued to increase, indicating that this programme is filling an access need. Like previous changes to the Business Development Bank of Canada, the SBLA changes show a commitment to a commercial and loan based rather than a subsidy based approach to assistance to business.

Looking ahead: The knowledge-based economy

Recent economic performance indicates that the Canadian economy is on the right track, and that the approach to industrial policy that has been developed and refined over the last ten years is contributing to this success. However, much remains to be done as the growth of the knowledge-based economy brings with it new competitiveness challenges for all economies, including Canada's. The effective management and use of knowledge will determine continued economic success for Canada. Industry Canada has established goals and strategic objectives to lead the department into the knowledge-based economy of the next century. Its goals are economic growth, employment growth and income growth. Its strategic objectives are:

- investment: improving conditions for investment in the Canadian economy;
- innovation: improving Canada's innovation performance and the transition to a knowledge-based economy;
- trade: working with Canadian companies to increase Canada's share of global trade;

- marketplace: building a fair, efficient and competitive marketplace for businesses and consumers.

These objectives must be met with a shrinking financial and human resource base. In the past few years, new programmes such as Technology Partnerships Canada have been approved, but all have been financed by reallocation either within Industry Canada or from within existing government resources. The department's budget continues to decline, and is projected to drop from $968 million in 1996-97 to $710 million in 1990-2000[3]. Meeting objectives with the resources available will require new kinds of organisations better able to respond to client needs, developing the skills and knowledge of staff and using the most up-to-date work practices and technologies to reduce costs and improve service quality. The department is using information technology, such as Strategis, to improve service to clients, and identifying means for alternative service delivery, such as Special Operating Agencies which often have significant input from the private sector.

Industry Canada is aiming to build on the progress made in providing access to the information highway and the knowledge infrastructure generally. Industry Canada will continue to modernise business frameworks to make Canada an attractive and competitive place for companies to grow and invest, and to provide targeted and strategic support for innovation and growing SMEs. Recent analysis indicates that the knowledge-based economy is essential for future growth, and that the knowledge-based economy will require industrial and human resource policies to be closely linked. Thus, an increasing focus is being placed on human resource development, especially youth, and working closely with the department of Human Resources Development on developing a micro-economic strategy for jobs and growth which will help Canada remain competitive and prosperous well into the next century.

NOTES

1. In 1991, responsibility for regional development in Quebec was transferred to a separate, new department, the Federal Office of Regional Development-Quebec (FORD-Q).

2. Creating Opportunity: The Liberal Plan for Canada, Liberal Party of Canada, Ottawa, 1993.

3. Industry Canada, (1997-98) *Main Estimates*, *Part III Expenditure Plan*.

CZECH REPUBLIC

DEVELOPMENT AND IMPROVEMENT OF THE CZECH INDUSTRIAL COMPETITIVENESS POLICY[1]

by
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Economic Policy Section

In 1989, fundamental social changes occurred in the Czech Republic which also involved a change of principles of the economic system. The transition from the centrally planned economy to the economy based on market principles represented the main orientation of the economic policy. A fundamental change of ownership relations, a substantial restriction of the state role in the economy, a large development of private entrepreneurial activities and other institutional and structural changes represented crucial moments of the whole process.

The Czech Republic entered this transformation period still as a part of the Czech and Slovak Federal Republic. The political and social evolution in both parts of the Federation however took place differently which led -- together with other factors -- to a peaceful separation of both states by late 1992, and since 1993, the Czech Republic has continued as a sovereign independent state.

These changes have, however, also stigmatised the economic development hitherto. By the beginning of the 1990s, *i.e.* at the start of the economic transformation, the Czech industry had an excessively high weight in the structure of the national economy (especially at the expense of the service sector) with a parallel monopolistic and centralised organisation structure and a minimal share of small and medium firm, and with a parallel absence of competition and the private sector. The industrial production was often earmarked by a relatively low value added, *i.e.* little effective valorisation of material, energy, capital and human resources. The trade orientation was directed first of all to a soft Eastern market.

Decisive Steps of the Economic Transformation -- Transformation -- Milestones

- **New codification of the terms for entrepreneurial activities** -- especially of the acts on joint stock companies, on individual entrepreneurial activities of physical persons and on the state enterprise, introduction of the Act on Bankruptcies and Settlement -- adoption of the Commercial Code, Trades Licensing Act, Act on Economic Competition.

- **Prices liberalisation --** the start of an adjustment of prices deformed by the planned economy -- a fundamental and nearly total prices deregulation (except especially energy prices for households, and rents).

- **Foreign trade liberalisation --** at the start of the transformation, the state monopoly on foreign trade was abolished, a fundamental reconstruction of the custom tariff rates from the classification structure view as well as from the view of a fundamental decrease of an average tariff burden was carried out.

- **Renewal of the dominant role of demand --** the beginning of a large adaptation process.

- **Currency exchange rate as the transformation anchor** -- an initial significant devaluation of the crown (1990) which had a significant pro-export effect, and introduction of an internal convertibility (the Czech currency has been fully convertible since 1995; in the course of 1996 a fluctuation band of + - 7.5 per cent and in 1997 a floating exchange rate have been introduced).

- **Privatisation and restructuring --** a fundamental change of the ownership structure but also a change of sector size, production and employment structure as well as a break of the inherited monopolised (state) structure of the industry, establishment of conditions for enterprises' structural adaptation to the sovereign economic decision making and to operation in the free market; use of a non-standard voucher privatisation method.

- **Inception of the capital market --** a change of ownership relations enabled renewal of the activity of the Stock Exchange and the inception of other standard financial institutions.

- **Complex tax reform** (since 1 January 1993) -- a standardisation of tax forms, introduction of a value added tax (VAT).

- **Institutional changes --** especially transformation of the banking system, state administration, justice -- a complex change of the legislation, etc.

- **Accession to the International Monetary Fund (IMF) and the World Bank, association and accession to the GATT/WTO, Declaration on the Central European Free Trade Agreement (CEFTA).**

- **Association Agreement with the EU.**

- **OECD membership** (December 1995).

Present situation

Industry continues to have a decisive share in the actual state and development of the economy of the Czech Republic. That is why extraordinary attention is paid to the formation and assurance of conditions which will enable a further growth of industry and an increase of its competitiveness in domestic and foreign markets.

The actual macro-economic situation of the Czech Republic, resp. its economic environment, in which the industry, the whole entrepreneurial sphere and all businessmen actually operate, is characterised by a demonstration of certain imbalance tendencies. They are connected especially with high current account deficit, lasting difficulties in a further inflation decrease within the level below 10 per cent, and a decline of the GDP and of industrial production.

For these reasons, the latest economic and political activities of the Government include the adoption of the export promotion concept including the establishment of a new export promotion organisation “CzechTrade” and the adoption of new instruments for the protection of local production and market against unfair imports (*e.g.* the antidumping act, the law on extraordinary trade measures, means to combat imports of counterfeit or pirate goods) as well as growing consumer goods imports (a temporary introduction of import deposits).

On the other hand, it is the case of a number of short-term stabilisation measures for the economy’s recovery, namely the fiscal policy sphere (a decrease of budget expenses), including a restriction of the so-called damping programmes in the mining, ore and uranium industries. Other measures are oriented to the stabilisation of the external imbalance, to the acceleration of further privatisation stages but also to the effective performance of the state ownership rights and to the improvement of conditions for entrepreneurial activities and exports with the aim to increase industry competitiveness.

Priorities for the coming years

In principle, the fundamental steps of the economic transformation have been fulfilled. Now it is time to pass to a substantially larger and more sensitive set of economic policy instruments. It will be first of all a case of completing and ensuring framework conditions which form the whole entrepreneurial environment, *i.e.* especially decreasing the tax burden in particular in regard to corporate income tax, a gradual increase of indirect taxes share; a completion of price deregulation; the improvement of the legislative framework (especially of the capital market, economic competition, commercial and trade law, etc.) and its harmonisation with the EU legislation. In this connection, stress will also be put on an effective operation of the state administration, a consistent enforcement of valid legal norms and regulations but also on the establishment of technical norms and research system, etc.

From the industrial policy view, it will be important to overcome the relatively lower competitiveness of the Czech companies on the domestic as well as on foreign markets until now, which is not always caused by low technical and technological level but more commonly by low productivity of labour and thus by lower value added. Furthermore, besides other factors, a hitherto real revaluation of the Czech currency resulting from a relatively high inflation differential plays its role. That is why the continuation of financial, ownership, organisation, material, personal restructuring will have a special significance; a formation of preconditions for the productivity of labour growth (including a desirable relationship between the growth of average wages and the productivity of labour); a development of conditions for financing investments and working capital; strengthening of not only the commercial but also the research and development infrastructure.

Main characteristics of industrial policy in future years

- **Cultivation of the Entrepreneurial Environment**

  – conditions for firms' financial restructuring and stabilisation;
  – completion of the privatisation process, including a decrease of the remaining share of the state ownership in strategic organisations;
  – information support, involving identification of and support in comparative advantages of the Czech industry and trade;
  – environment-friendly technologies support;
  – protection against dumping prices and other non-fair business practices and intellectual property protection.

- **Improvement of Competitiveness**

  – introduction of advanced technologies, machinery and equipment;
  – modernisation of processing industries, innovation and technological development;
  – foreign direct investment inflow;
  – intangible investments -- education and qualification, know-how, licences;
  – industrial research and development;
  – energy saving programmes and a rational raw materials policy;
  – export credits, export guarantees and insurance with a State support -- strengthening of the Czech Export Bank and the Export Guarantee and Insurance Corporation resources, extension of credit and insurance products provided by these institutions;
  – restriction of tariff and non-tariff trade barriers, including creation of free trade zones and international trade groupings;
  – strengthening of the economic role of the Czech embassies, economic utilisation of the Czech Centres abroad, development of activities of the Czech Trade agency, promotion of the participation of Czech organisations in Fairs and exhibitions.

- **Small and Medium Enterprises**

  – elimination of barriers for the development of small and medium enterprises;
  – promotion of entrepreneurial activities (existing and new programmes; the state interests subvention and co-participation in guarantees);
  – consultation and information services.

- **External Relations -- Internationalisation**

  – harmonisation of norms and technical regulations with EU;
  – an active participation in international organisations, in particular OECD, EU, ECE, GATT/WTO;
  – sector analyses as a part of a preparation for discussions on the EU accession.

NOTES

1. This document does not express the official stand of the Government of the Czech Republic in regard to this matter. It contains nevertheless evaluations and assessments which are expressed by the Ministry of Industry and Trade in connection with the discussion on the industrial policy in the Czech Republic.

DENMARK

INDUSTRIAL POLICY ORIENTATION IN DENMARK

by
Ministry of Business and Industry

Introduction

During the 1980s and in the beginning of the 1990s, industrial policy in Denmark was dominated by a substantial number of industrial programmes based on subsidies. Moreover, policies affecting business conditions were carried out in a rather uncoordinated manner. Education policy, research policy, industrial policy and sector policies (*i.e.* energy policy and healthcare policy) each had separate strategies with little attention paid to the interdependency between the strategies. New industrial policy measures were in most cases carried out on an ad hoc basis targeted at barriers in areas such as technology, entrepreneurship, exports etc.

In 1993, a new government came into office. As the Danish economy was confronted with high unemployment, increased globalisation and increasing competition from low-wage countries, one of the governments most important goals was to formulate and implement a new business strategy.

The business strategy has three major goals. Firstly, it aims at a high degree of co-ordination between all policies and public actors (ministries, regional bodies and local bodies) influencing business performance. Secondly, it seeks to increase the transparency of subsidy measures by cutting the number of measures and by ensuring a high degree of uniformity in the remaining measures. Finally, it formulates the major challenges confronting the Danish business sector and points out ways to create better framework conditions.

While macroeconomic policies and labour market policies constitute the foundation for long-term planning within the enterprises, industrial policy is targeted at improving framework conditions in individual industries and sectors which are of crucial importance for their performance. Framework conditions are defined as policies affecting enterprises ability to innovate, to adopt global strategies, and to continuously deploy and renew its material and immaterial assets.

However, the emerging knowledge-based economy does not only have a high potential for higher incomes, better productivity and improved working conditions. It also implies risks of unemployment and marginalisation for the least trained part of the labour force.

Therefore, the Danish response to the challenges of the knowledge-based economy is two-fold. On the one hand it focuses on the creation of world-class framework conditions for the enterprises. On the other hand employment opportunities for low-skilled workers must be enhanced by education and training and by creating new jobs for them in the private sector -- without significant changes in the income distribution.

In the last two years, the new Danish strategy has resulted in hundreds of new initiatives at national, regional and local levels. They include general initiatives addressing the need to improve work force qualifications, capital market conditions, infrastructures, etc. And they include a large number of initiatives directed at specific barriers to growth and critical framework conditions in those business areas where Danish enterprises are specialised.

The remainder of the paper highlights the most important changes in policy directions due to the new strategy.

Focus on resource areas

The resource areas are broad coherent business areas, consisting of several industries, in which Danish enterprises are specialised according to production and trade. The sectors and enterprises within each resource area are characterised by a high degree of uniformity both with regard to co-operation/sub-contracting, use of production factors (including technology) and concerning crucial framework conditions.

Box 1. **Definition of resource areas**

- A resource area is a broad range of products and services, which is relatively stable over time and has a considerable weight and size in the economy.
- A resource area is made up of sectors that are mutually interdependent or are in a common relation due to the requirements to produce the final product or service in co-operation.
- The enterprises in a resource area have the same demands in terms of factor conditions.

The efforts to divide the Danish business sector into resource areas can be explained by the fact that industrial development and competencies are rooted in the interplay between enterprises, sectors, markets, and public institutions. Thus, policies taking their point of departure in individual industries often fail to take into account the dynamic forces determining structural change and long term competitiveness.

To establish a sound basis for policy initiatives, the Danish Agency for Development of Trade and Industry carried out comprehensive analyses of strategic development characteristics within each resource area, which are:

- foodstuff,
- consumer products,
- building and construction,
- communication,
- transportation/energy/environment,
- medico/health care,
- non-specific supporting industries.

The 7 resource areas cover approximately 95 per cent of Danish employment and exports.

In 1994 and 1995, the Danish government established reference groups for the specific resource areas, who identified the specific challenges and critical framework conditions and set up working groups. Each working group put forward specific proposals to improve the critical framework conditions on the basis of discussions and analyses. The reference groups and working groups consist of individual enterprises, business organisations, research institutions, public bodies, etc.

New and small businesses

The Danish policy on new and small businesses focuses on identifying and removing barriers to creation of new businesses and growth of existing small businesses. Possible obstacles include access to venture capital, attitudes towards entrepreneurship, and administrative burdens due to obligations towards public bodies.

In spite of the fact that small enterprises play a relatively important role in the Danish business sector, there are several signs of weaknesses and obstacles to growth:

- the establishment rate of new businesses is below OECD average.
- attitudes towards entrepreneurship are generally negative, especially among high-skilled workers.
- the solidity of small businesses in Denmark is considerably below the solidity of large enterprises. Due to a relatively weak market for venture capital, the average solidity rate in Denmark is also low in an international context.

To improve framework conditions for new and small businesses, a number of new initiatives have therefore been implemented.

A coherent strategy for the education system has been developed in order to improve pupils and students motivation and ability to become entrepreneurs. The plan includes the development of personal skills through new training and teaching processes as well as new courses in entrepreneurship.

A task force has been established in the Ministry of Business and Industry with the purpose of developing proposals that reduce administrative burdens in SMEs. The initiatives include deregulation, better co-ordination between public authorities, reporting via IT/Internet, development of new administrative services to SMEs (*i.e.* outsourcing the administrative burdens).

A guarantee scheme has been introduced to promote the establishment of a number of venture companies, that provide venture capital to SMEs.

A stock market reform has been implemented. Among others, the reform opens up specialised stock markets for SMEs subject to government supervision.

Innovation Policies

Innovation is regarded as a key area in Danish industrial policy. The new business strategy puts special emphasis on the concept "Access to knowledge". A range of new institutional set-ups have been developed in order to increase co-operation and networking between public knowledge institutions and private enterprises. And in order to facilitate an effective diffusion of knowledge to small and medium-sized enterprises.

The most important new initiatives are:

- the establishment of a number of Research Centers, which allow private enterprises, universities and specialised research institutes to co-operate on research of common interest;

- "Research and Technology Contracts" which constitute a legal agreement to co-operate on specific projects between enterprises, technological service institutes and research institutes -- the government finances the costs of technological service institutes and research institutes for entering into the projects;

- Innovation Centers established in connection with universities and public knowledge institutions, which provide financial and advisory services to entrepreneurs, new businesses and potential entrepreneurs among academics and students.

Promoting technological and organisational change

In the period 1984-1992, Danish governments invested 1.4 billions DKK in programmes promoting investments in new technologies in small and medium-sized enterprises. The largest programme was the so-called "Technology Development Programme" (1985-90) by which the government granted more than 1 billion DKK to private enterprises investing in information and communication technologies.

In the beginning of the 1990s, 280 million DKK were granted to enterprises introducing a broad range of development projects including training programmes, ISO certification, Total Quality Management, Business Process Re-engineering, etc.

Today, focus is oriented towards the need to improve the quality of services that enterprises are making use of when planning and initiating organisational changes. Thus, shifts to flatter organisational structures and new management principles also have impacts on the demand for training, counselling and competencies. Moreover, a need to increase enterprises' access to information and knowledge about organisational and managerial change has been identified.

Under the headline "Management, Organisation and Competencies in the Knowledge-based Society", the Danish government initiated in 1996 a wide dialogue process with participation of individual enterprises, social partners and knowledge institutions. The purpose of the dialogue was to improve public policies in areas which influence the rate and quality of organisational change within the enterprises.

The outcome is 10 new initiatives to be implemented during 1998 and 1999. The initiatives have been designed to meet the following needs of businesses:

- advisory services for SMEs demanding specialised services from educational institutions;

- provision of specialised training for consultancies to comply with enterprises' need for holistic change projects, including both technological and organisational change;

- new institutional set-ups in order to increase the co-operation between businesses and universities, including the establishment of a new network-based research center which will allow enterprises, consultants and universities to co-operate within the field of new work organisation;

- a research project focusing on new standards for measuring and accounting intangible assets;

- so-called "Change Contracts" designed to initiate co-operation projects between public institutions and private enterprises concerning organisational change and new qualifications.

Supplementary Training

In Denmark, there is a long tradition for legislation and tripartite co-operation on supplementary training for adults. The Danish government has during the past few years carried out a number of reforms in order to secure a larger and more diversified scheme of education for adults and supplementary training. The organisation of the education has become more flexible for example when considering the needs of SMEs for specialised training.

The Ministry of Labour has established a two-year national pilot scheme with the purpose of increasing the awareness of supplementary training, and to promote strategic planning of education within the enterprises. The purpose is to create a more qualified demand for public supplementary training schemes. Special emphasis is put on increasing the degree of co-operation between SMEs and providers of training services.

Export promotion

Improvement of competences in the individual companies, access to up to date information on markets, access to markets abroad, and to competitive financing of exports are key issues in Danish export policy. To improve the competitiveness of Danish companies, initiatives have been taken in:

- Improvement of skills and qualifications within companies new to export and international work. Practical training of students in marketing and export skills.
- Better use of the Danish information and export assistance services and introduction of users' fees.
- Assisting Danish companies in entering selected new and promising markets. Selection of business partners and introduction to business culture and conditions in such markets are essential parts of the activities.
- Assistance to long-term, targeted export campaigns for branches and groups of companies.
- Implementing a survey-group for technical trade barriers and mechanisms to deal with complaints within the frames of the European Union, GATT and WTO.

- Privatisation of marketable export risks and a streamlining of the state export credit insurance and exporting finance assistance to ensure internationally competitive terms for Danish exporters.

FINLAND

FINNISH INDUSTRIAL POLICY IN THE 1990s

by
Ministry of Trade and Industry

Background of the new industrial policy

The Finnish industrial policy has changed quite dramatically during the 1990s. Until then, it was very traditional: government subsidies were used to support industrial investment and bail out large corporations in financial crises; regulation of economic activity was tight and many industries were sheltered from both domestic and foreign competition. Moreover, the national growth strategy was based on the accumulation of productive resources during the post-war years. As a result, efficiency and productivity questions were not a central concern for Finnish policy makers.

By the end of 1980s, the “investment-driven” growth strategy had run its course and created widespread inefficiency in the Finnish economy. As the economic environment changed rapidly in the turn of the decade, it became clear that the Finnish industrial policy required fundamental re-evaluation. The results of the subsequent re-evaluation process are summarised in the three policy documents published in the 1990s.

National industrial strategy of 1993

The first of these documents was the “National Industrial Strategy for Finland” published in 1993, during the deepest recession in Finland’s history. The recession was characterised by a rapidly increasing current account deficit, mass unemployment, and an explosion of public sector debt. To combat the mounting economic problems, the government chose an export-driven growth strategy that was based on the competitiveness, growth and diversification of the Finnish manufacturing industry. The service sector played only a secondary role in the new growth strategy because it was generally seen to be closely-linked to, and dependent on, the success of the manufacturing sector.

The export-driven growth strategy was built on new economic theories that underlined the importance of human capital, technology development (R&D) and competition as the principal determinants of economic growth and competitiveness. The new perspective emphasised the globalisation of factor markets, increasing specialisation of production and differentiation of product markets, and the tendency of industrial concentration. A special emphasis was also laid on the interaction and interdependence of firms and production activities, which called for a “cluster-based” approach to industrial policy. Also, the improvement of Finland’s locational advantages and attractiveness became a major goal for industrial policy.

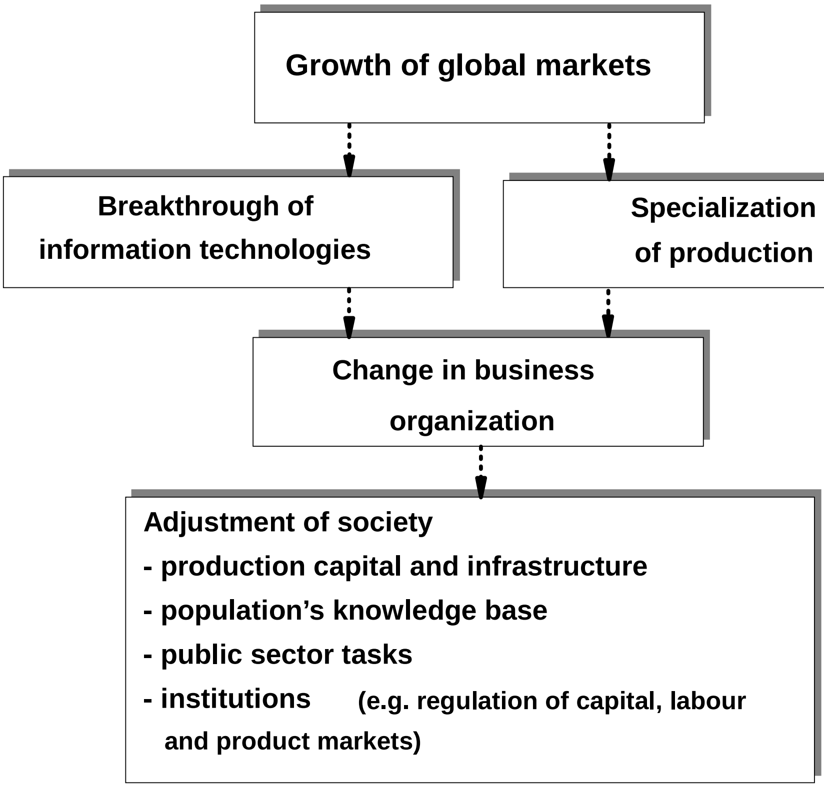
The overall framework for the new Industrial Strategy was based on Michael Porter’s “Diamond” theory of national competitive advantage. It marked a clear shift from the traditional sector-specific government interventions to horizontal policy measures which were related to: general macroeconomic environment, financial markets, taxation, environmental protection, SMEs, logistics, energy and raw materials, labour markets, education, technology development and international agreements. The strategy also identified the most important industrial clusters in Finland: forest, telecommunications, metal, energy, environment, well-being and transportation.

From a policy-making perspective, the main weakness of Porter’s diamond framework was its vagueness about the role of government. In short, industrial or competitiveness policy was defined as all policy measures that could improve the four corners of the competitiveness “diamond”. Such a general definition posed a major challenge for policy makers. In particular, Porter’s framework gave very little guidance in practical policy questions concerning the specific nature, limits and means of government intervention. Hence, the MTI began to draft a new policy document that would complement the Industrial Strategy by carefully defining the appropriate role of government in the rapidly changing socio-economic environment. As a result, the MTI published “A New Outlook on Industrial Policies” in 1996.

New outlook on industrial policies

The need to redefine the role of government was based on the major economic and social adjustment challenges created by the deep technological and structural changes taking place in the world economy. According to the New Outlook, Finland’s economic and social problems reflected a world-wide techno-economic paradigm shift which could be compared to the First and Second Industrial Revolutions in the late 18th and 19th centuries, respectively. The main driving forces behind the new paradigm shift were the globalisation of the world economy and the breakthrough of new information and communications technologies. In recent years, these forces have led to a major change in firms’ production processes and organisational arrangements. The adjustment of public sector role and institutional framework (laws, regulations, and informal behavioural norms) has been much slower.

Chart 1. **The structural change process**



Source: A New Outlook on Industrial Policies, MTI Finland, 1996

The rapid technological and structural change in the world economy has fundamentally changed the environment of industrial economies. The adjustment problems have resulted in high structural unemployment and sustained public sector deficits. These problems require rapid structural reform in both private and public sectors of the society. If successful, such reforms can form the basis for a new period of sustained growth. On the other hand, structural rigidities and slow adjustment are likely to produce growing social problems and uncertainty.

The growing global competition and domestic productivity problems gave rise to a new "efficiency-driven" growth strategy where the government focused on the reduction of market failures. The new strategy did not change the basic principles of the 1993 Industrial Strategy but it defined more carefully the market failures that **could** require government intervention. Such market failures involve, *inter alia*, insufficient competition, inefficient functioning of capital markets and inadequate investment in research, development and education.

Graph 2. **Market failures and possible public sector tasks**

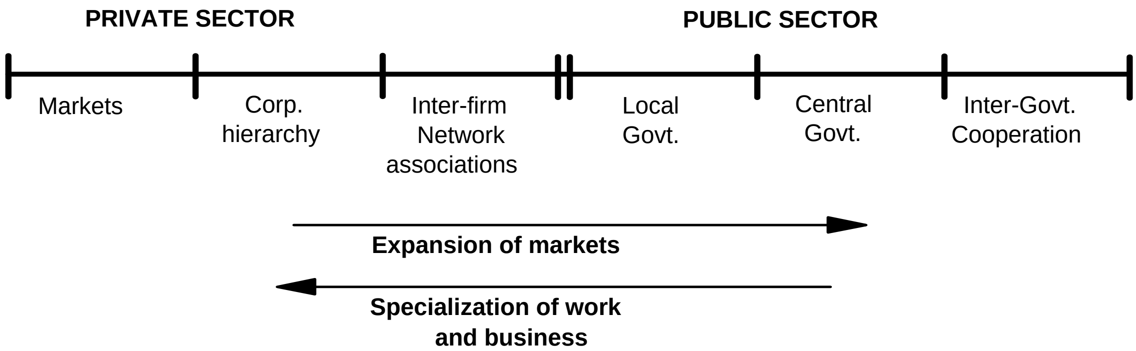
MARKET FAILURES	POTENTIAL PUBLIC SECTOR TASKS
Internal and external security	Maintenance of judicial system, property rights, police and army
Large cyclical variations	Aggregate demand management by monetary, financial and exchange rate policies
Barriers to competition	Competition policy, restraint in regulation and industrial subsidies, labour market reforms, liberalisation of international trade
Public goods	Provision of transportation and communications infrastructure
Externalities	Promotion of positive externalities (education and R & D) and reduction of negative externalities (environmental damage)
Large uncertainties and informational problems	Improvement of market information, export and finance guarantees, R & D support, development of venture capital markets
Structural adjustment rigidities	Promotion of structural change, provision of economic vision, conflict management between interest groups
Economies of scale and learning	Export promotion, facilitation of structural adjustment, public procurement

Source: A new outlook on industrial policies, MTI Finland, 1996

The New Outlook pointed out that the existence of market failures does not necessarily call for government intervention, many of them can be effectively reduced by private sector solutions. The different organisational arrangements of market economies -- the price mechanism, corporate hierarchies, inter-firm networks, associations, local authorities, central government and inter-governmental co-operation -- are often alternative and complementary solutions for specific market failures. For example, environmental problems (negative externalities) have been reduced by both private sector initiatives (market behaviour, corporate action, inter-firm co-operation) and the laws and regulations of local and national governments and supranational institutions.

There are no simple rules of thumb for the effective organisation of an economy. As a result, the appropriate division of labour between private and public sector organisational arrangements and specific public sector interventions must be evaluated in the particular circumstances of time and place. However, over time, it is possible to distinguish two clear, but opposing organisational trends.

Graph 3. **Alternative organisational arrangements for reducing market failures**



Source: A new outlook on industrial policies, MTI Finland, 1996

First, over the past few centuries, the organisation of economies has been influenced by a continual growth of markets, which has significantly increased the scope of many market failures. The geographical expansion of market failures has favoured more comprehensive and powerful organisational arrangements, in both the private and the public sectors of the economy. The market mechanism typically co-ordinated economic activities in the 19th century. However, during the past century, it was first replaced by corporate hierarchies and more recently by inter-firm networks as the dominant organisational paradigm. In the same way, public sector activity was first dominated by local principalities and authorities, then by nation states, and currently more and more by inter-government co-operation (*e.g.* EU, WTO, UN). More generally, the responsibility for overcoming market failures has increasingly shifted from the private to the public sector.

The other, opposing organisational trend is caused by the ever-increasing specialisation of work and production activities. The increasing specialisation of workers and firms have made their needs more heterogeneous. The greater differentiation of needs does not only apply to private goods and services but also those that are related to the reduction of market failures. In other words, the growing specialisation of needs requires increasingly "tailor-made" organisational solutions to market failures.

In the public sector, this trend has increased the emphasis on "subsidiarity" and pushed the responsibility for many tasks to lower levels of government. The same trend can also be recognised in the private sector. In some areas, inter-firm co-operation has been replaced by large corporate hierarchies, very often multinational corporations; and in others, markets have been created where corporate hierarchies used to internalise interdependent business activities. Also, the co-operation between the private and public sectors of the economy has increased.

Finally, the New Outlook emphasised that inter-firm co-operation and non-profit associations can often remedy a limited market failure more effectively than the government. However, these organisational alternatives may suffer from a "free rider" problem where the benefits of reduced market failures diffuse to parties that have not paid their share of the related costs. The free-rider problem may offer a comparative organisational advantage to countries like Finland which have well-established and comprehensive co-operative associations for many spheres of economy and society. Their activities and energy could increasingly be directed towards the market-facilitating and competitiveness-enhancing activities that have traditionally been the responsibility of government (*e.g.* training, information and other public goods, basic R&D, etc.). As a result, government interventions could be focused on problems that cannot be effectively solved by the private sector.

Government's white paper on industrial policy

The environmental analysis and policy principles of the New Outlook formed the basis of the subsequent White Paper of the Finnish government which was published in late 1996. Other significant contributions to the White Paper were an expert group report on the development of the Finnish service sector, a programme for SME policy, and the decisions of Ministerial Committees concerning the privatisation of state-owned corporations and energy policy.

In the White Paper, the whole government committed itself to a market-failure based approach to industrial policy. The market-failure approach was elaborated for the different areas of industrial policy in the form of policy outlines. These areas included: competition policy, state aids, state ownership, tax system, financial markets, technology development, education, energy supply, environment, regional development and industrial policy administration.

The White Paper also emphasised the importance of taking a "cluster-based" approach to practical industrial policy measures. Such an approach is consistent with the specialisation of firms' needs with regard to solutions to specific market failures. The White Paper also paid special attention to the urgent need to develop the service sector of the Finnish economy. More specifically, the government decided to consider and treat the service and manufacturing sectors equally in industrial policy making. Moreover, specific policy measures will be planned for the knowledge-based services and price- and cost-sensitive services.

Future challenges

The rapid development of the Finnish industrial policy in the 1990s poses several challenges to practical policy making. The most important of them are briefly described below.

a) **Redefining the role of government**. The rapid technological and structural change of the world economy requires a fundamental rethinking of public sector activities. The continuous public sector deficits and high tax rates are not sustainable in the long run and their reduction requires further prioritisation of government duties. The New Outlook redefined the role of government in economic policy. The new approach to the public sector role was adopted by the Government in the White Paper. However, the transformation of the government role takes time. The whole public sector, at all levels, needs to adopt a new way of thinking about industrial policy.

b) **Diffusion of the market failure approach**. The market-facilitating approach to industrial policy requires further elaboration and propagation among the different authorities responsible for industrial policy. The market-failure framework has not been fully internalised by the different departments of the MTI, not to speak of the other ministries (education, communications, finance, etc.) and sub-national authorities responsible for industrial policy. A major education and communication effort is likely to be needed before the new thinking has been internalised by all relevant policy makers.

c) **Co-ordination of industrial policies**. Since industrial policies are planned and implemented in different parts of the administration, their interdependencies should be closely co-ordinated. At the moment, systematic and regular co-ordination only takes place at the level of the government and state secretaries. In addition, EU-related matters and some other aspects of industrial policy (such as energy, industry and forest policies) are co-ordinated in national committees. However, these committees tend to represent only the higher levels of civil service and interest groups. Moreover, they usually meet rather seldom, which makes the co-ordination of day-to-day policy making difficult. The most urgent need of co-ordination involves the lower levels of civil service where the practical industrial policy decisions are planned and implemented.

d) **Systematic policy evaluation**. At the moment, there is very little information about the impacts of industrial policy on economic performance, welfare and unemployment. Also, the tools of policy evaluation are poorly developed. Despite some current initiatives, a lot still needs to be done to improve the decisions and success of different types of industrial policies.

e) **Benchmarking framework conditions**. Finland has recently began to benchmark its framework conditions of industry. The MTI is actively participating in the benchmarking work of both the European Union (DG III) and the OECD (Industry Committee). In the EU, Finland is the lead country of one of its four benchmarking pilot projects. Moreover, the Ministry of Finance has started a broad benchmarking project of its own. The policy benefits of these projects will come in the future, and they will be influenced by the continuity and co-ordination of the different benchmarking activities and the quality of the methodologies used. Most important of all, the success of benchmarking is ultimately determined by the effectiveness with which the new information is transferred into actual policies.

f) **Regulatory reform**. Finland has not yet embarked on a fundamental regulatory review and reform process. The need for fundamental regulatory review and reform has not managed to draw the attention of policy makers, politicians or the general public. The administration has only recently begun to prepare itself for the regulatory challenges of the 21st century. However, most regulatory issues are still addressed in a reactive manner, as a response to crises or the complaints of those affected. As a result, outdated regulations are likely to slow down the diffusion of new production methods and technologies in Finland.

g) **Service sector development**. In the White Paper, the Finnish government committed itself to developing the service sector alongside the manufacturing sector. It has already started a trial project that involves the whole of Finland where two different financial incentive schemes are used to encourage households to use more external services. This project may offer a partial solution to the lack of personal services in the Finnish economy. However, a more fundamental solution to this problem would require a major reduction in the Finnish tax wedge, which is one of the highest among the OECD countries.

The growth of business services is limited by the small size of the Finnish markets. Highly specialised business services require large markets which Finland often does not have. As a result, Finnish service firms are often disadvantaged relative to their foreign competitors who can develop their firm-specific advantages in large domestic markets. Small domestic markets also affect the framework conditions of service firms because public sector efforts are often focused on larger and internationally competitive sectors. Hence, industrial policy makers face the difficult problem of overcoming the natural disadvantage of small markets in trying to create new internationally competitive service clusters. The small size of domestic markets puts a special emphasis on policies that support the internationalisation of the Finnish service firms. Recently, such internalisation has tended to take place mainly through foreign acquisitions of Finnish service companies.

h) **Strengthening the role of non-profit organisations**. As noted above, the locus of industrial policy is, to a certain extent, shifting away from nation states. Some of the public sector duties could more effectively be undertaken in the non-profit sector. This is particularly the case with the reduction of market failures which involve specialised needs and preferences. Finland has always had plenty of associations and special interest groups. Unfortunately, many of them have become financially dependent on government hand-outs and have consequently directed their policies towards lobbying the public sector. As a result, the great potential of having a strong non-profit sector which could handle many limited market failures more effectively than the government has not been realised. In the future, the government will have to redefine its relationship with the non-profit sector in a way that fully utilises both sectors' comparative advantages.

i) **Development of more effective technology diffusion policies**. Finland is one of the leading countries in the transition to a Knowledge-Based Society. This puts a major emphasis on the continuous development of the national innovation system. Particularly, international co-operation and technology diffusion and utilisation require further attention.

Like the post-war growth strategy, the Finnish technology policy has been investment-driven. In the minds of many policy makers, increasing investments in R&D have been equalled with better technologies, economic growth and increasing employment. However, after the recent government decisions to increase the level of national R&D investments to 2.9 per cent of the GDP, there is an increasing risk that not all public R&D investments will be utilised effectively. Moreover, as a small country, Finland will always import most of its technologies from abroad. For both reasons, Finnish technology policy will have to pay special attention to the diffusion and transfer of new technologies in the Finnish economy. The importance of technology diffusion and transfer for economic performance has recently also been emphasised by the OECD.

FRANCE

MAIN ORIENTATIONS OF FRENCH POLICIES FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

by
Ministry of Economy, Finance and Industry

Introduction

The current industrial climate is characterised by increased competition on domestic and world markets and by rapid technological change. As a result, enterprises must constantly adapt to the changing situation if they are to continue to develop. They primarily do this by moving into market segments which have high value added and/or by making regular process or product innovations.

How has the French government reacted to these industrial trends and what steps has it taken to promote industrial competitiveness[1]?

For any country, the strength of its industry and industrial performance are one of the best indicators of the health of the economy as a whole and an essential engine for growth. After the market segment policy of the 1970s and the policy of promoting specific branches of industry (until around 1985), both of which relied on State intervention to modernise the industrial system (primarily through sector-based plans and nationalisations), France’s industrial policy has changed. There is now a consensus that to reactivate growth, enterprises must have the means to make the most of the opportunities opened up to them by the globalisation of trade and to capitalise on their assets in the global market-place. Seen in this light, the role of the State is to create a favourable and attractive environment for entrepreneurship and to provide enterprises with the stimulus they need to develop their competitiveness. In this respect, French industry has a relatively high level of competitiveness (I) which the industrial competitiveness policy implemented by the government over the past ten years has tried to preserve and enhance (II).

PART ONE. A COMPETITIVE INDUSTRIAL SYSTEM THAT NEEDS TO ADAPT

Constant gains in competitiveness have allowed French industry to establish itself more firmly in the world market over the past few years. This effort must continue in the future, but it is not an easy task in an increasingly global economy and there are signs that French industry is finding it hard to adjust to economic changes.

I. A competitive industry and a major player on the world stage

French industry is characterised by its great openness to international markets, both in terms of its dynamism in exporting and the size of inward and outward industrial investment, which reflects the competitiveness of French enterprises and France's great attractiveness to foreign investment. However, this cannot disguise the structural weaknesses that exist in French industry.

1.1 International openness

a) Sustained growth in foreign trade as an indication of increased competitiveness

After several years of successive trade deficits (until 1991), French industrial enterprises now generate a trade surplus through their exporting activities and in 1996 France was the world's fourth largest exporter of manufactured goods, with a share of the world market ranging from 5.5 to 6.5 per cent, depending on the year, and a record trade balance surplus in 1996[2]. This export performance testifies to the satisfactory level of competitiveness of French enterprises. On the whole, French products have a favourable image abroad because of their quality, diversity and degree of innovation. The penetration of foreign markets is especially strong in high-technology sectors, in which French groups have gained a world-wide reputation (aeronautics, space, railway equipment, industrial electronics), and in the luxury goods sector.

French enterprises trade first and foremost with Europe (60 per cent of exports). Trade with Asian markets is still marginal (2 per cent market share), but is somewhat larger with the United States (2.3 per cent) and South America (nearly 4 per cent). In this regard, the government makes a constant effort to help French enterprises establish themselves in profitable markets. The government has launched initiatives to publicise and promote French industry abroad in order to improve the penetration of French products in certain countries (the "Exporting to Japan is possible" campaign in 1992 and the "French Initiative towards Asia" campaign in 1996).

b) French investment abroad

French exports are driven in part by foreign investment. In 1996 France was the world's fifth largest investor (in terms of stocks)[3] and the number of foreign subsidiaries of French enterprises has steadily increased and now accounts for the equivalent of 30 per cent of domestic production in 1996. 40 per cent of this direct investment abroad was made by industry, with the chemical, electronic and electrical equipment sectors accounting for the largest share of investment. Investment is concentrated mainly in the OECD countries, but is increasingly shifting towards high-growth countries (South-East Asia, Brazil-Argentina, Eastern Europe). SMIs play only a modest role in direct investment abroad[4].

c) The steady growth of foreign investment in France

Attracting foreign industrial investment to France is a major challenge for the government because of its potential to stimulate growth and employment. The government's constant efforts to improve the business environment have unquestionably made France more attractive to investors. France now ranks second in inward industrial investment among European countries and third world-wide, accounting for 6.4 per cent of the world-wide foreign investment flow compared with 5 per cent in 1984. Subsidiaries of foreign groups are mainly to be found in the chemical, data-processing and consumer electronics sectors. In 1994, they accounted for more than 27 per cent of business turnover in France and employed 22 per cent of the industrial labour force. These figures show the high level of globalisation of French industry, but also the success of the government's policy of making France more attractive to foreign investors and enhancing its positive image.

1.2 Improvement of industrial competitiveness hampered by structural weaknesses

The competitiveness of industrial manufacturing has clearly improved. Nevertheless, a number of characteristics of French industry currently make it difficult for it to improve its international performance.

a) An industrial structure made up mainly of small enterprises

The structure of the French industry is not entirely conducive to widespread participation by French enterprises in global competition. This is because of the preponderance of small enterprises, in terms of jobs and local development in particular[5], at the expense of medium-sized enterprises. This results in uneven rates of internationalisation in French industry, in that SMIs still lag behind in this regard[6]. Today they only account for 30 per cent of exports and the low level of their direct investment abroad can prevent them from gaining access to emerging markets. The development of foreign trade as a whole will therefore largely depend upon the mobilisation of SMIs. Because of the importance of SMIs and their growth potential, the government gives them special attention and periodically introduces series of specific measures to provide them with the means to improve their performance.

In addition, major French enterprises are rarely large enough to be competitive at the international level. However, some have adopted international development strategies that have made it possible to change this situation. At the same time as they have consolidated their basic activities, they have formed groups large enough to compete globally such as Saint-Gobain, Matra, Bull, Renault, Usinor, Péchiney or Rhône-Poulenc. There have also been European and international alliances, particularly in high-technology sectors, such as the establishment of SGS Thomson (prior to 1985) through a partnership between the French companies France Telecom, CEA Industrie and Thomson CSF and the Italian corporations IRI and Finmeccanica, and the creation in 1995 of the Atlas joint venture by France Telecom and Deutsche Telekom, which in turn entered into an alliance with the US company Sprint.

b) The halting recovery in productive investment

In an economic climate of sluggish domestic demand and increased competition on foreign markets, enterprise creation is risky[7] and existing enterprises face a difficult trade-off between investing and reducing indebtedness. Thus, after rising continuously between 1985 and 1991, productive investment fell by approximately 40 per cent through 1994, before recovering in 1995 and 1996, although without reaching the record level of 1991[8].

Since this situation could result in an increasingly outmoded productive system and a decline in competitiveness, which in turn might limit industry's ability to recover, successive governments have tried to stimulate investment through a number of measures designed to facilitate the creation and buy-out of enterprises (tax exemptions, aid to entrepreneurs) and investment (the programmes of the *Banque de Développement des PME*, the SME Development Bank, established in 1996 to cofinance and guarantee loans to SMEs and to provide aid for the modernisation of the productive system).

c) Relative weakness of industrial R&D

The growth of enterprises is currently driven largely by their ability to integrate technological change into processes and to meet demand with innovative products. It is therefore crucial for enterprises to promote innovation, which will do much to determine their performance. From this standpoint, industrial R&D in France is relatively low in comparison with the situation in other major industrial countries. In 1996, R&D expenditure accounted for 8 per cent of value added in the manufacturing industry -- which was lower than in the United States, Japan or Germany -- and 46 per cent of research in France was financed by enterprises, compared with an average of 53 per cent in Europe. R&D is also highly concentrated in a few key sectors (electrical and electronic equipment, aerospace, railways and shipbuilding, pharmaceutics) and two thirds of it was conducted by enterprises with more than 2 000 employees. This relative lag in R&D is a real handicap for French manufacturers in terms of their ability to compete internationally and unless it can be eliminated may steadily erode their competitiveness in an increasingly open economy.

d) Continuing decline of industrial employment and the lag in organisational change

Two aspects of industrial employment give cause for concern. From a quantitative standpoint, employment in industry has been declining more or less continuously for the past 20 years because of productivity gains, outsourcing[9] and the development of the tertiary sector. Given the direct and indirect weight of industry in GDP[10], this is an obstacle to a lasting recovery in overall employment[11].

What is more, the quality of jobs and type of organisational mode now play an essential role in the performance of enterprises and their ability to adapt to market trends. Enterprises can perform better and become more adaptable by improving their employees' creativity and skills and by organising their work effectively. As a result, the occupational training of employees has become a priority. Enterprises are required by law to devote an amount equivalent to 1.5 per cent of their wage bill to training. A portion of this amount may now be used to finance skill formation contracts in enterprises for young workers. Furthermore, for several years the Ministry of Industry has been actively involved in organising training networks and improving the quality of training[12]. However, the system of validating skills acquired throughout employees' working life, which would make it possible formally to define the employability of workers and improve their mobility, is not yet widespread. Similarly, performance can be improved substantially by organising work more effectively. Innovation remains fairly limited in this area and the potential of organisational changes to raise competitiveness has not yet been fully realised.

II. Outlook

The outlook for industrial activity in a context of increased competition is relatively encouraging.

1.1 Improved economic conditions

The health of French industry improved in 1997 and forecasts for growth in 1998 are optimistic. Growth will be stimulated primarily by the expansion of world trade, which will lead to greater demand outside Europe, from which French manufacturers should benefit in particular because franc/dollar/yen parities have fallen to more realistic levels in recent months. However, even though manufacturers are optimistic and have on the whole improved the financial structure of their enterprises, industrial investment continues to recover slowly, although it should rise slightly in 1998 due to the more favourable outlook for demand.

The convergence of economic policies in Europe and the general reduction of structural deficits prior to the adoption of the single currency in 1999 are also factors that should stimulate short and medium-term growth.

1.2 Increased regional and international competition

Competition among enterprises to capture market share will intensify even further in the near future, at both the regional and the international level.

a) At the European level

The key event of the coming months will be the adoption of the single currency which is expected to enhance the competitiveness of enterprises. The next few years should also see the final integration of the single European market with the implementation of the action plan in favour of the Internal Market, adopted by the Commission in April 1997, which is aimed at eliminating the last barriers to intra-Community trade. The level of competition which should ultimately be achieved will therefore be higher than that which has ever existed between European enterprises. Competition will be further increased over the next 5 to 10 years as the European Community is enlarged to include the countries of Eastern Europe.

b) At the international level

As new countries develop a market economy, new enterprises will enter the world market. This will be the case in particular in low value added market segments (textiles-clothing, leather-footwear, consumer electronics and shipbuilding), in which the price competitiveness of emerging countries gives them a considerable advantage over European and French industries. Despite existing international rules, there is likely to be an increase of counterfeit goods in the most vulnerable sectors (luxury goods, automobile parts, pharmaceutics). This greater international competition makes it essential for French industry to overcome its structural handicaps, and this has been one of the main goals of the government’s industrial competitiveness policy for a number of years.

PART TWO. A COMPETITIVENESS POLICY AIMED AT PROMOTING STRUCTURAL ADJUSTMENT

The goal of improving the competitiveness of French industry cannot be achieved unless, firstly, action is taken at the macro-economic level to create a stable domestic and international framework in which firms can develop, and secondly regulatory action is taken to create a favourable environment for entrepreneurship. However, steps must also be taken at the micro-economic level in the form of measures to assist firms in their efforts to make adjustments. Over the past ten years priority has been given to several types of measure aimed at encouraging French industry to adapt to an increasingly global economy and improve its international competitiveness.

I. Creating a favourable environment in which enterprises can grow

Over the past ten years, the governments have directed their macro- and micro-economic policies towards creating a favourable environment for entrepreneurship.

1.1 Sound macro-economic basics

The government has successfully pursued a policy of competitive disinflation, first introduced in the 1970s, for the past ten years. As a result of this policy inflation has been brought down to around 2-3 per cent, the franc has been stabilised, thereby allowing import costs to be kept under control, and interest rates have steadily fallen and thus provided an incentive for productive investment.

The convergence of the economic policies of most EU Member States has reduced public deficits, kept down inflation rates within the Union and put an end to the competitive devaluation policies from which French industry had suffered until 1995.

1.2 A favourable economic and regulatory environment

In order to optimise the conditions for enterprise development and improve the attractiveness of France as an industrial location, the government has attempted over the past few years to create a favourable environment for the creation and development of industrial activities. This action has been pursued in a number of domains and primarily consists in an activistic territorial development policy; an education policy aimed at ensuring a supply of skilled labour; sustained efforts to reduce the administrative burden on enterprises[13]; construction of comprehensive and high-quality communications infrastructure; major efforts to promote basic research, the cornerstone for industrial research (France ranks first among the industrialised nations in terms of the volume of funding devoted to basic research as a proportion of GDP), and constant improvements in commercial and tax law[14].

II. Vigorous action to improve non-price competitiveness

The comparative advantage of enterprises in the world economy increasingly lies in their ability to improve their non-price competitiveness by incorporating a large proportion of intangible content into products (innovation, quality, prestigious image, etc.). France enjoys high levels of intangible investment[15]. However, for several years the government have expressed concern at the low level of industrial innovation, which has prompted it to draw up a number of incentives in this area.

2.1 Promotion of research activities and diffusion of innovation

a) Development of industrial R&D

For several years the objectives pursued by the government have been to promote industrial research and to diffuse technologies, primarily to aid SMEs. This action has become one of the main pillars of French policy towards industrial competitiveness and a wide range of measures to encourage firms to invest in research have been developed. As a result, public support programmes for industrial research have become one of the priorities of French industrial aid policy during this period. These programmes are mainly administered by the ANVAR (Agence Nationale pour la Valorisation de la Recherche) which grants loans, repayable if the outcome is a success, to cover the costs of research activities (staff, equipment)[16]. Furthermore, firms which step up their research activities can benefit from tax reductions through Research Tax Credits (introduced in 1983).

The government has also endeavoured to increase the supply of capital to innovative SMEs by encouraging the use of private savings to fund innovation (promotion of venture capital, the new stock exchange market set up in 1996, joint funds for investment in innovation which offer tax deductions to private investors who buy into the capital of innovative firms, etc.).

Since 1989 the government has also introduced measures to encourage firms to invest in the development of innovative products or processes of strategic importance (Major Innovative Projects). In the same vein, a study entitled “Key technologies for French industry in the year 2000”[17] identified areas of technological expertise which would have positive spin-offs for French industry in the future. A call for project proposals was issued to firms in industry to develop work on the technologies thus identified.

Incentives to encourage intangible investment include action taken to enhance the skills potential of SMEs. For example, under the Planning Contracts between central government and the regions, in 1984 the State set up Regional Funds for Consultancy Aid (FRAC -- Fonds Régionaux d’Aide au Conseil) aimed at encouraging SMIs to make use of outside consultants by providing funding to cover part of the cost of audits. Similar aid is provided for the recruitment of managers to allow SMIs to enhance their expertise by hiring specialised staff.

b) Speeding up the diffusion of research findings

Accelerating the diffusion of new know-how, processes and products throughout the industrial fabric is crucial to ensuring the competitiveness not only of firms which do not have the financial capacity to fund research activities, but also of major firms which, due to the trend towards networking and outsourcing, need to be able to rely upon support from efficient SMEs. The government encourages the dissemination of research findings through the use of goal-based contracts with research bodies, greater co-operation between research laboratories and firms, the provision of targeted programmes of support for technological investment[18] and technology transfers (Regional Funds for Assistance with Technology Transfers -- FRATT[19]) for SMIs, and international technology exchange programmes. Research findings are disseminated throughout France via a network of Technology Resource Centres and Industrial Technology Centres which also offer advice and consultancy services to firms.

c) Innovation -- The constant priority for the future

The main thrust of technology policy has been maintained in the new incentives offered to high-growth SMEs (financial measures, possibility of distributing stock options in new start-ups under advantageous tax conditions[20]). At the same time, support for the innovative efforts of enterprises can be constantly maintained through a significant increase in ANVAR funding, the creation of new instruments such as the Atout-Drop procedure to promote the use of new production techniques, and the continuation of the programme for acquiring expertise in “key technologies”.

The authorities are also playing an active role in EU research programmes through their collaboration in the drafting of the European Union’s 5th R&D Framework Programme and participation in the Eureka and Medea (micro-electronics) research programmes.

2.2 A policy based on quality

Quality is also one of the key factors in the competitiveness of firms. By allowing firms to reduce wastage and increase customer satisfaction, quality procedures enhance product image and are a major factor in ensuring the long-term survival of firms and in maintaining jobs in industry. Firms are now increasingly focusing on this aspect of their activities in response to the promotional efforts of the Ministry of Trade and the French Standards Organisation AFNOR (Agence Française pour la Normalisation): information campaigns on quality standards and certification systems, award of a national quality prize, financial support for firms wishing to set up quality assurance systems.

Consumers are also increasingly sensitive to efforts by manufacturers to safeguard the quality of the environment. The government encourages firms to take account of environmental considerations in manufacturing processes by promoting the certification of environmental management systems put in place by firms. Furthermore, the Ministry of Industry has made the environment a major issue in its call for “key technology” proposals in that almost half of the technologies selected are directly linked to the environment.

2.3 Flexibility in the organisation of work

The idea of rethinking the organisation of industrial working methods has gradually come to the fore as one of the key factors in firms’ efforts to adjust and to enhance their competitiveness. The reorganisation of industrial working methods has thus become a priority which might help to increase growth in employment.

After consideration and experimentation in the past with social and organisational innovation in working methods (tele-commuting, flexitime, temporary assignments in-house, job-sharing, annual working hour quotas) and the creation of a network of developers to disseminate information on best practices in the area, the course of action to which priority has now been given is that of relaunching very rapidly the debate on working hours in order to find a system that would make it possible to absorb constant productivity gains without damaging either employment or the competitiveness of firms.

The national conference on employment, wages and working hours held on 10 October 1997 concluded that steps should be taken to prepare a draft law setting out an approach and incentives aimed at reducing the length of the legal working week to 35 hours by 1 January 2000 (2002 for small firms). Provision is made for incentives to be offered to firms creating at least 6 per cent more jobs after a

10 per cent reduction in working hours. The system should not result in higher labour costs, mainly because of the organisational changes that its introduction should bring about. The task of determining how working conditions inside firms should be reorganised has been left to management and workers at the firm level. This reflection on work organisation might even allow firms to identify new ways in which to respond to the market which had not until then been considered or developed due to a lack of human resources (moth-balled projects).

In addition, at the instigation of France, the extraordinary summit meeting on employment was held in November 1997 with a view to relaunching the European Union's social chapter and in particular to working towards common approaches to jobs and efforts to combat unemployment. The guidelines adopted were designed in particular to:

- improve the ability of unemployed workers to re-enter the job market, notably by improving the supply of training courses;

- promote the spirit of entrepreneurship by facilitating the start-up and management of firms;

- encourage firms and their employees to develop their capacity to organise their work in a different way in order to achieve a balance between flexibility and security.

III. Facing the major challenge of ensuring the success of French industry in the fourth industrial revolution

While industry has fallen behind its major competitors in terms of innovation, although it is now starting to catch up again, it has also experienced difficulties in integrating new computer and multimedia[21] technologies. The government is firmly committed to ensuring that French industry undergoes its fourth revolution, that of adapting to new computer and multimedia technologies*: "France's entry into the information society [represents] a decisive challenge for the future"*[22]. The aim is to end the isolation of firms, notably SMIs, through growth in electronic commerce and to give firms the opportunity to maintain a genuine technology watch. To this end efforts will be made to encourage SMIs to link up to the Internet.

Alongside this general policy approach, practical steps have been take to make firms more aware of the potential benefits afforded by computer technology with regard to working methods (just-in-time manufacturing, use of EDI in the supply chain in the textile and fashion industries, pharmaceutics, electronics and even printing). These incentives are part of a broader programme of aid to firms to help them to work in different ways, notably in terms of their relations with procurement managers or distributors. Thus in 1995 the Ministry of Industry successfully issued a call for proposals on the "branch partnership" scheme aimed at encouraging innovative partnership arrangements between suppliers, industry and sales networks in order to improve the overall organisation of branches, to better meet customer expectations and, lastly, to achieve gains in competitiveness.

Improving the position of French industry in the information technology market is another crucial economic challenge to which the government has given high priority. The projects selected in response to the call for proposals on "information highways" in 1995 will therefore continue to receive support.

CONCLUSION

Industrial competitiveness is vital for living standards and employment, and has therefore to be maintained within an economic environment which is increasingly competitive. To meet this challenge, the thrust of industrial policy has had to be shifted towards identifying the means by which to boost the competitive development of French industry. That challenge has been met with a certain degree of success as regards innovation and intangible investment, contributing to the distinct improvement in the globalisation of French industry.

Unfortunately, this good performance has not been sufficient to stem the decline in industrial employment and, consequently, the steady increase in unemployment. Reducing the latter is the government's most urgent assignment, which it intends to accomplish by resorting actively to work reorganisation methods. Similarly, while France may well be the fourth biggest industrial power in terms of production, industrial investment is being slow to pick up significantly. These last two factors mar the overall picture and serve as a reminder that the efforts to be made to foster competitiveness and growth are onerous and that there can be no easing up on the part of either firms or government.

BIBLIOGRAPHY

- *Les chiffres clés de l'industrie française 1997/1998*, SESSI, Ministry of Industry, 1997.
- *1997 : l'état de l'industrie française s'améliore*, 4 pages du SESSI, Ministry of Industry, 1997.
- *Loi de finances 1997* -- *Reponses aux questionnaires des commissions parlementaires,* Ministry of Industry.
- *L'état de l'industrie française*, Commission Permanente de Concertation de l'Industrie, Ministry of Industry, 1997.
- *France Industrie 2000*, Ministry of Industry, 1997.
- *Industrie française et mondialisation*, Commission Permanente de Concertation de l'Industrie, Ministry of Industry, 1996.
- *La reconversion : une ardente obligation*, report by Mr. Grosdidier, 1996.
- *Rapports d'activité de la DGSI*, Ministry of Industry, 1995-1996.
- *Industrie pour l'emploi*, 4 pages du SESSI, Ministry of Industry, 1995.
- *Green Book on Innovation*, European Commission, 1995.
- *France : le choix de la performance globale*, report by the commission on French competitiveness, Commissariat général du Plan, Dec. 1992.

NOTES

1. Since the OECD Industry Committee's main centre of interest is manufacturing industry, this presentation excludes government action in the field of mining, energy or aerospace.

2. In 1996, trade in civilian industrial goods attained a record surplus of FF 115 billion (including FF 15 billion of military equipment).

3. Outward FDI experienced unprecedented growth between 1985 and 1990, when it peaked. It then declined until 1995 before staging a strong recovery in 1996.

4. SMIs account for merely 14 per cent of subsidiaries and 5 per cent of the staff of French enterprises abroad.

5. In 1995, 92 per cent of French enterprises employed fewer than 10 employees.

6. In 1995, less than 10 per cent of enterprises had an international activity (export or import) and 1 per cent of them were responsible for two thirds of foreign trade.

7. Enterprise creation dropped sharply between 1989 and 1992, from more than 200 000 per year to fewer than 170 000 per year, before recovering in 1992 and 1994, and then falling again to approximately 180 000 in 1995 (see "*Les défaillances d'entreprises en France*", Problèmes Economiques, 4 Dec. 1996).

8. Despite a recovery in 1995-1996, the investment ratio in relation to value added is currently at an all-time record low of approximately 13 per cent.

9. Since 1975 industrial employment has been falling at an average rate of - 1.7 per cent per year. The only recovery occurred in 1994 and part of 1995.

10. The secondary sector accounts directly for roughly 28 per cent of GDP and indirectly for 50 per cent, since industry contributes partially to the growth of services ("*Industrie pour l'emploi*", 4 pages du SESSI, Ministry of Industry.

11. The countries which create the most jobs are those which have been most successful in preserving their industrial employment (cf. the example of the successful reindustrialisation of the United States. "*Réveil industriel et emploi*", Suzanne Berger, Les Echos, 30 September 1997).

12. In 1996, AFNOR was given the task of speeding up the work to standardise occupational training benefits.

13. Several surveys have drawn attention to the cost of administrative formalities, which often appear to penalise SMIs (cf. *"Les PMI et la simplification administrative"*, 4 pages du SESSI, Ministry of Industry, 1996). A number of initiatives aimed at reducing these formalities have been introduced on a trial basis by the Commission de Simplification des Formalités Administratives (COSIFORM) since 1990.

14. Examples include: the reform of the Ordinance of 1986 on the right of competition under the Act of 1 July 1996, aimed in particular at redressing the balance in producer/distributor relations; the 1996 reform of bankruptcy law; changes in tax regulations such as the abolition, in 1993, of the one month deferral of

VAT reimbursements to firms or the plan to improve the financial position of SMEs by imposing shorter deadlines for the late payment of bills by their largest customers.

15. Intangible investment in industry (R&D, advertising, training, software, etc.) exceeded physical investment in 1994. In 1995 such investment amounted to 35 per cent of total investment.

16. At present, over 50 per cent of ANVAR loans are repaid.

17. Study carried out by the Direction Générale des Stratégies Industrielles in the Ministry of Industry in 1995.

18. The PUMA programme, for example, offers loans to SMEs to encourage them to use advanced materials.

19. The FRATTs also encourage technology transfers in favour of SMIs by facilitating co-operation between SMIs and public or private-sector research laboratories.

20. Draft finance law for 1998.

21. Expenditure on computer technology by French industry in 1993 represented 2.6 per cent of industrial GDP and was therefore lower than that in Anglo-Saxon and Nordic countries.

22. Speech given by the Prime Minister at the Université de la Communication, Hourtin, 25 August 1997.

GERMANY

GERMAN INDUSTRIAL POLICY: RESULTS AND OUTLOOK

by
Federal Ministry of Economics

Objectives and concept of German industrial policy

- German industrial policy aims at maintaining the country's attractiveness as an industrial location by creating favourable investment and production conditions. It thus is part of comprehensive measures to improve the overall economic framework conditions.
- Industrial policy regards the market and competition as central elements; interventionist measures in favour of individual industries are absolutely disapproved of.

Important measures to improve the attractiveness of Germany as an industrial location since the mid-80s

Budgetary and tax policies

- Between 1982 and 1989 public-sector share in GNP was reduced to less than 46 per cent due to stringent cuts in spending. This was the basis for the three-tier tax reform 1986/88/90 with tax reliefs totalling about DM 50 billion.
- After German unification, the financial policy of the 80s has basically been continued in spite of additional burdens. The burden net of revenues from the Eastern federal states has been largely met by means of cuts and shifts. However, in view of the volume of the financial burden and the slowdown of the economic development, in particular during the slump in 1992/93, further tax measures and additional borrowing were necessary.
- It was nonetheless possible to reduce taxes on income and on non-income values (in particular SMEs).

Reduction of statutory non-wage labour costs

- Cost reduction due to reforms in the compulsory health and pension insurances.
- Reduction of sickness pay as well as more control to prevent abuse of unemployment benefits.

Removal of bottlenecks with regard to access to venture capital

- Promotion of Germany as a financial centre among other things by means of deregulation, tax reliefs, the possibility of new types of financing and new market segments.
- Support of start-ups and the expansion of technology-oriented, innovative enterprises.
- Low-interest loans for innovative research and development projects and market introductions.

Lean administrations by means of privatisation and deregulation

- Since 1982, the federal government sold all participating shares of 23 companies and some of the participating shares of five firms; by the end of 1994, more than 12 000 formerly state-owned enterprises in eastern Germany were privatised and restructured to become competitive.
- Repeal of 15 laws and 30 ordinances as well as simplification/cancellation of 400 stipulations in various fields.
- Acceleration of planning and authorisation procedures, in particular in the fields of the construction of roads and the protection against harmful effects on the environment.
- Abolition of state monopolies by means of rail and postal reforms.
- Extension of shop hours since 1 November 1996.

Talks with individual industries

- Since the beginning of 1995, the Federal Minister of Economics has held talks with senior representatives of various industrial branches and the service sector as well as with individual trade unions, in order to discuss specific steps to improve framework conditions in these industries; 18 rounds with 13 industries have taken place so far.

Labour law

- Working hours have been made more flexible.
- The conclusion of limited employment contracts has been facilitated and the scope for temporary and part-time work has been enlarged.
- Legislation governing protection against dismissal has been made more flexible.

Strengthening the innovative potential

- Strengthening the innovative ability in eastern Germany by means of research promotion totalling approximately DM 3.9 billion (federal means) in the period 1991/96.
- Improvement of the framework conditions for inventions and patents.
- Elaboration of an action plan to promote the transformation process towards an information society (1996). Within this framework: liberalisation of telecommunications networks and services in 1996.

- Reduction of administrative barriers for research and production activities in the field of genetic engineering.

Education policy

- Elaboration of training regulations for 82 occupations, updating in 62 cases and new regulations for 20 occupations.
- Strengthening of companies' willingness to take on apprentices (among other things by granting low-interest and long-term loans to SMEs that are willing to employ apprentices).

Improvement of opportunities in the international division of labour

- Active participation in the trade negotiations within the framework of the Uruguay Round and the establishment of the multilateral World Trade Organisation (WTO).
- Further development of export credit insurances, expansion of the network of bilateral investment protection treaties and of the instrument of investment guarantees.
- Increasing funds for the support of participation in trade fairs abroad by 180 per cent since 1982.
- Expansion of information and consultancy infrastructures for German companies abroad.
- Development of regional concepts for the promotion of German commitment abroad.

Future priorities of the Federal Government to improve the attractiveness of Germany as an industrial location

The main tasks continue to be the lasting improvement of the conditions for more employment, the strengthening of growth dynamism and the removal of structural problems.

Future priorities:

Reduction of the public-sector share in GNP and of the tax burden

- Reduction of the public-sector share in GNP to 46 per cent by the year 2000.
- Implementation of a further tax reform with net reliefs totalling DM 20-30 billion (reduction of taxes for all tax payers, reduction of corporate taxes, broadening the tax base by abolishing exemption rules and benefits).

Social policy: reduction of the statutory non-wage labour costs by continuing the reform policy. Objective: reduction of social security contributions to less than 40 per cent of gross wages and salaries by the year 2000.

Removal of bottlenecks with regard to access to venture capital

- Further improvement of the framework conditions for raising private venture capital (both on organised markets and by improving the framework conditions for equity investment companies).
- Facilitating the use of capital for supplementary expenses for old-age.

Strengthening the competitive principle in the economy

- Liberalisation and deregulation of the electricity and gas markets.
- Liberalisation of the postal markets as from 1998.

Lean administrations by means of privatisation and deregulation: among other things through the sale of further state-held shares.

Continuation of talks with individual industries: with senior representatives of the industrial and service sectors as well as with various trade unions.

Strengthening small and medium-sized businesses, making full use of the services potentials: improvement of support conditions for business start-ups and SMEs as well as of framework conditions for companies in the service sector.

Labour-market policy: bringing further vocational training more in line with company requirements.

Strengthening the innovative potential

- Shifting research promotion from direct to indirect measures.
- Further strengthening of the innovative ability in Eastern Germany: in the period 1997-2000, about 2 500 to 3 000 small and medium-sized businesses are planned to be supported with a total of DM 1.5 billion federal funds.
- Improving framework conditions for biotechnology and genetic engineering.
- Promoting the transformation process towards an information society: consistent implementation of the action plan that was adopted in 1996, in particular through the creation of clear legal framework conditions for private investors and with special initiatives (*e.g.* electronic trade, telework).
- Expanding transport infrastructures in line with requirements and the environment (investment funds of about DM 20 billion annually are planned up to the year 2000).

Education policy: among other things strengthening companies’ willingness and ability to take on apprentices and improving the quality of higher education.

Improving opportunities in the international division of labour

- The Federal Government will continue to support further multilateral liberalisation and improved market access.
- Further expansion of information and consultancy infrastructures in the field of foreign trade.
- Harmonisation of export credit insurances in the EU Member States and in the OECD.
- Extension of the network of bilateral investment promotion treaties with developing and reform countries.
- Continuation of support of participation in trade fairs abroad (about 160 participations in fairs abroad will be promoted in 1997).

Continuation of the rebuilding process in the Eastern federal states: with the majority of the support measures focusing on the broadening of the industrial base.

GREECE

INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS IN GREECE

by
Ministry of Development
Direction of International Industrial Relations

With the entrance of Greece in the EEC, the Greek economy was already open in the international economic environment. At the same time, there remained some sectors which had specific protection from international competition. The main problem of the Greek industry since the second half of the 1980s and the beginning of the 1990s was the continuous decrease of its international competitiveness. The abolishment of protectionism and the gradual removal of the barriers in the EU market combined with the loss of advantage of particularly low labour cost, as well as the abandonment of the aggressive depreciation of the national currency, revealed the inability of the Greek industry to compete with the industry of other countries.

The continuing removal of trade barriers intensified even more the pressure on the competitiveness of the Greek products. During the last years, the average labour productivity is remaining rather stable, despite the fact that the actual labour cost has substantially decreased.

The various policies which have been applied since 1979, through the Regional Development Laws for the industry (direct grants to the enterprises or indirect investment grants like cash grants and interest rate subsidies or tax free reserves) did not give the expected results. As a consequence, there was a delay in the basic infrastructure development which could possibly reinforce the competitiveness of enterprises and could improve the total environment of industry.

These developments indicate that the main reasons of productivity stagnation should be found in: low investment level, insufficient technological adaptation, lack of manpower training and limited adoption of modern organisational and administrative methods.

Since the end of 1993, it was already clear that in order to assure the conditions for a long term development of the Greek industry, a new industrial policy should be created. The main axe of that policy should be the sustainable improvement of enterprises' competitiveness.

The success, or not, of such a policy is depending on the way it its implemented. To succeed, the application process should:

- focus its action on solving the structural and not the occasional problems of industry;

- minimise the market distortions and enhance the market against monopolistic and oligopolistic conditions;
- acknowledge the business risks without totally removing them;
- enhance the horizontal and vertical co-operation of enterprises;
- facilitate business decisions which lead industry towards:
  - higher added value,
  - higher average size of enterprises,
  - exports,
  - high-technology production methods and products,
  - environment protection and energy saving;
- combine the selective support of specific enterprises and investment projects with the creation of infrastructure and technological support of horizontal character in activity sectors or regions of particular interest to the Greek industry;
- be based on integrated and long term business plans of the supported enterprises, a fact which allows the verification of the realisation procedure and the tackling of problems as a whole.

The latest Regional Development Law (2234/94) is converging towards this direction and mainly the articles 23A and 23B included in the Operational Programme for Industry (part of the second Community Framework) which are the main tools for the implementation of the new industrial policy applied in Greece. With the Operational Programme for Industry (1994-99) an integrated intervention has been adopted with a timetable and targets of direct grants for modernisation not only in fixed assets but also in business plans (including restructuring and soft measures). The estimated total cost of that programme is 2810 M ECU and it is divided into the following six sub-programmes which are realised by the Ministry of Development:

1. Infrastructure;
2. Promotion of private investments;
3. Industry modernisation;
4. Small and Medium sized enterprises;
5. Manpower;
6. Implementation of the programme.

Policy for the improvement of SMEs competitiveness

From the beginning of the 1990s the improvement of competitiveness, flexibility and adaptation of the SMEs became a prime necessity for their existence. This was very important for Greece where the SMEs constitute the backbone of the Greek economy and they are an important factor of social cohesion.

Since 1992 the European Union acknowledging SMEs importance and considering their difficulties in all member countries, began the formation of an SMEs assistance policy. In order to accomplish this policy the EU, in collaboration with every member country, introduced a number of programmes directed at SMEs and dealing with manufacturing and services.

The programmes which already started to be realised in Greece are:

1. SMEs initiative;
2. Regional Operational programmes;
3. SMEs in declining areas;
4. SMEs and Tourism;
5. URBAN initiative;
6. Improvement of the SMEs competitiveness and financial instruments.

The above programmes have three routes of intervention:

- intervention in the interior of the enterprises (organisation, management, application of technology, quality assurance);
- intervention for the improvement of enterprise competitiveness (access to new markets, access to new technologies, SMEs collaboration, networks -- clusters, access to information networks);
- intervention for employment upgrade and diversification.

Priorities for the development of competitiveness in the next years

The main priorities for the improvement of the competitiveness of the Greek economy for the near future are:

- good performance in the European Union market;
- sustainability and stability approaching the macro-economic targets;
- policy for competitiveness, quality and consumer protection;
- privatisation and modernisation of the Public enterprises;
- creation of infrastructures with European networks, creation of clusters and continuous specialisation of the enterprises in the international market;
- amendment of the Development Law in favour of the reinforcement of indirect grants.

HUNGARY

HUNGARIAN INDUSTRIAL DEVELOPMENT POLICY: PAST AND FUTURE

by
Ministry of Industry, Trade and Tourism

PAST: Changing Priorities Since 1990

Transformation Crisis Period (1990-92) and Slow Recovery Accompanied by Growing Macro-economic Imbalances (1993-95)

Long-term goals:

(i) to improve competitiveness;
(ii) to preserve employment;
(iii) structural adjustment.

Medium-term goals:

(i) to stop the overall decrease of industrial production;
(ii) to establish the conditions for sustainable growth.

Short-term goals and means:

A. Completion of the transformation/transition tasks

1. organisational restructuring (organisational decentralisation -- dismemberment of quasi-large, multi-plant industrial enterprises); establishment a normal size distribution of enterprises;

2. privatisation of State-owned companies -- reform of ownership structure of the industry (finding real owners, capable of modernising enterprises, to acquire new market shares to replace the lost CMEA and domestic market positions, to upgrade productivity, etc.);

3. crisis-management interventions (turning around and revitalisation of important "strategic" companies);

4. improving State property management (introducing and upgrading corporate governance structures).

B. Promotion of industrial restructuring by horizontal means

1. investment promotion (including FDI);

2. SME promotion;

3. technology dissemination;

4. export promotion;

5. preparing for European integration;

6. human resources development (training and retraining);

7. regional development;

8. infrastructure development.

In the first two years the establishment of the framework conditions of a properly functioning market economy (institutions, legal rules, etc.) was in the focus of the government's economic and industrial policy. Due to the unexpectedly deep and long crisis (loss of Eastern European markets, abrupt increase of competitive pressure, bankruptcy waves caused by extremely severe bankruptcy law, etc.) the government was forced to concentrate on crisis management beside the other transitory objectives and measures, and less attention and resources remained for the implementation of horizontal objectives.

As the levels of both the budget and current account deficit appeared unsustainable at the beginning of 1995, the government introduced a comprehensive economic stabilisation programme in March. The stabilisation package addressed the most pressing short-term macro-economic disequilibrium problems, plus initiated some reforms which created the necessary fiscal and monetary conditions for long-term sustainable growth (*e.g.* considerable decrease of budget/GPD ratio, contraction of current account deficit/GDP ratio, diminishing public debt/GDP ratio, preconditions for a lower inflation rate, etc.).

The March 1995-September 1996 economic stabilisation period was characterised by relatively slow growth (close to zero) in GDP, but considerably improving macro-economic balances.

PRESENT AND FUTURE: Competitiveness is the focus

Major challenges facing the Hungarian industrial policy in the second half of the 90s

- to eliminate modernisation deficit through investments;

- to strengthen the process of restructuring and to increase the share of higher value added products both in production and in exports;

- to enhance the harmonisation of Hungarian laws and regulations with the European Union, and generally promote the microeconomic integration with the EU;

- to increase, along with the strengthening of export orientation, the share of Hungarian industry in the domestic markets.

The basic objectives of the **current industrial policy** are the improvement of the market, financial and strategic positions of enterprises, and the creation of favourable conditions for investments, exports, and the development of firm-to-firm relations.

The strategic elements of the current industrial policy are the following:

1. Preparation towards European integration.

2. Eight so-called horizontal industrial policy tools (which promote competitiveness throughout the whole of industry, irrespective of sectoral characteristics).

3. **Professional programmes** of general technology development designed to improve the competitiveness of enterprises.

Accession strategy towards European integration

Adhesion to the European Union is a fundamental objective of the Hungarian government. This determines the development strategy of the industrial sector also too. On the one hand, priority is attached to speeding up the restructuring of industry, and the development of competitive structures. On the other hand, the tools available for industrial policy need to be in harmony, both in the short and medium term, with the requirements stemming from Hungary's international obligations, and EU accession strategy.

- In the interest of strengthening the "maturity for accession" of industry, it is important throughout the whole period of preparation for the European integration to harmonise the use of trade policy, industrial policy and competition policy tools.

- Legal harmonisation is a precondition of the integration: (*e.g.* provisions of the competition policy, subsidisation policy, public procurements, environmental protection standards, etc.).

- Development of the infrastructure (Hungary's strategic interest to get involved in the Community programmes aimed at the development of the European infrastructural systems in the domains of energy, environmental protection and telecommunications).

Horizontal policy measures promoting competitiveness

Strategic objectives	Tools
Investment stimulation --long-term 20-25 per cent investment rate --modernisation of manufacturing industry, enlargement of competitive capacities	Economic stabilisation, improvement of investment climate Support of enterprise modernisation and development, including -- preferences in the tax system -- favourable amortisation rules -- special credit arrangements -- expansion of guarantee system
Corporate R&D, support of innovation --improvement of enterprise export potential, competitiveness, innovation potential --quality development --environmental aspects	Stimulation of enterprise demand for R&D Promotion of new technology based SMEs Technology transfer
Strengthening of modernisation role of FDI --annual 1.5 bn dollar FDI --integration of Hungary-based firms into international enterprise networks	Attractive investment environment Preferences for infrastructural developments Priority treatment of large investors Reduction of tax burdens Economic diplomacy measures for attracting foreign large investors Development of domestic sub-supplier system
Strengthening of modernisation of FDI --reconstruction and expansion of enterprise co-operation relations --joining of international company networks	Spreading of new type production culture, production organisation, quality assurance methods Qualitative development of small- and medium-sized enterprises, enhancement of their competitiveness Partner seeking, assurance of fora for the development of enterprise relations
Company networks, development of sub-supplier system --reconstruction and expansion of enterprise co-operation relations	Diffusion of new type production culture, production organisation, quality assurance methods Development of SMEs Partner seeking, provision of fora for the development of enterprise relations
Export promotion --higher export growth than that of imports and of industrial production	Improvement of financing conditions of exports (pre-financing, buyer credits) Export stimulating exchange rate policy (in consideration of inflationary effects) Improvement of market access conditions of enterprises through economic diplomacy and trade promotion actions

Strategic objectives	Tools
Market protection --market protection measures complying with international obligations, serving fair internal market competition	Law on public procurement Custom measures and quantitative restrictions in a narrow and contracting range **Temporary** import surcharge Market monitoring Consumer protection
Improvement of competitiveness from the labour cost side --strengthening, exploitation of comparative advantages linked to labour costs --labour training	Increase of real wages parallel with growth of productivity Reduction of employment-related costs Development of the system of education and vocational training
Co-operation of industrial policy actors --better foundation of the set of goals and tools of industrial policy --creation of consensus and broad-based support for the government's industrial policy	Utilisation of fora available for the reconciliation of industrial interests Development of division of labour and co-operation between MIT and the chambers Strengthening of professional federations

ICELAND

ICELANDIC POLICY ON COMPETITIVENESS FOR GROWTH AND JOBS

by
Ministry of Industry and Commerce

Introduction

Extensive results have been achieved in the Icelandic economy in recent times. Economic growth has been excellent, inflation very low, unemployment reduced and the standard of living improving.

Last year's economic growth reached 5.2 per cent and it is expected to be 4.5 per cent during the current year. If this plan materializes the average economic growth in Iceland will be 3.6 per cent during 1994-97 as compared with 2.4 per cent in the industrialized States. During recent years inflation has been about 2 per cent. Unemployment has dropped from 5 per cent of the 1995 labour force to below 4 per cent at the present stage. The purchasing power of disposable income has risen by 9 per cent during the last two years, representing over twice the OECD average.

Various reasons form the background to this favourable development. A mention may be made of three important items. Firstly, extensive improvements have been effected in the Icelandic economy during recent years, i.a. consisting of the strengthening of a market economy, the opening of a financial market and EEA participation. Secondly, general economic administration has in an increasing measure been aimed at ensuring stability and a balanced economy. Finally, favourable external conditions have coincided with good domestic conditions for growth. This has formed the basis for the advances and improved standard of living which has occurred in Iceland in recent times.

The Government will base activities on this foundation during the next few years. Thus work will continue on the strengthening of a market economy, i.a. by converting State enterprises to public limited companies and supporting competition wherever possible. The administration of State finances and monetary affairs will also be co-ordinated with a view to maintaining a balance and stability in the national economy. With this background, and based on eventual wages and terms agreements being concluded on realistic premises, there are prospects of Iceland continuing to belong to the group of OECD States remaining foremost in the economic field.

Improved competitiveness

It is of importance to increase competitiveness, employment and the standard of living and reduce inflation by means of goal-oriented concerns and not merely in the field of economic affairs in general, but also in that of working conditions and activities in support of the economy. Fruitful economic policy is no longer based solely on the results achieved in the field of macro economics, such as State finances, rate-of-exchange or taxes, but also on aimed general activities in the field of micro economies and supporting activities in competition with foreign developments in that sphere. At the same time the utilization of human resources will be of ever-increasing importance within firms, the administrative system or society as a whole in the knowledge-based society of the present and the future in order to increase competitiveness, the shaping of values, employment and the standard of living.

During the electoral term of the current Government work has been aimed at manifold items forming the basis of an improved standard of living in the future. These items are linked with various sectors within the economic system, including conditions of work in the economy to increase its competitiveness, increase employment and improve upon the standard of living by means of a more aimed formulation of policy on the part of the authorities than has previously been practised. Due to the small economic system and other sectors the policy in the field of industry and competitiveness has, on the other hand, formed part of the general economic policy.

In Iceland as in other neighbouring countries the employment and competition policy and supporting activities during recent years have generally shifted from being rather specific to being of a general nature, and from specific employment policies in the direction of a general competitiveness policy. Such a policy is aimed at avoiding disturbance in the market, but rather at encouraging it by means of general activities, such as in the field of support for small and medium-sized enterprises (SMEs), advisory services, co-operation between firms, dissemination of information, policy formation, training, etc.

It is, on the other hand, of importance to take a look at the measures of the authorities to increase competitiveness on the whole, not merely in a few, isolated fields, as results achieved in delineated fields do not suffice for success. In order to ensure results of official measures for increasing competitiveness in the economy it is most important to advance activities in as many spheres as possible which influence competitiveness, and it is similarly not sufficient in the operation of enterprises to achieve results in a delineated field if overall operations are to be a success.

The tasks which have been worked on and which relate to conditions of work and competitiveness of the economy may mainly be divided into two principal classes. Firstly, a mention is to be made of the items which have been worked on in the field of general macro-economics affecting development and increased competitiveness in industry as well as other branches. This is revealed as improved working conditions in the economy as compared with the past, such as increased stability in the economic system, a lower rate of inflation, a reduced rate of interest, a steady rate-of-exchange, a lower real rate-of-exchange, co-ordination of the taxes of firms as compared with those abroad and co-ordination and simplification of a variety of laws and regulations on account of the EEA Agreement.

I. The economic and fiscal agenda

- To maintain economic stability and improve conditions for economic growth.
- A favourable exchange rate and interest rates.
- To attain a balanced budget during the Government’s term of office.

- To ensure stable and solid operating conditions for exporting sectors.

Secondly, a mention is to be made of the projects which have been worked on (micro) under the auspices of the Ministries of Industry and Commerce and other Ministries in order to strengthen the development and competitiveness of domestic industry and the economy.

Taking a further look at emphasis and activities in the field of industry and competitiveness as a whole in Iceland these may i.a. be classified as follows, although some of these classes are administered by other Ministries.

II. The policy on industrial competitiveness and technology

1. International co-operation

- To strengthen Iceland's relations with the European Union on the basis of the EEA-Agreement.
- Ensuring trade co-operation and other relations with the United States.
- Seeking new markets in all parts of the world.
- The opportunities for international trade offered by Iceland's membership of the WTO.
- Maintaining the important co-operation between the Nordic countries.
- Co-operation in the Arctic Council of the states which have interest in the Arctic region.

2. General supporting activities in industry

- To ensure stable and solid operating conditions for export industries.
- To promote new initiatives and progress in product development and marketing.
- Special emphasis will be put on improving the handling of marine resources.

3. Small and medium-sized enterprises (SMEs)

- To stimulate growth of small and medium-sized enterprises.
- To increase the competitiveness of the industry in general through various measures.

4. Access to venture capital

- Transformation and merging of funds.
- Through tax incentives, the public will be encouraged to put up risk capital for industry.

5. Competition policy

- Reduction of bureaucracy in the relations of citizens with the authorities.
- Unnecessary legal and regulatory provisions will be abolished.
- To continue emphasis on improvements in the area of competition.

- Restructuring in public enterprises, *e.g.* increased tenders, service contracts and amended pay system.
- Industrial State companies will be placed on an equal footing with private enterprises.

6. Simplification of laws and regulations

- To establish rules which guarantee access by citizens to information possessed by the State.
- Reduction of bureaucracy in the relations of citizens with the authorities.
- Unnecessary legal and regulatory provisions will be abolished.
- State services will be attuned to modern technology, *e.g.* through on-line connections of service.

7. Tax policy

- To initiate co-operation with the social partners on a review of the tax system.
- Reducing tax evasion, lowering marginal tax rates, simplifying the tax system, equality.
- The tax environment of enterprises will be on a par with the best in the countries of our competitors.

8. Diffusion of technology

- To strengthen the overall industrial, research and technological policy in general.

9. Institutional framework in R&D

- To work for restructuring in public enterprises.
- Increased cost efficiency in public construction projects will be sought.
- Efforts will be made to simplify public enterprises and at the same time make them more efficient.

10. Research and development

- Intensive research and development are the prerequisites for progress in the Icelandic economy.
- Continued efforts will be made for building and developing universities in Iceland.
- Students' participation in research projects will be increased.
- Intensive research in the field of marine biology and productivity.

11. Information technology

- To formulate a comprehensive information technology and communications policy.
- The new information technology will be utilized for the benefit of all parts of the economy.

12. *Energy policy measures*

- To work for further foreign investment in the Icelandic economy in this field.
- Sensible utilisation of hydroelectric and geothermal energy resources.

13. *Export related support*

- To ensure stable and solid operating conditions for export businesses.
- To promote new initiatives and progress in product development and marketing.
- To stimulate domestic investment abroad and consulting services.

14. *Trade and investment*

- To work towards further foreign investment in Iceland.
- Marketing efforts will be increased by strengthening the activities in trade and investment.
- Promoting the opportunities offered to foreign investors in Iceland.
- Work will be continued on preparations for energy-intensive industry.
- The Foreign Investment Act will be reviewed with a view to attracting foreign investment.

15. *Privatisation*

- Privatisation programme which will be implemented during the government's term in office.
- Emphasis on changing the operational form of the state-owned banks and investment funds.
- During the government's term of office, work will proceed on the sale of State-owned companies.

16. *Vocational training and the labour market*

- Secondary education will be strengthened, not in the least vocational and practical training.
- Individual needs for re-training and adult education will be met.
- To review the labour laws to promote stability and the responsibility of contracting parties.
- Increased choices in pension savings and competition between the various pension funds.

17. *Measures to protect the environment*

- Take part in international co-operation on pollution control and the protection of the marine ecology.
- Efforts will be made to attain more systematic recycling and re-use of materials.
- Improvement in tourist services, taking strict account of environmental considerations.
- Priority will be attached to preserving Iceland's image of environmental purity and protection.

18. Regional development policy measures

- To promote reliable communications so that the country's resources can be utilized efficiently.
- Service centres will be strengthened through the transfer of tasks from the State to local governments.
- Efforts will be made to reduce the cost of heating buildings in regions where this cost is high.
- The operations of various organisations will be reviewed to stimulate increased co-operation.

Under the auspices of the Ministries of Industry and Commerce work has been undertaken on many of these projects, although a brief account will be given here of a few of them.

General supporting activities in industry. In the field of general supporting activities in industry work has been done on competition analysis and policy formulating emphasis, which will subsequently be revealed in activities or supportive projects in various spheres. In this connection a mention may be made of a variety of studies of the competitive position of various branches of industry and proposals for improvement. A mention may be made of tasks such as the following: 1) the competitive position of the textile industry, 2) the choice of materials and the shaping of employment, 3) manpower requirements and specialisation on account of power-intensive industry, 4) the future organisation of energy, and 5) guarantors of financial undertakings. There are also other activities, such as those to increase productivity.

Small and medium-sized enterprises (SMEs). Under the Ministries' auspices, there has been much emphasis on small and medium-sized enterprises (SMEs). This has been effected by manifold activities. In 1995 a Committee was appointed to deal with SMEs and the competitiveness of the economy and this Committee consisted inter alia of parties representing employers, wage-earners and other Ministries in addition to the Ministries of Industry and Commerce. The Committee has submitted many proposals relating to improved competitive position in the economy. A Conference was held in September 1997 to deal with improved competitive position, i.a. being attended by representatives of OECD, Britain, Norway and Canada. Booklets have also been published to grant information concerning European projects in this field, and others on policy formulation for increased competitiveness in Iceland. In the beginning of 1996 a special project was launched, entitled "The Job Creation Initiative for SMEs", but the task consists of numerous supportive projects, i.a. in the field of 1) advisory services, 2) co-operation projects, 3) production development, 4) projects under the auspices of EEA and 5) support for entrepreneurs.

Access to venture capital. In the field of access to venture capital, much work has been performed, such as the conversion of investment loan funds to a single bank and the establishment of a special innovation fund in connection with that amendment. This will increase to a considerable extent the availability of investment funds. A law on the New Business Venture Fund has already been passed by the Parliament and the Fund will start operation in January 1998.

Competition policy. Emphasis in the field of competition policy has mainly been in the direction of increasing the effectiveness of the market by means of growing competition in the economy, but under the provisions of the EEA Agreement, legislation in this field has been co-ordinated with the EEC arrangement. A variety of differentiation has also been abolished recently, i.a. where State enterprises have been in competition in the market.

Information technology. In the field of information technology a special Government policy has been formulated. This was recently introduced in a special report and currently work is being undertaken on the implementation of that policy as a special project.

Trade and investment. Work has also been done on many other items, such as special introduction for foreign investors by means of the establishment of the Invest in Iceland Bureau, the sale of electric power to foreign power-intensive industry and on many other projects. In 1997 there are prospects of a considerable increase of foreign investment in Iceland through the extension of the Alusuisse aluminium smelter already underway. There are also plans for an extension of the ferro-silicon plant and the erection of a new aluminium smelter of the Columbia Corporation in Iceland, to be commenced in 1997.

Conclusion

As previously stated one of the principal aims of the present Government is that of strengthening the Icelandic economy, increasing the shaping of values and the number of jobs. A mention has been made of the principal sectors in this field, but much has, however, been omitted. Activities of other countries in this field are, on the other hand, being followed closely and taken into account.

The Icelandic economy is increasingly becoming a part of the international market and the competitors are therefore increasingly represented by concerns throughout the world. These must be confronted by successful competition if it is to be possible to support increasing creation of values and employment as well as an improved standard of living. The competitive policy of individual states is increasingly based on a general and extensive formulation of policy instead of a specialized policy based on the interests of individual branches of industry. The importance of policy formulation by the authorities for the increased competitiveness of the economy and the shaping of values by means of general activities has therefore increased with growing competition between nations, no less than the importance of policy formulation within the enterprises.

Refer also to a further discussion and information contained in the Ministry’s booklet entitled “Icelandic Policy on Competitiveness for growth and jobs” and in the Ministry’s home page http://eldur.stjr.is/ivr/upplysingar/utgafur/policy/index.html.

IRELAND

POLICIES FOR ENTERPRISE IN IRELAND

Introduction

During the 1990s enterprise policy in Ireland has undergone a significant change in focus. Emphasis has moved away from highly interventionist policies aimed at manufacturing industry towards a broader based view which focuses on the interrelations between the diverse elements of the overall environment which impact on enterprise competitiveness. That change in focus is summarised in the following mission statement:

Enterprise policy in Ireland aims to:

Enhance the competitive advantage and employment potential of firms operating in Ireland through the creation of a pro enterprise environment.

Key recent developments impacting on enterprise competitiveness include:

Competitiveness Council

In May 1997, the government established a National Competitiveness Council under the aegis of the Taoiseach's (Prime Minister's) Department. The functions of the Council are to:

Report on a regular basis on the main challenges facing the enterprise sector over the medium term and the policy responses required to meet them.

Examine and monitor policies and actions that impact on the competitiveness of the enterprise sector and prepare reports on priority competitiveness issues, as appropriate, with recommendations on actions required to improve competitiveness.

Economic issues

Priority has been given to the creation of a stable macro-economic climate capable of delivering high growth rates coupled with low inflation, and to ensuring that this growth is translated into increased employment. Key actions and achievements include:

A reduction in the General Government Deficit (GGD) from 9 per cent in 1987 to 1 per cent in 1996.

Tax reform aimed at simplifying the tax system and reducing personal and business taxation. In the area of personal taxation there has been a systematic lowering of the standard rate of income tax and a widening of the tax bands. Particular attention has been paid to reducing the burden of taxation on the lower paid so as to increase the employment intensity of growth.

In relation to business taxation, the most significant development has been the Government's decision to maintain a low rate of corporation tax on enterprise profits arising from trading activity. Both the Capital Gains and Capital Acquisitions tax codes have been amended to facilitate enterprise growth.

Moderate wage increases have been achieved through a series of social partnership agreements.

Welfare supports have been reformed with the aim of helping unemployed people make the transition back to the world of work.

Competition law has been strengthened, in particular, by giving the Competition Authority the power to instigate its own investigations.

Infrastructure / information society

There have been significant improvements in transport infrastructure -- with particular emphasis on strategic primary routes (road) and on the improved operation of key seaports and airports.

An ongoing process of deregulating the public utilities is being pursued in line with EU policy.

Particular attention has been given to increasing competition and investment in the telecommunications sector. An Information Society Commission has been established under the aegis of the Taoiseach's Department to accelerate Ireland's participation in the information society.

Human resource development

The availability of a skilled, flexible workforce has been an essential element in Ireland's growing competitiveness. Characteristics of the Irish labour market include very large numbers of young people entering the labour force; a return to Ireland of many former immigrants; the growing participation of women returning to the labour market, a changing occupational mix towards those with higher skills levels and the emergence of new patterns of work, in particular, part time work.

Key objectives being pursued in the area of human resource development policy are:

- to increase the level, relevance and quality of private sector training;
- to assist small enterprises to overcome skills barriers to business development;
- to promote a commitment to life long learning on the part of individual workers and their employers; and,
- to develop a strong quality assurance system for human resource development and training activities.

Skills availability

Because of the changing nature of work and Ireland's growing young labour force, skills availability is a particularly critical concern. In 1996 the Government established a Future Skills Identification Group comprising representatives of the Enterprise Development and Higher Education agencies, and the Departments of Education, Enterprise and Finance. The task of the Group is to assess existing and emerging skills needs and bring forward plans to address them. In response to the Group's initial work, the Government has substantially increased the provision of Third Level places in languages and information technology.

Participation in the global economy

Ireland is committed to full participation in the global economy. It is one of the most trade-dependent economies in the OECD area. One job in four is directly dependent on exports; when indirect influences are taken into account, this rises to almost one job in two. This reality is reflected in the trade policy approach that Ireland takes at EU and other levels. Key aspects of this approach are:

- commitment to the rules-bound international trading system embodied in the WTO;
- support for further multilateral liberalisation of trade and investment provided that the basis for further liberalisation of agricultural trade is compatible with the reformed EU Common Agricultural Policy;
- focus of Government activity on measures to enhance the competitive environment -- including a reduction of regulatory and other burdens on business -- and to ensure coherence between economic/trade policy and policy objectives in related areas such as the environment, education and foreign affairs;
- concentration of State supports for exporters on those companies who demonstrate a capacity for sustainable export growth and for whom such State support can make an appreciable contribution to their success in this respect.

Foreign Direct Investment (FDI)

Ireland has a long history of openness to FDI dating from the 1960s. Pro FDI policies have played a major part in underpinning Ireland's overall industrial and trading performance: for example, in 1995, of the IR£ 23.5bn exported by companies with more than 19 employees, IR£ 16.5bn or 70 per cent was accounted for by foreign-owned companies. Current FDI policies are aimed at maintaining Ireland's position as a strategically attractive location for FDI and an increasingly competitive and globalised environment. Three key strategies are being pursued:

- focus on attracting projects in sectors and segments where Ireland has a sustainable competitive advantage: primarily knowledge based and technologically intensive manufacturing and international services;
- targeting of emerging sectors and preparing to meet their requirements;

- ensuring that Ireland's competitiveness in relation to key location decision factors such as costs and skills is continuously upgraded.

Research and Technological Development

Concerted efforts have been made in recent years to improve Ireland's RTD performance. At the infrastructural level, a network of industrially focused research centres in key technologies: biotechnology, engineering, electronics and IT, has been established within the Third Level sector.

In addition, there has been a significant increase in direct financial support for industry R&D. These initiatives have supported an increase in Business Expenditure on R&D (BERD), which at 1.02 per cent of GDP (1995 figures) has brought Ireland on a par with economies such as Norway, Denmark and the Netherlands.

Following the publication of a White Paper on Science, Technology and Innovation, the Government established a standing Science, Technology and Innovation Advisory Council. A major role of the Council is to report to Government on the prioritisation of spending across all areas of State-funded research and development.

9. Small businesses and services

As indicated in the introduction to this paper, policy has been broadening its scope away from a concentration on manufacturing industry. This has particularly been the case in regard to indigenous small businesses, many of which are services businesses. The macroeconomic policies referred to in the section on economic issues and the consequent strong growth in the economy have led to very positive growth in the services sector. In the period 1990-1996, 120 000 jobs were created in the services sector generally. In the internationally traded services sector, employment grew by 3 800 (70 per cent) in Irish owned firms which were assisted by State agencies.

Specific initiatives for the small businesses sector include:

- A local partnership approach has been adopted with a focus on promoting small business growth and tackling social exclusion. A network of 36 city and County Enterprise Boards (CEBs) has been established to provide advice, mentoring and seed financing to small and start-up businesses with up to ten employees.

- Access to finance for small businesses has been addressed via subsidised and low interest loan schemes.

- A programme of administrative simplification designed to reduce the level of government regulation on small businesses.

- Legislation on prompt payments applying to Government Departments and Agencies has been passed and will come into operation at the start of 1998.

- An information programme to help small businesses gain easier access to public procurement programmes has been implemented.

Looking ahead

The key challenge facing Ireland is to maintain the momentum of its recent growth. In the macroeconomic area, control of inflation and public spending are key priorities. These, in turn, impact on Ireland's qualification for Economic and Monetary Union, with participation in EMU representing a major challenge for the economy. The Government is sponsoring an ongoing information campaign under the aegis of the agency Forfas to assist in making businesses aware of the changes involved in EMU and the challenges they will face. Other key issues to be addressed are:

- Responding to globalisation and technological change. Full participation in the information society and addressing the general issue of skills availability are particular priorities.

- The need to continue to deepen what is still a relatively shallow, albeit up to date, infrastructural base.

- Expansion of the capital markets and the development of a less risk averse culture among the financial institutions.

One significant concern in relation to enterprise policy is the underperformance of a significant proportion of the indigenous manufacturing sector. Key concerns are: the number of firms represented in low growth sectors, low levels of profitability, low commitment to key strategic functions such as R&D marketing and training. The Government is currently engaged in a review of the industrial development agencies aimed at addressing these concerns.

ITALY

MAIN ORIENTATIONS OF POLICIES FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS OVER THE PAST TEN YEARS AND THE FUTURE OUTLOOK

by
Ministry of Industry, Commerce and Crafts
Directorate-General for the Development of Production and Competitiveness
Research Department

The economic crisis of the 1970s, largely attributable to the successive oil shocks, affected all European countries, with new difficulties emerging after these countries adopted different strategies. These strategies aimed at overcoming the crisis chiefly by forging strategic alliances and mergers at the national level with a view to ensuring a position of leadership within the European oligopoly. During this period, the Italian government mainly concentrated on “rescuing” firms in trouble by expanding the public sector. But this expansion was not done systematically on the basis of a clearly-defined programme of priorities, and the concept of the “particularity and specificity of public interest sectors” was only introduced later as a way of “rationalising” policies that had already been implemented. Nevertheless, this policy did make it possible to create and strengthen real strategic poles of development within the Italian economy, such as the aeronautics industry, which has been a source of technological innovation transferable to other sectors. On the other hand, it has prevented the emergence of major private industrial groups that are competitive on a European scale.

Corporate “rescues” often went hand in hand with “restructuring”, for it was felt that appropriate legislation was lacking to set the limits and criteria for restructuring operations.

Act 675/1977 had been designed to provide a more precise framework for restructuring operations, but unfortunately its entry into force was delayed by lengthy debates over its interpretation in Parliament and the European Commission. It was finally passed and was applied mainly in traditional basic sectors. By and large, therefore, the response to the economic problems of industry during the 1970s failed to encourage the technological innovation and social change that would have adequately promoted the development and competitiveness of firms.

In the 1980s, however, because of the structural backwardness of the economy as a whole, there was a radical change in the way “industrial policy” was perceived. As the successive initiatives and policies aimed at “rescuing” firms described above proved ineffective, the government began to adopt measures aiming at economic liberalisation and privatisation. It is currently trying to reduce and rationalise its incentives policy, and new approaches to promoting industrial development are emerging, such as policies based on public demand, the provision of services to enterprises and modernisation of the public sector. Both government and industry are currently shifting their focus from a “sectoral” to a “factor-based” policy.

The main industrial policy legislation of the 1980s was **Act 46/1982,** the aim of which was to promote innovation, and **Act 696/1983,** which provided for incentives to enable SMEs to purchase high-tech equipment; these policies were designed to promote the modernisation of production through the application of research and technological innovation in production processes and products, while at the same time fostering innovation in SMEs. Mention should also be made of **Act 64/1986,** which provided for special measures to promote research and innovative business services in the Mezzogiorno.

The creation of the “Technological Innovation Fund” (**Act 46/1982**) enabled the Ministry of Industry to provide funds aimed at improving competitiveness directly to firms; however, the measures addressing problems of human resource development and retraining and energy issues proved disappointing.

In the 1980s Italy also initiated **legislation on privatisation and the rationalisation of basic sectors** such as the iron and steel industry and introduced measures to make the economy more outward-looking and to facilitate capital mobility. The Italian authorities are increasingly convinced that firms are able to adapt to **international competition** by themselves and that the role of government should be to ensure more favourable conditions for their development.

SMEs have come to play an important role in **international competition,** although, because of their large number and small size, they have received relatively little government assistance. But it seems obvious that, in the long run, if left to themselves SMEs will not be able to withstand international competition.

Lastly, Italy entered into the debate on the **European Monetary Union** and has undertaken structural measures to bring its economy into line with those of its European partners.

The programmes of the 1980s mainly focused on providing **direct funding**, which proved difficult to manage both because of problems of selecting among qualified applicants and because of the small amount of funds available; what is more, these initiatives, although they did much to facilitate restructuring and to promote innovation in medium-sized and large enterprises, appear only to have played a secondary role in strengthening innovation in the Italian industrial system and did not constitute vigorous industrial innovation policies like those implemented by Italy’s European partners.

The main orientations of policies for promoting industrial development and competitiveness

The current policy is to create market conditions conducive to promoting the development of firms by implementing legislation on competitiveness and the market, continuing the privatisation process and developing a policy of incentives to industrial development in line with the limitations and aid levels set at the Community level; it is also planned to develop and modernise infrastructure, networks and services in order to create the conditions of a truly competitive market that is integrated into the EU and open to international competition.

The government has also decided to improve and reinforce existing legislation, which has proved its effectiveness in assisting firms and SMEs in particular.

Education and training at all levels**, the market, the economic system, telecommunications and computer networks, transport, health care services, environmental protection, protection and management of the artistic and cultural heritage --** all these elements are closely interrelated. **Industrial policies to promote innovation** play a more important role than in the past in making it possible to meet the challenges of competition, which now stem from the growing integration of the economic system, country and firms, as the experience of other countries has shown.

Less government intervention in the field of innovation and development policy, but higher quality

A significant example of the changing role of government in the economy is the sale of the shares owned directly or indirectly by the state, in line with guidelines laid down by Parliament; such sales are a key aspect of the transition to a more competitive system. Within an orderly development of the economic system, based on open markets, competition and deregulation, the state will no longer be involved in running firms but will focus on setting policy and monitoring compliance with the rules of the market, especially in strategic sectors in which its regulatory bodies monitor the emergence of monopoly situations; it was for this purpose that the Italian government created the **Energy Authority and the Competition and Market Authority**. Privatisations inject competition and competitiveness into markets, make relations between operators more transparent and open up new possibilities of investment to a broader range of investors.

What is more, the revenues generated by privatisations will have a significant impact on public finances since they will help to reduce the public debt/GDP ratio and thereby contribute to meeting the criteria of the Maastricht Treaty; these revenues are deposited in a Public Debt Reduction Fund which is used to buy back or redeem government securities.

Since 1994, the Ministry of the Treasury has been directly managing the privatisation of IMI (a bank), INA (an insurance company) and ENI (the national gas and petroleum company), generating total revenues of L 24 000 billion.

Projects recently completed or in progress. In June and July, the Ministry of the Treasury sold the third tranche of ENI shares, and completed the sale of 60 per cent of the capital of *Banco di Napoli* and sold its interest in the *Banco di San Paolo di Torino*. Arrangements are currently being made to sell off the State’s holdings in SEAT and the IRI’s stake in the *Società Autostrade*.

In the telecommunications sector, the Ministry of the Treasury plans to sell off its stake in TELECOM ITALIA spa. in the near future.

Parliament’s approval of the Banking Act will make it easier for banks to sell the shares they own in credit institutions; bank privatisations will inject competition and efficiency into the credit market.

As regards the action of the Ministry of Industry more specifically, we should mention the repeal in 1992 of **Act 64/1986** on special measures for the *Mezzogiorno*, and the approval of **Act 488/1992** designed to provide assistance to all the “depressed” areas of the country in accordance with EU criteria and objectives. Thus far, some 14 000 applications for aid have been filed on two separate lists, which exceeds the financial resources available. This is partly due to the elimination of special measures for the *Mezzogiorno* and the government agency Agensud and the transfer of its responsibilities to the Ministry of Industry, since aid to industry was frozen during the transfer period. Of the 14 000 applications filed, some 10 000 are deemed to be eligible; 6 000 will qualify for the first round of aid and 4 000 for the second round.

The aid provided under **Act 488/1992** is aimed at promoting new initiatives or reinforcing existing ones in the “disadvantaged” areas of the country.

The Ministry of Industry wishes to extend the application of this Act and has proposed amending the automatic tax incentives provided under **Act 341/1995**, which allows firms to deduct a percentage of their investment from their tax liability. Though the value of this incentive is lower than the aid provided under **Act 488/1992**, its advantage lies in the fact that it is automatic.

In addition, **Act 1329/1992** (the Sabadini Act, which is aimed at promoting the modernisation of plant in SMEs) has been confirmed, together with **Act 46/1982** on technological innovation; furthermore, the Ministry has submitted a bill to Parliament that would provide support to SMEs that group together for the purpose of exporting.

Act 317/1991 ("Programmes for innovation and the development of SMEs") has been implemented. It aims to promote SME development, innovation and competitiveness, including the creation of co-operatives, with special focus on disseminating and developing new technologies and promoting the formation of groups of small enterprises.

All these measures were improved, updated and supplemented in a single bill proposed by the Minister for Industry, Mr. Bersani, designed to rationalise the system of incentives by making it easier for SMEs to use. This bill was adopted by Parliament and entered into force as **Act 266** of 7 August 1997.

Special attention was paid to those SMEs that traditionally seek to improve their technology by purchasing new equipment; this approach must be encouraged since it is best suited to the vast number of small enterprises that are unable to make technological innovations by themselves and that have to buy in equipment. Nevertheless, the need to improve products and conquer new markets also requires direct investment in innovative products, which means acquiring technological know-how adapted to the real situation of firms. The trend towards this kind of investment by small enterprises must be supported. Moreover, it is planned to reorganise the aid system by standardising and simplifying aid mechanisms even for initiatives involving intangible investments. In this regard, **Act 266** of 7 August 1997 provides for the creation of a structure that will assess and monitor the impact of aid measures.

In summary, the main fields of action of the Ministry of Industry are as follows:

a) the creation of a single market

b) privatisation, opening up and regulation of new markets

c) innovation and competitiveness among various actors

d) the importance of the territorial dimension and social cohesion

e) globalisation

a) The creation of a single market

More rapid and effective implementation of Community regulations; further efforts to eliminate market barriers; facilitate integration by promoting compliance of products with technical and quality standards.

b) Privatisation, and opening up and regulation of new markets

To allow new actors to have access to the market, to release the potential for technological development, to inject new capital into the market and to create new initiatives, new enterprises and consequently new jobs; to prevent the emergence of monopoly positions that impede economic development.

Privatisation of the National Electricity Company (ENEL).

c) Innovation and competitiveness among various actors

To promote links between research and industry in order to create new opportunities for innovation within a fragmented system of enterprises; integration with regional legislation.

d) The importance of the territorial dimension and social cohesion

To reassess the relationship between the central government and regional and local governments by addressing the following basic aspects:

1. the transfer of responsibilities within a federal perspective;

2. consistency of national, regional and local objectives;

3. new and more rational legislation on business development;

4. better co-operation between the public sector and associations;

5. simplification of the tax and administrative system, easier access to information.

e) Globalisation

To carry out initiatives promoting foreign trade in co-operation with the ICE (the Institute for Foreign Trade) by providing support mainly to small firms, which are those that find it the most costly to establish a stable export business.

To redraft export promotion legislation so that it will address all aspects of the globalisation of firms.

BIBLIOGRAPHY

- Rivista di politica economica -- Ed. SIPI s.r.l.

- Quarantacinque anni di politica industriale in Italia: protagonisti, obiettivi e strumenti, Romano Prodi and Daniele De Giovanni.

- Le fasi dello sviluppo industriale italiano e l’intreccio tra settore privato e impresa pubblica, Fulvio Coltori.

- Politica industriale e innovazione tecnologica -- prospettive per gli anni ‘90, Bruno Lamborghini and Cesare Sacchi.

- “Linee programmatiche del Governo sulla materie di competenza del Ministero”, Audizione presso la Commissione X del Ministro dell’Industria, On. Pier Luigi Bersani, 26 January 1996.

- Documento di programmazione economico-finanziaria per gli anni 1998-2000, Ministry of the Treasury, Budget and Economic Planning.

PRIORITY ACTIVITIES OF THE MINISTRY OF INDUSTRY

The changing role of the Ministry of Industry, Commerce and Crafts

The role of the Ministry of Industry, Commerce and Crafts and Tourism is currently undergoing a number of changes because certain key responsibilities are being transferred to the regions and because it has long been recognised that the Ministry's internal organisation needs to be brought closer into line with its objectives.

The tourism sector is one of the areas that the Ministry plans to develop; in the more strictly industrial field, it plans to launch initiatives to promote, for example trade marks and product quality and standardisation.

In addition, the Ministry intends to regulate relations between business and society at large, bearing in mind the different interests of producers, distributors and consumers. It must also take environmental issues into account, ensuring that industrial development does not conflict with environmental protection and public health.

The Ministry of Industry intends to take a leading role in the field of industry and the environment whenever possible, but without losing sight of the need to maintain competitiveness, for failure to do so could make even apparently positive environmental measures counterproductive.

The organisation of the Ministry of Industry, Commerce and Crafts following the reorganisation undertaken by Minister Bersani

The ***Minister*** is in charge of the Ministry and sets policies with the assistance of his Private Office and Secretariat.

The ***Private Office and Secretariat*** are under the Minister's direct responsibility and report to him on all policy matters.

The ***Legislative Office*** is under the responsibility of the Private Office and gathers data on the effectiveness of the legislation in force in the various sectors. It assess the advisability of amending this legislation in co-operation with the Legislative Office of the Prime Minister. It reviews existing legislation and studies amendments to be made both in terms of policy and from a strictly legal standpoint.

The ***Under-Secretaries*** assist the Minister by carrying out the responsibilities delegated to them. The Under-Secretaries are subordinate to the Minister and may not participate in Cabinet meetings (they may not replace the Minister); their responsibilities are laid down by Ministerial Decree and published in the Official Gazette.

Directorates-General (D.G.)

The Directorates-General are the basic operational bodies of the Ministry.

The main aims of the reorganisation were to:

- rationalise existing responsibilities by creating unified centres of responsibility that monitor the same or related issues and by merging services at the general level of the directorate;
- expand certain responsibilities by creating new services at the directorate-general level;
- ensure that the planned restructuring is compatible with the future organisation of the Ministry of Industry following the transfer of some management responsibilities to regions and local governments;
- give greater visibility to its role as an intermediary between the European Union and the regions in the context of growing European integration and the implementation of a federal system.

The new organisational structure

Directorate-General for General Affairs

This Directorate is responsible for managing the internal operations of the Ministry of Industry in the fields of personnel, occupational health and safety, management of assets, forecasting of expenditure and other related fields.

Directorate-General for Energy and Mining Resources

The Directorate-General for Energy and Mining Resources is responsible for the following: framing energy policies at the regional and national levels; relations with the European Union and other International Organisations in its fields of competence; the safety of power plants that present a high risk to the environment and the definition of regulations in this field; other related or complementary aspects in the field of energy or mining resources.

Directorate-General for Trade, Insurance and Services

The Directorate-General for Trade, Insurance and Services is responsible for the following: relations with the European Union, economic and trade surveys and studies, national and international trade fairs, implementation of trade regulations, regulations governing insurance companies and related issues.

Directorate-General for the Development of Production and Competitiveness

The Directorate-General for the Development of Production and Competitiveness is responsible for the following: economic policy and planning, studies and surveys, co-ordination of industrial policies and SMEs, and relations with the EU and with regions and administrations regarding the regulation of aid to enterprises. It is also responsible for promoting the development and transfer of new technologies, monitoring the safety of industrial plants that present a high risk to the environment, implementing technical regulations to ensure product quality and safety, and promoting industrial development in depressed areas.

Directorate-General for the Co-ordination of Aid to Enterprises

The Directorate-General for the Co-ordination of Aid to Enterprises is responsible for the following: evaluation of the impact of aid disbursed to enterprises within the framework of EU commitments; management of aid to enterprises in line with the objectives and criteria laid down in the legislation in force, and in accordance with EU commitments.

Directorate-General for the Harmonisation and Protection of the Market

The Directorate-General for the Harmonisation and Protection of the Market is responsible for the following: relations with the Competition and Market Authority; protection of consumers' economic interests; monitoring compliance of products with Community directives in co-operation with the Directorate-General for the Development of Production and Competitiveness; other fields related to the protection of consumers and the market.

SUMMARY OF THE NEW ORGANISATION OF THE MINISTRY OF INDUSTRY

The titles given to the new Directorates-General take into account the terminology of the Treaty of Rome and the need to make clear the new responsibilities being developed.

The substantive responsibilities of the Directorate-General for General Affairs have remained virtually unchanged in the reorganisation under way. The Directorate-General for Trade, Insurance and Services was constituted by merging the Ministry's various responsibilities in the tertiary sector. The Directorate-General for Energy and Mining Resources was formed by combining a number of responsibilities in the sector of energy and mining resources. This reflects the key importance that energy research and exploitation (petroleum, natural gas, coal and geothermal energy) have gradually come to have in mining activities.

The Directorate-General for the Co-ordination of Aid to Enterprises is responsible for co-operation with the European Union and the monitoring of regional programmes of financial aid to enterprises in all sectors. The concentration of all aid programmes in different sectors within a single organisational structure should make it possible to standardise and simplify not only the procedures for granting and disbursing this aid but also those used in evaluating and monitoring results.

The Directorate-General for the Development of Production and Competitiveness will take over the responsibilities currently exercised by the Directorate-General for Industrial Production in the field of large enterprises in difficulty, the regulation of the various market sectors considered to be "mature", intellectual property, and industrial policies in new sectors (the information society, the biomedical sector, new chemicals, etc.), as well as being responsible for SMEs issues. This new structure would reverse the traditional emphasis of the Ministry of Industry, which until now has mainly focused on sectors in crisis and depressed or declining economic areas.

The new organisation of the Ministry's responsibilities specifically in the industrial sphere is now based on the content of policies rather than on their beneficiaries. As a result of this new approach, there is no longer a need for a specialised body for SMEs, which was often felt to be necessary in various situations in the past. It was thought that such a body would be useful to counterbalance the role of the Directorate-General for Industrial Production, which focused primarily on large enterprises. In the new organisation proposed, the issues of competitiveness and the development of small enterprises are given a central position and cut across all the new sectoral directorates-general.

The Directorate-General for the Harmonisation and Protection of the Market should be responsible for all initiatives in the field of consumer protection, enforcement of Community directives on products, regulatory harmonisation and certification. It will also act as the interface with the Competition and Market Authority, and will monitor price formation and will be the central body responsible for legal weights and measures and regulations governing net weight.

JAPAN

INDUSTRIAL POLICY OF JAPAN: PAST AND FUTURE

by
Ministry of International Trade and Industry

The objective of industrial policy

The ultimate goal of industrial policy is to maintain and create jobs and to increase national income by securing the basis for economic development through sound and healthy development of industries, and thus to improve the living standards of this and future generations. Japanese industrial policy places an emphasis on the market mechanism and has adopted indirect policy means to achieve this goal. The synergy with macro-economic policies which contribute to the expansion of the world economy in harmony with international economic environments has been considered very important for the last decade. In particular, the realisation of the domestic demand-led economic growth has become an important goal to decrease the surplus of balance of payments.

Shifts of emphasis in the industrial policy

For the last decade, the emphasis in industrial policy has been shifted as follows. The orientations of those policies are expected to continue in the future.

SMEs policy

Japan recognises the need for the rectification of disadvantages particularly to SMEs, which are handicapped economically and socially in such areas as human resources, funding, information and technology and promotes policies based on market principles for strengthening these areas of SMEs.

On the other hand, concerning a positive aspect, SMEs play important roles to create new industry and technical innovations, and it is from this perspective that Japan promotes a business environment more favourable to SMEs.

Promotion of regional industries

Emphasis was formerly put on the dispersion of industries from large city areas, relocation to local regions and the adjustment of industrial structures of depressed or disadvantaged areas. However, recent emphasis is put on the revitalisation of industrial potential such as the maintenance and development of agglomerations of regional industries.

Investment in industrial fundamentals such as R&D activity, advanced information and telecommunication systems, etc.

In addition to the emphasis on support for R&D activities which are the key factor for future economic development, the policy emphasis is placed on investment in various fundamentals for future development, such as technological fundamentals including advanced information and telecommunication systems, and intangible fundamentals such as the education and training of human resources.

Future orientations of the industrial policy

Regulatory reform: creation of new business and a business environment attractive to Japanese as well as foreign companies

In the progress of the globalisation of the economy, the “megacompetition” in which “Companies select advantageous countries” has been intensified. Under those circumstances, the elimination of various regulations and inefficiencies that prevent the creation of an attractive business environment and constitute one of the causes of high-cost structure, and the reform of various related systems such as the standardisation systems and the working and employment systems, has become a remarkably important subject.

Restraint of the public burden from the standpoint of maintaining economic vitality

The increasing public burden on the people, workers, and the firms due to progression towards an ageing society is anticipated as being a restrictive factor on economic activity. The restraint of the public burden by improving the efficiency of the public sector as a whole, including social security, national and local government finances and the review of the system for achieving appropriate levels of benefits and burdens, are serious problems to be solved from the standpoint of maintaining economic vitality.

KOREA

KOREAN INDUSTRY POLICY FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

by
Ministry of Trade, Industry and Energy
Korea

Korean Industry Policy during the Past Decade

The main objectives of industry policy in Korea

1. Liberalisation: shift from government's direct intervention toward more indirect and functional methods.
2. Economic restructuring to reduce factor costs and to a develop better environment to do business.
3. Foster self-reliant SMEs to achieve balanced and sustained economic growth.

Policy strategies

Liberalisation

- Change to functional and horizontal policies from industrial policies for specific industries: abolish the seven individual promotional acts for the development of specific industries and enact the "Industry Development Act" in 1986.
- Import liberalisation to introduce more competition in the domestic market: renovation of the import-related system on a par with international standards and reduction in tariff rates and other barriers to trade.
- Changes in the foreign capital inducement policy: change to the negative-list system (restriction criteria) from the positive one (selection criteria), lifting of the restriction on the equity share of foreigners and introduction of the on-the-spot permission system.

Economic restructuring

- Institutional reform in four important areas: financial sector reform, tax reform, fiscal reform, deregulation of administrative controls.
- Technology Advancement Policy and Education Reform to lay a firm basis for the further development of Korea.
- Formulate and implement "measures to raise the national competitiveness by more than 10 per cent" to overcome the current economic difficulties and to strengthen the economic foundation since October last year.
- New emphasis on the environment-friendly industrial structure for sustainable development.
- Efforts to reduce high factor costs in labour, factory sites and logistics, and to tackle unreasonable regulations.

Support of SMEs

- Initiate the SME Structural Readjustment Programme in 1993 to help SMEs become more competitive through automation and the commercialisation of new technologies.
- Government procurement system aimed at giving SMEs favourable consideration in bidding for government procurement contracts.
- Provide better infrastructures so that SMEs can compete with the large firms on an equal basis, *e.g.* easy access to communication services, industrial standardisation and Quality Assessment System.
- Cultivating SMEs' human resources by helping SME support agencies arrange their programmes to educate and train SME employees.
- Support the technological development and innovation of SMEs through financial assistance, tax incentives, etc.
- Strengthen the credit support system for SMEs by establishing the regionally-based Credit Guarantee Association, etc.

New direction for 21st century

The main objectives of Korean industrial policy

1. Establish an environment for free competition and improved industrial activity.
2. Strengthen industrial competitiveness to survive head-to-head competition with other countries.
3. Vitalise market mechanisms and private-sector creativity -- enhance the flexibility of industrial structures.
4. Support the start-up of new SMEs to vitalise the Korean economy and improve the overall industrial structure by promoting the venture business.

Policy strategies

Management deregulation

- Accelerate current deregulation efforts in areas such as finance, land use, customs clearance, etc.
- Eliminate bureaucratic red-tape and simplify procedures.
- Tighten surveillance to control abuse of administrative authority.
- Deregulate credit controls both in domestic and international capital markets, and ease foreign exchange controls.

Substantive liberalisation

- Improve the business environment for foreign investors, including one-stop service, easier purchase or rent of industrial sites, etc.
- Harmonise domestic institutions and conventions with international standards (IPR, subsidies, etc.).
- Increase public spending to build social and industrial infrastructure, and provide incentives to induce the private sector's investment.

Enhancement of industrial structure

- Increase the ratio of R&D investment to sales from 2.8 per cent in 1996 to 5 per cent by 2002.
- Initiate technology-driven policies through the "Five-year Technology Infrastructure Development Plan (1996-2000)" and the "Five-Year Plan for Industrial Technology Development (1996-2000)".
- Establish a collaborative joint research system among government-funded institutes.
- Support SMEs' structural adjustment by facilitating competition, and strengthen links and mutual co-operation between large enterprises and SMEs.
- Increase economic flexibility by fostering business ventures and discourage rent-seeking activities.
- Pursue an environment-friendly industrial structure and promote environment-related industries.

Development of regional industries

- Suggest basic policy framework for the promotion of regional SMEs, and balance the industrial development between central and provincial areas.

- Establish credit unions in each region, with contributions from local governments and industrial sectors.
- Devise a basic plan for regional industrial distribution for the 21st century, in consideration of each region's characteristics.

Promotion of venture business

- Enact the "Venture Business Promotion Act" in 1997 to accelerate the start-up of technology- and knowledge-based SMEs.
- Provide better availability of venture capital, including angel capital and Over-the-counter Market.
- Remove restrictions on utilising foreign capital for investing in venture businesses.
- Improve the environment for venture business: support R&D activities, cultivate human resources, and reduce high factor costs in labour, factory sites and logistics.

LUXEMBOURG

MAIN ORIENTATIONS OF POLICIES IN LUXEMBOURG FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

by
Ministry of Economy

Brief introduction

It is first worth noting the distinctive nature of Luxembourg’s economy which might be described as that of a small area.

Domestic demand in the Grand Duchy of Luxembourg is low and the country is therefore obliged to export domestically-produced goods and services. Luxembourg’s natural, human and financial resources are limited in quantitative terms, and insufficiently varied in qualitative terms, to be able to meet the country’s demand for factors of production, which means that the latter must largely be imported.

These two distinctive characteristics -- and the need to ensure profitability -- mean that industry is obliged to exploit economies of scale, which has resulted, firstly, in a trend towards specialisation and the concentration of activities in given sectors, and secondly the proportionally greater use of foreign factors of production than is the case in larger countries.

Current situation

Against this background, the objectives of Luxembourg’s general economic and industrial policy are to:

- maintain sustainable economic growth;
- diversify the range of production activities;
- develop, strengthen and redirect industrial structures.

At present, Luxembourg’s industrial policy is set out in the amended framework-law of 27 July 1993 whose objectives are to promote economic development and diversification and to improve the general structure and regional balance of the economy.

This law is designed to encourage investment, restructuring or R&D initiatives aimed at promoting the creation, development, rationalisation, conversion or reorientation of enterprises.

The provisions of this law apply to both industrial firms and firms supplying services, in that the latter can help to drive economic development while at the same time making a positive contribution to the development or structural adjustment of the economy.

Improving the business environment

To help maintain the industrial competitiveness of firms, the Luxembourg government has modified a number of direct and indirect tax measures and in particular the following:

- special amortisation provisions for firms investing in measures to protect the environment (reductions in water consumption, emission prevention and waste recycling, more efficient use of energy);
- reduction in the tax on local authority revenue (the tax rate for fiscal 1998 will fall from 32 per cent to 30 per cent;
- abolition of the communal business tax on operating capital;
- introduction of legal provisions to encourage leasing operations in the property market;
- introduction of an abatement for physical persons with commercial income.

Action plan for small and medium-sized firms

To maintain a healthy and vigorous craft and small business sector in the Luxembourg economy, the Government has drawn up an action plan for SMEs.

This programme is aimed both at enterprises and the labour market and is designed to:

- encourage the creation of new firms and buyouts of existing firms;
- make it easier for workers with secondary and higher education diplomas to enter the crafts and small business sector;
- increase the capital of mutual associations providing assistance to SMEs in order to increase their capacity to guarantee loans to young entrepreneurs lacking sufficient financial backing;
- enhance the competitiveness of firms by facilitating the modernisation, expansion and restructuring of firms as well as inter-firm collaboration;
- liberalise the limits on the number of authorised subsidiaries allowed;
- ensure the initial and continuing training of company heads.

Monitoring the labour market and trends in employment

Under a Grand Ducal ruling issued on 31 January 1996, the Government set up a standing Committee on the labour market to allow it to monitor the labour market and trends in employment. This

Committee is a three-party body chaired by the Minister of Work and Employment and meets at least once every two months.

The Labour Committee monitors decisions relating to employment taken by the three-party co-ordinating committee. As part of this task, the Standing Committee on Employment monitors the operation and development of the labour market in Luxembourg. To do this, the Committee can commission reports on the labour market, as well as general or sectoral studies, and can put forward proposals regarding the action to be taken by government.

Conclusion

Luxembourg's industrial policy and all the measures recently introduced by the government are designed to maintain the attractiveness of Luxembourg as an industrial location by creating a framework and environment which will encourage investment, competitiveness and the creation of new jobs.

MEXICO

MEXICO'S INDUSTRIAL POLICIES SINCE MID 1980s

by
Secretaria de Comercio y Fomento Industrial
General Directorate for Industrial Promotion

Since the middle of the past decade, Mexico has undertaken deep structural reforms aimed at improving performance and competitiveness in all its economic sectors. Starting from accession to the GATT in 1986, followed by an unilateral liberalisation process, these reforms have shaped a completely different environment under which economic activity takes place.

Government's role has also changed. From being an active participant of the economic activity, it has shifted towards creating the framework for competitive markets to develop, which fosters private investments as well as highly remunerated jobs. Policies pursue a business environment where market forces can operate freely and undistorted: there are no subsidies for any specific sector. This represents a major shift from previous policies, vertical and sector oriented. Policy is giving closer attention to the SME sector rather than large businesses.

Several steps have been simultaneously taken in order to accomplish these goals. Industrial policy, trade policy and the deregulation of economic activity have all worked through co-ordinated and consistent guidelines. Among the most important government initiatives are:

- Regulatory reform. Significant changes have been made to the regulatory framework in areas such as foreign investment, intellectual and industrial property, land ownership and petrochemicals, mainly.

  The reformed Law on Foreign Investment has succeeded in fostering capital inflows for business projects as well as strengthening the financial market. This Law allows for a complete participation of foreign investment in most economic activities, except for banking and finance -- limited participation -- and those explicitly reserved for the State.

  The framework on intellectual property has been revised basically in relation to two concepts: Copyrights and Industrial Property. The former has now a broader scope and includes, in addition to literary rights, radio, music, films, etc. The latter is enforced by a decentralised government institution whose main task is to detect and eliminate counterfeiting and piracy.

  Legal framework on land ownership for agriculture has also been revised, opening new business opportunities for private -- domestic and foreign -- investors in this area.

- Liberalisation and Trade. At the end of the past decade, Mexico unilaterally accelerated its free trade policy and within two years became one of the most liberalised economies in the world. In addition, several agreements on trade, investment and co-operation have been negotiated with different countries to expand business opportunities for domestic and foreign corporations. Counterparts include Bolivia, Canada, Chile, Colombia, Costa Rica, El Salvador, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Peru, United States and Venezuela among others.

  The most important of these agreements is of course NAFTA. Not only for Mexico, but for the whole North America region, it has represented a very significant increase in business and trade, reflected in higher level of exports, employment and investments.

  However, upon recognition of the important benefits from commercial diversification, the framework for a trade agreement negotiation with the European Community is currently being discussed.

- Privatisation process. Within its new role in the economy, the government has kept aside of economic activities, leaving them almost entirely to the private sector, except for the cases where either by constitutional mandate or market conditions its involvement is needed. Hence, the government sold most of the public enterprises -- including profitable financial institutions -- and used revenues to create infrastructure and pay its debt.

  This privatisation process has also been intended to foster private investments in strategic areas, such as telecommunications, airports, seaports, railroads and roads. Furthermore, the oil industry, for many years being exclusively owned by the government, now is also opened to private investment in the petrochemicals sector.

- Competitive markets. A Federal Commission on Competition has also been created to help enterprises increase their competitiveness by eliminating market distortions in the economy. To accomplish this task, the Commission participates in the selling process of public enterprises, revises the regulatory framework for enterprises, eliminates trade barriers and acts against monopolies, either by prohibiting them or regulating the ones in existence.

- Normalisation and metrology. Solid progress has been made on the use of a nationally-recognised system on norms and metrology in order to guarantee the same quality standards for all domestic products of any given industry. A National Commission on Normalisation has been created for this purpose.

- Deregulation process. Deregulation of the economic activity is among the highest priorities of industrial policy. In addition to the above mentioned regulatory reform, the legal framework is constantly revised in order to eliminate unnecessary burdens for enterprises. Special attention is given to the reduction of paperwork and other procedures on investment, trade and credit for SMEs.

  An agreement between the government and the private and academic sectors has been signed on this issue. After in-depth examination on the current legal framework for each sector, decisions on further deregulation are taken by consensus of this group on a case by case basis.

- Pensions system. The social security system has faced a major restructuring with a twofold purpose: first, to offer better services and higher pensions for workers after retirement. Second, it will allow for a higher level of domestic savings which in turn will make the country less vulnerable to external shocks.

The results from all these combined efforts are more favourable business conditions for the private sector, reflected in higher, more stable levels of employment and growth for the whole economy. The economy's performance during these most recent years has proven the benefits from such a deep reform. In fact, the Mexican economy would not have recovered so fast from the 1994 peso crisis if these structural changes had not occurred years before.

NETHERLANDS

INDUSTRIAL DEVELOPMENT POLICY IN THE NETHERLANDS: PAST, PRESENT AND FUTURE

by
Ministry of Economic Affairs
General Policy Co-ordination Department

Industrial policy in the 1980s and 1990s

General economic background

In the early 1980s, the Dutch economy encountered some severe problems. The public finances were out of control. To finance this expenditure, the tax burden rose sharply. At the same time the government deficit increased. Also labour costs rose, partly due to the rise in taxes and automatic wage compensation for price rises. As a result employment came under pressure. From 1981 to 1983, 6 per cent of the jobs in the Netherlands were lost -- twice as many as in the EU as a whole.

Since then several important policy changes have been made to counter these developments. Firstly, successful efforts were made to control public spending. This made tax cuts possible. Secondly, these tax cuts also contributed to wage moderation. Work was placed above income. The labour income ratio fell from 93 per cent in 1983 to about 83 per cent in 1997. Thirdly, a reorganisation of the social security system took place. Benefits were reduced, the statutory minimum wage on which benefits are based was frozen and the eligibility criteria were tightened up.

In addition to the continuation of the above mentioned policy-lines, in the 1990s two new policies were introduced. Firstly, policies were implemented to strengthen market forces.

This was done by deregulation of the labour market, and goods and service markets (shop closing hours were broadened, new legislation on competition is being implemented). Secondly, there has been a shift in government expenditure from consumption to investment (in infrastructure). An excellent infrastructure is vital for the Netherlands, given its role as an important "Gateway to Europe".

The 1995 Dutch benchmarking project underscored the necessity of the above mentioned policy lines. The aim of this project was to identify the relative position of the Dutch economy in relation to a number of other countries (Germany, Belgium, Denmark, US and Japan) on key determinants of competitiveness.

Industrial policy

In the early 1980s, Dutch industrial policy aimed at the support of companies facing continuity problems. This policy could be characterised as “defensive”. In the 1990s the industrial policy moved its focus towards the creation of general conditions that favour the competitiveness of its economy (an offensive strategy).

In addition to the improvement of general economic conditions mentioned in the first paragraph (infrastructural works, tax-reliefs, deregulation and strengthening of market forces) the Dutch industrial policy focuses more specifically on technological innovation and co-operation.

In the late 1980s, early 1990s Dutch spending on R&D has been falling as a percentage of GDP and dropped below the OECD average. This was caused by a drop in the private sector R&D spending. In 1995 the Ministers of Economic Affairs, Education, Culture and Science and Agriculture sent a paper (“Knowledge in Action”) to the Parliament that outlined some major changes in industrial and technology policy. The paper indicated that not only lagging investments in R&D (private and public) is a topic of concern, but that special efforts were needed regarding the output of R&D. In pursuing this goal -- a higher output of R&D-spending -- the government paid special attention to the interaction between public and private research. This new policy has led to a reorientation of the instruments that are employed by the Dutch government for the stimulation of technological innovation.

“Knowledge in Action” announced policy-efforts along three lines of action. In the first place policy was aimed at strengthening the basic conditions for innovation. This was done with several instruments, among which tax reduction on R&D-employees (WVA/S&O) and the creation of Leading Technological Institutes (TTIs) based on public and private partnership. It is to be expected that there will be four TTIs in operation at the end of 1997.

Secondly, the government tried to improve the match between supply and demand of knowledge. Several instruments have been put into action or have been modified:

- funding of research institutes in a more market-oriented way (research programmes are oriented on markets and -- future -- customers and the private sector commits itself to these programmes);

- the creation of a collaboration facility (BTS), aimed at technological co-operation between corporations and between corporations and research institutes;

- a new facility which enables SMEs to perform feasibility-studies to assess the introduction of new technologies;

- KIM-facility (this facility enables SMEs to contract graduates. This mechanism permits SMEs to “import” innovation capacity);

- focusing of fundamental scientific research on issues relevant to the private sector (this is done by the Netherlands Organisation for Scientific Research (NWO)).

Thirdly, programmes were set up to stimulate a better use of promising emerging technologies:

- The EET-programme (Economy Ecology Technology) focuses on technologies expected to yield economic and ecological results in the foreseeable future (5-20 years). Projects within this programme are a better co-operation of corporations and research institutes.

- The action programme Electronic Highways, which focuses on the stimulation of the creation of the ICT-infrastructure and the use of electronic highways. This is, among other things, done by liberalisation of the telecommunication and media markets, demonstration projects and an action plan “ICT and Education”.

Future trends

Although it is difficult to forecast the directions in which industrial development policy is leading, some future trends are foreseeable.

The new directions in technology policy seem to be fruitful. This means that further strengthening of the three policy lines is considered. Possibilities are the extension of technology stimulation programmes (BTS, WBSO) and programmes to stimulate the diffusion of knowledge (KIM-facility, feasibility-facility).

Much effort is done to stimulate the development of technology and co-operation in the Netherlands. But the actual use of technology also is a problem. High financial and commercial risks cause corporations to be careful in adopting new technologies. Rather, they rely on proven technology and new technologies stay on the shelf. To improve the use of new technologies a so called first-mover-facility is created. This facility will focus on eco-technologies.

There is a clear trend that corporations (and research institutes) co-operate more and more. Reasons are (among others) the high costs and complexity of technological development. The Dutch government is investigating how to further facilitate this trend (“clustering policy”).

The strengthening of the Dutch economic structure is high on the political agenda. A central issue is how the economic structure can be strengthened in a sustainable way. There are several major knowledge gaps. Therefore, an important aspect in this discussion is the strengthening of the Dutch knowledge infrastructure.

More and more it is recognised that innovation is dependent on several factors of which technology (although very important) is only one aspect. For example, “soft” knowledge is also relevant: knowledge of markets, of design, of organisation, etc. Another aspect is the trend toward lifelong learning and employability. It is under investigation how these new forms of innovation and learning (“learning on the job”, etc.) can be stimulated.

NEW ZEALAND

NEW ZEALAND: INDUSTRY POLICY

by
Ministry of Commerce

The New Zealand economic reform process over the past thirteen years has been described as the most comprehensive economic reform programme undertaken by any OECD country in recent decades. The exchange rate has been floated, industry protective import licensing and subsidies have been removed, and market liberalisation is ongoing through tariff reduction and simplification programmes. Tariffs are New Zealand's main remaining direct industry assistance instrument, with the once-comprehensive import licensing system coming to a complete end in 1992 (most goods were exempted by 1988). A tariff review in 1998 will be conducted in the context of a government decision, announced in the 1997 Budget, that all tariffs are to reduce to zero well before 2010. The current tariff reduction programme applying from July 1997 to July 2000 is already reducing rates and rationalising the tariff profile; by July 2000, all rates will be either duty-free or at 15, 10 or 5 per cent. The public sector has undergone massive change with the introduction of new financial management systems aimed at improving efficiency and accountability, as well as the commercialisation or privatisation of state-owned enterprises. Monetary and fiscal policy has been geared to reducing uncertainty in the business environment through the goal of general price stability. The labour market has been deregulated, facilitating the mobility of resources in the market.

The reforms have led to economic growth, in real terms, of about 17 per cent in the six years since 1991. Underlying inflation has generally remained below 2 per cent. New Zealand's export earnings over the past five years have increased by 33 per cent, with significant growth in exports of non-commodity manufactures. Unemployment has fallen from 10.6 per cent in 1992 to 6.2 per cent in 1997. Net public debt has fallen from 50.5 per cent of GDP in 1991 to 28.6 per cent of GDP in 1996.

The Government's economic policy objectives are designed to benefit all businesses no matter what their size, sector or location. There is no policy to promote the development of particular industries or geographic regions. The aim is to create a competitive environment in which investment decisions are based on undistorted market signals. There are five key cornerstones to this policy, each of which is important in creating an environment in which business can prosper:

- Price stability -- this reduces the risk of boom and bust cycles that can be particularly destructive for small businesses, which tend to be less diversified and less able to withstand such cycles.

- The Employment Contracts Act -- creates labour market flexibility which enables businesses to tailor their employer-employee relationship to their individual circumstances rather than being encumbered with centrally determined industrial relations arrangements.

- Generating budget surpluses and debt reduction -- reduces the impact of adverse shocks to the economy which small businesses in particular are less able to withstand.

- Broad based, low rate tax structure -- ensures that all enterprises pay their fair share of the tax burden, rather than disadvantaging businesses that cannot afford complex tax planning.

- An open internationally competitive environment -- this has resulted in exposure to international best practices and reduced import costs. It provides the best opportunity for businesses, particularly small businesses, to trade and develop linkages with overseas markets, thereby enabling them to develop niche markets that the domestic market alone could not support.

The New Zealand Government seeks to encourage successful enterprise and innovation for all firms in a variety of ways (see below for examples).

1. Minimising government red tape

The Government is committed to improving the quality of interventions in the economy and providing a regulatory environment which is effective and fair, enhances a competitive economy, and imposes the minimum necessary costs on business.

The Government has recently agreed in principle to a package of measures which aims to improve the quality of regulatory outcomes and reduce the cost of regulation. The measures deal largely with the processes and underlying principles for regulatory action. They include the adoption of a Code of Good Regulatory Practice to spell out the principles which should underpin regulation-making, a Generic Development Process to ensure features of good process (including consultation) are undertaken, and the requirement to complete Regulatory Impact Statements with policy proposals. These measures will also introduce greater transparency and accountability into the regulation-making process.

A key element of the package is the introduction of a Regulatory Responsibility Act to promote quality intervention by government. The purpose of a Regulatory Responsibility Act is to impose a legislative discipline on the regulation-making process by establishing a set of principles to guide regulation-making which is authoritative, accessible and durable.

2. Availability of appropriate technology

The New Zealand Government remains committed to supporting technological innovation within the economy with three inter-linked strategic goals:

i. to raise the technological competence and understanding of more New Zealand enterprises;

ii. to ensure that the environment within which technology investments are made is free from regulatory, institutional and other impediments; and

iii. to enhance the integration of New Zealand firms into the global technology market.

In June 1997 a new government-funded scheme, the Technology New Zealand Scheme ($15.7 million in 1997/98), was established as a direct result of recommendations made by a Technological Innovation Working Group appointed by Cabinet in the middle of 1996.

The scheme consists of three programmes: TechLink, which is intended to create enterprise awareness of and facilitate access to new technology; Technology for Business Growth which is intended to foster research and development, technological learning and technological innovation within enterprises; and Graduates in Industry Fellowships which is intended to support science and technology based projects carried out within enterprises by improving university-industry linkages and increasing the number of science postgraduates in industry.

The TechLink programme is a new initiative while the Technology for Business Growth and Graduates in Industry Fellowships programmes are expansions of existing programmes.

3. Internationally competitive human resources

The Government has given emphasis to raising the skills base throughout the economy with particular emphasis on education, training and workforce participation. The goal is for New Zealand to become the most highly skilled nation in the world, with relevant skills and academic knowledge widely distributed.

Industry Training Organisations (ITOs) established in particular industries, are responsible for setting national skill standards for their industry, developing training packages for employers in their industry, arranging for delivery of training and determining how to monitor training standards and the assessment of trainees. The strategy is about training by industry for industry.

There are currently 51 ITOs promoting qualifications registered on the National Qualifications Framework (NQF).

4. Business Development Programme

The Business Development Programme, including the grant schemes, was the subject of review and refocus in 1995. The current programme includes business appraisal, education and keeping businesses informed on business development issues (see attached). The emphasis is on best practice and business excellence. The communication and recognition vehicles used include the publication “Business Development News” which is published 11 times per annum and the Business Development Quality Awards which are administered by the Business Development Group of the Ministry of Commerce with financial support from private sector sponsors. The Business Development Programme, including the grant scheme component, is currently the subject of further review.

5. New Zealand Trade Development Board

While largely government-funded, the New Zealand Trade Development Board (Tradenz) is a commercially-driven organisation which works with exporters to develop international business opportunities. Tradenz educates and provides information to exporters through a range of initiatives including market seminars, Joint Action Groups, hard networks, databases of export opportunities and its network of trade commissioner and representative offices. Most services are supplied on a cost-sharing basis.

While the Government provides a level of information and advisory services to both exporting and domestically based businesses, it generally expects businesses to look to their own resources in acquiring the skills and knowledge necessary for success.

New Zealand has practised unilateral liberalisation in all areas of its trade policy, but sees multilateral free trade as the best possible policy setting and works toward this end in the WTO and APEC. New Zealand is committed to move to free trade and investment by 2010 under APEC commitments.

ANNEX
THE REFOCUSED BUSINESS DEVELOPMENT PROGRAMME

Objectives of the programme

The Business Development Programme helps New Zealand's small and medium enterprises (SMEs) access the Information and skills they need to compete effectively in todays global trading environment, and so accelerate and sustain economic growth.

The Programme Components

1. **Information component**. The objective of this component is to help remove uncertainty and improve the quality of decision-making through the provision of timely and relevant information to SMEs on overall economic/regulatory information within which businesses operate, New Zealand's trading activity and regional economies, techniques to improve business skills, and sources of advice and assistance for SMEs.

2. **Business Capability Improvement Component**. Comprises four inter-linked elements with clients entering at the most appropriate point in terms of their business capabilities.

   a) A preliminary business appraisal (capability assessment):

   – An independent "snap-shot" to help clients determine their current capability, skill and performance levels. The objective is to provide an independent basis for developing an ongoing programme for improvement, whether through further BDP assistance or referral to other agencies.

   – The assessment focuses on 8 key capabilities: business planning; marketing; operations management; financial and information systems; organisation and human resources management; product design, research and development; quality; and environmental management.

   – Available to SMEs on a dollar-for-dollar subsidy to a total grant of up to $500 GST inclusive. Larger businesses may have an appraisal done, but they will not be eligible for a subsidy. A free pre-appraisal assessment may be provided by BDP staff for individuals contemplating going into business.

   b) A business training/educative component:

   – Involves training and education based on the skills, knowledge and capability gaps identified in the appraisal. Clients will be referred to practical business training of a level and duration appropriate to their needs. The training is provided by a range of agencies in the community.

   – Attendance costs will be met by participants. Boards may contribute towards any shortfall if attendance fees do not cover the costs of providing the training.

c) A grant scheme:

- Lets clients test and apply capabilities and skills gained in the business training/educative element, or acquired independently, by providing assistance in three key areas: strategy, innovation and research & development, and implementation.

- The strategy element helps clients determine their goals and objectives, and ways of meeting them. The grants are to encourage businesses to engage consultants in any of the eight capabilities referred to in the appraisal element.

- The innovation/R&D and the implementation element enable clients to test their strategic focus for products or services new to a region, or for the introduction of new technology into an existing product or service. The innovation/R&D element covers market assessments, financial analysis, research and development, production feasibility studies, intellectual property protection, accessing technology, regulatory requirements and distribution. The implementation elements is available for market research into and exploration visits to new overseas markets, trade fair participation, promotion/advertising in new overseas markets, and intellectual property protection.

- Open to any individual or organisation resident in New Zealand and registered for either income tax or GST. Businesses, including subsidiaries, employing more than 50 full time or full time equivalent staff are ineligible. The activity must be legal and applications must show that the goods or services already compete, or show potential to compete, with imports or products on the international market. Activities directed at the Australian market are ineligible.

- No client can receive more than $50 000 in total, and no more than $20 000 in payments in any one financial year. Grants are GST inclusive, and are paid on the basis of 50 per cent reimbursement of eligible costs, with no other portion of the costs being funded from any other Government source. The maximum grant available under specific categories is:

Innovation and R&D	$ 10 000
Market research into new overseas markets	$ 2 500
Exploration visits to new overseas markets	$ 3 000
Trade fair participation	$ 7 500
Promotion/advertising in new overseas markets	$ 6 000
Intellectual property protection	$ 2 000

d) Business best practice education and recognition initiatives:

Directed at fostering the application of TQM principles and best practices in New Zealand organisations, particularly SMEs. Businesses are encouraged to apply TQM principles through advice and information utilising the Excel NZ business improvement initiatives, and by having their achievement recognised through the Business Development Quality Awards.

3. **Co-operation Component**. BDPs are not alone in providing advice, information and access to trainers and appraisers. Boards are required to work closely with other providers, and establish effective co-operative relationships, be they Government, local government agencies or private sector parties.

NORWAY

POLICIES FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

by
Royal Norwegian Ministry of Trade and Industry
Industrial Policy Department
Division of Economic Planning and Analysis

History

The development of Norwegian manufacturing industries has been chiefly founded on the following objectives:

- to produce equipment, tools and other items for industrial and domestic use;
- to exploit our natural resources, such as fish, timber, metal ores, hydroelectric power, petroleum, etc.

Electricity laid the basis for the great industrial breakthrough at the beginning of the century. Large hydroelectric power stations were constructed, and the electric power was used for different types of chemical and metallurgical industries. Norway has large forest resources. These laid the basis first of all for wood manufactures and later for the manufacture of paper and paper products. Rich Norwegian fisheries have laid the basis for a fish processing industry that is found along the entire coast. Furthermore, large discoveries of oil in the North Sea in the early 1970s started Norwegian petroleum-based activity. The subsequent investments in the petroleum industry and petroleum-related activities led to the development of a petroleum sector that has become extremely important to the Norwegian economy and business and trade. The public income from the petroleum activities is channelled into the Norwegian economy through the State Budget. This income contributes to keeping our high standard of living without putting more pressure on the tax level.

Few countries in the world have a more open economy and are more dependent on trade than Norway. With a small domestic market, many enterprises and industries are completely dependent on exporting their goods. Between 80 and 90 per cent of all Norwegian fish products are exported, and the same percentage of all aluminium and other metals are exported. At the same time, imports constitute approximately half of all consumption in Norway. Export companies are not the only ones that are exposed to international competition. A number of the companies that supply goods and services to the domestic market are actually also exposed to international competition in Norway. This means that it is our ability to produce and develop goods that are competitive in international markets, either in Norway or abroad, that determines our ability to maintain employment, create more jobs and further develop the welfare society.

The Norwegian economy is often referred to as a mixed economy. This entails that the production and the distribution of goods and services are partly determined by supply and demand in the market and partly by government authorities at different levels. The private sector of the Norwegian economy is not a free-competition market. The authorities set out clear ground rules under which enterprises must operate. This applies to for instance taxation, environmental and safety requirements, requirements concerning industrial democracy and distribution. Within limits that are established politically, the enterprises themselves are responsible for using their resources to create profitable activities.

Recent developments

Increased internationalisation of industry places considerable demands on a coherent and co-ordinated industrial policy. This is the main reason that the responsibility for industrial policy and some aspects of trade policy were combined in the Ministry of Industry and Trade as from 1 January 1997. The Government thus aims at placing greater emphasis on international conditions when formulating industrial policy in the years ahead. The main priorities of the Government's economic policy in recent years have been to secure work for everyone, a just allocation of goods, and a further development of a prosperous welfare society. Prime conditions for achieving these goals are access to capital and competence, together with a solid industry consisting of strong and competitive business.

The Government has in recent years worked with a purpose to reduce unemployment, the so-called "Solidarity Alternative". A main element in this strategy has been a reduced price growth combined with fixed exchange rates in order to strengthen the competitiveness of trade and industry in terms of costs. The Government has furthermore, through the policy outlined in its Long Term Programme for 1994-1997, laid the path for an income-policy co-operation with the parties in working life, an active labour market policy, and an equalisation policy of the living standards. This has given results: inflation is under control, we experience low rates of interest, the exchange rates have remained stable, a positive growth in job creation throughout the country is taking place, and exports have shown a pronounced increase.

The Norwegian economy has experienced a general strong upward movement in trade for more than three years. The growth was especially prominent in the last half of 1993 and in 1994. Factors behind this growth were: strong increase in private consumption, high housing investments, and increased exports of traditional goods. Since 1995, the general improvement in trade further secured its grip through investment growth in mainland Norway. The last months' developments indicate a continuing growth in 1997.

Several indicators reflect this development (numbers from the Final budget proposal):

Key projections for the Norwegian economy (volume change from previous years, %)	**1996**	**1997**
GDP, total	5.3	3.9
GDP, mainland Norway	3.7	3.3
Employment	2.5	2
Gross fixed investments	4.8	8.2
-of which: petroleum activities	-4.4	18.5
mainland Norway	11.1	5.1
Private consumption	4.7	3.2
Exports	10	5.1
-of which: crude oil and natural gas	15.5	6.8
traditional goods	10.3	4
Unemployment rate	4.9	4

A broad industrial policy strategy

Norway is facing great political challenges when it comes to taking care of and further developing the welfare society. The petroleum revenues are expected to decrease strongly after the turn of the century. After year 2010 the growth in the labour force is expected to decrease at the same time, while a rising number of elderly leads to increased expenses for pensions, nursing and social services. A strong growth in the labour force over the next 10-15 years necessitates an increase in the number of available jobs in order to achieve the goal of work for everyone. In order to meet those challenges and to create a possibility for improved quality of life, job and income security, and securing a good environment, it is necessary to increase the industrial activity in the mainland economy.

Key tasks of industrial policy are to foster an efficient use of resources in areas of importance to the development of industry and commerce and to increase the level of skills in the business sector and the labour force. At the same time the policy should contribute to innovation and the use of new knowledge and technology, create conditions which ensure a sufficient supply of risk capital in all parts of the country and develop the public sector as a positive competitive factor. In a knowledge-based economy, the further development of the education and research system will be an important task.

The conditions for higher value added and employment in industry and commerce are determined by many factors -- internal conditions in enterprises, the market situation and the rules established by authorities. A forward-looking industrial and regional policy must promote a coherent strategy for a dynamic business sector in all parts of the country. Special emphasis must be placed on the challenges facing the small and medium-sized enterprises.

A central approach is how we unite changing needs of the individual with increased demands for reorganisation. How can we create an organisation of work that is flexible enough to contribute to fulfilling: demands to industrial activity and a sustainable economic development, demands from individuals regarding different needs through different phases of their lives, and demands on increased equality between the sexes.

Policy for internationalisation and exports

In an international context, Norwegian enterprises compete with companies from far larger countries. Resources from the Norwegian authorities may at times appear small in this connection. Being based in a small country can also provide advantages for the business sector, such as transparency, flexibility and good working relations. The Government will seek to promote Norwegian interests in the further development of international rules which regulate industry's competitive conditions both on a European and global level. This work will be based on an appropriate and practically oriented co-operation with the business sector and the social partners.

A better co-ordination of efforts to develop international know-how and marketing may improve enterprises' potential for international activities. The Norwegian schemes for credit insurance and guarantees for exports are today competitive with other countries' arrangements. The increased focus on distant markets entails that various policy areas must be viewed as a whole. Regional plans for promoting exports to distant markets have shown favourable results, and the Government will continue to co-operate with the business sector concerning the development of regional plans. Regional plans will contribute to synergy effects between the use of various instruments. This applies to existing export-promoting instruments, but also through a political dialogue, cultural exchange, information and the development of networks. The goal is to amplify the effect of the overall efforts aimed at internationalisation and exports.

Policy for small and medium-sized enterprises

Small and medium-sized enterprises account for an important share of innovation and restructuring in the business sector, but may face many challenges. The Government will therefore attach special importance to the needs of these enterprises in general economic policy and industrial policy. Industrial and regional policy instruments that are of considerable importance to small and medium-sized enterprises are risk financing, advisory services, rules and regulations and the transfer of know-how.

Supply of capital and ownership

The basis for a sufficient supply of capital is established through profitability and sound investment projects developed by the business sector. The task of the authorities is primarily to ensure framework conditions for financial markets which provide an efficient supply of capital, both of loan capital and new equity capital. It is particularly important to prevent tax considerations from being a dominant consideration for the investment of capital, which would contribute to a lower social return.

Capital which is made available at an early stage of new development projects, along with an active transfer of know-how for company and product development, is often referred to as seed capital. Several of the existing public financing schemes have some characteristic of seed capital. Furthermore, a special scheme with state capital in the form of subordinated loans will be established which can be extended to seed capital funds where private investors participate with equity capital. A requirement for obtaining this capital is that the state's capital contribution is at least matched by contributions from private investors.

Ownership should be evaluated based on the importance of the supply of capital for business activities and the policy guidelines for management, but also based on distributional concerns and a long-term approach. Enterprises are very different with regard to commercial strategy, capital requirements, funding sources, and performance follow-up. The type of ownership which is most appropriate will therefore vary considerably. In most cases the competitive situation will be more important as a management corrective than whether the enterprise is, for example, publicly or privately owned.

Competition policy

The main objective of competition policy is to contribute to an efficient utilisation of society's resources by providing the necessary conditions for effective competition.

The Government intends to make active use of instruments in the Competition Act. This applies to both the enforcement of prohibitions and requirements and the application of the power of intervention pursuant to the Act. Over the next few years it will be particularly important to monitor markets which to a greater or lesser degree are sheltered from cross-border competition, *e.g.* retail trade and the agro-food industry, and markets that are developing as a result of de-regulation, *e.g.* markets for electricity, aviation and pharmaceutical products.

The Government assumes that restructuring of former monopoly areas or heavily regulated markets shall result in genuine competition in the markets concerned. Public sector entities that are converted to separate companies, will then be placed on an equal footing with other enterprises in relation to the competition authorities. This entails that a greater portion of commercial activities will be subject to general framework conditions, and to a lesser extent be governed by special regulations.

A policy for innovation and skills development

Enterprises' ability to adjust and innovate is becoming an increasingly important element of competitiveness. This comprises the development of products and organisation and a strengthening of the capabilities of management and employees. The basis is developed through an interplay between research and development and an efficient supply of capital.

Innovation and skills must be developed in a global context. Knowledge and ideas are flowing ever more quickly between countries, not least with the use of new information and communication technologies, and within multinational corporations. National boundaries thus take on less importance for technology and markets. International co-operation and technology acquisition will be an increasingly important element of R&D efforts in an increasingly global economy.

The Government will endeavour to strengthen R&D activities in the business sector. Continued emphasis will be placed on user-managed R&D programmes under the auspices of the Research Council of Norway in order to encourage enterprises to increase their R&D efforts and to make use of the results. Government involvement should be concentrated on projects that can be expected to provide good results but where there is insufficient basis for commercial funding, projects with diffusion of knowledge and technology (strategic R&D programmes and basic research) and fields where there are broad user interests in Norway.

POLAND

INDUSTRIAL POLICY OF POLAND DURING THE TRANSFORMATION PERIOD AND ASSUMPTIONS FOR THE FUTURE

by
Ministry of Economy

The reasons of creation and the objectives of industrial policy

The break of 1989/1990 commenced the process of fundamental changes within the Polish economy. Their aim was to fully abolish the centrally planned economy and to transfer to a free market economy. During the first years of this process the principal goal of the government was to create an appropriate environment for economic activities, consistent with the rules of a market economy. Then it was also assumed that the market should play the role of a superior creator and regulator of the transformation process, and the government should limit to the highest degree its participation in this process. During this period the government did not try to create industrial policy but did concentrate on such issues as:

- renewed enforcement of the Commercial Code passed in 1934 but practically not functioning after the 2nd World War;
- gradual liquidation of prices and wages control;
- repeal of subsidies to many economic branches, including mining industry and state owned agricultural farms;
- privatisation of enterprises and creation of a capital market;
- tax reform, including the introduction of income taxes (Personal Income Tax, Corporate Income Tax and Value Added Tax);
- liberalisation of foreign turnover.

This assumption, that is the lack of an active state policy, turned out to be appropriate to a large extent. Re-orientation of the economy from the markets of the former COMECON states to the markets of developed countries, of EU first of all, took place relatively quickly and the production and the national income decrease was smaller than in other countries which were in the process of transformation. Opening the economy allowed to directly confront Polish and foreign products, that on one hand showed the distance separating the Polish industry from its foreign competitors but on the other it caused production "clearing" of goods not accepted by the market.

Nevertheless, the defects of such policy rapidly came to light. Market mechanisms turned out to be effective in the restructuring of trade and services and of "light" industrial branches. In a short period of time they enabled to establish a lot of private companies (ca 2 mln), mainly commercial, small and of weak capital. However, the restructuring of the major part of the industry proceeded slower than it had been assumed by the votaries of "pure" market mechanisms. The number of enterprises having deficit and trouble with financial liquidity constantly increased, and the number of economically strong enterprises was small. This situation was especially sharply observed in the traditional, "heavy" industries where even relatively small technological changes require large capital expenditures. Worsening the situation of enterprises was the reason for a significant drop of income to the budget and a rapid growth of its deficit in 1991. Besides, there occurred an intensification of social strains (due to unemployment), especially in traditional industrial centres as well as local ones, dependent on single, huge works.

In this situation, at the end of 1991 work on industrial policy of the State was started in the Ministry of Industry and Trade. In September 1993, the Government accepted the document entitled: "Industrial Policy -- Objectives and Implementation Programme for 1993-1995" and in May 1995, the programme of industrial policy for 1995-1997 entitled "Policy Towards Small and Medium Enterprises".

The objective of the industrial policy programme for 1995-1997 is to increase international competitiveness of the Polish industry and to ensure economic growth in the open economy conditions.

A characteristic feature of the accepted industrial policy programme was a combination of both, horizontal and sectoral approaches. In the horizontal approach two areas were exposed, namely export-oriented policy and technological policy. The sectoral character was characterised by, partly, the policy of structural changes in industry, comprising ownership changes, development of small and medium enterprises and industrial restructuring.

The objective of export-oriented policy was to achieve a sustainable increase of export and to use it as a basic factor to accelerate the rate of economic growth.

The export-oriented policy measures comprise the following:

- financial:
  - creation of an institutional infrastructure for export credits insurance,
  - investment reliefs for exporters;

- informative and organisational:
  - monitoring of enterprises having a significant export share as well as sensitive to changes in the economic and financial environment,
  - acting in favour of increasing the share of Polish enterprises in international co-operation,
  - assistance to small and medium-sized enterprises undertaking export activities,
  - training for exporting enterprises;

- regarding foreign trade:
  - elaboration of a new customs code,
  - application of restructuring provisions and protection measures included in the Europe Agreement, and in CEFTA and GATT/WTO agreements,
  - custom duty exemption for equipment and raw materials indispensable for industrial restructuring and not produced in the country.

The objective of technological policy is to upgrade the level of technology in the industry which is one of the most important elements of competitiveness. This policy provides for laying out main directions of research and elaborating a system to support selected technology fields.

These activities will be carried out by the government in four areas:

- research and development,
- implementation infrastructure,
- quality and modernity,
- information and training.

The objective of the policy of structural changes is to contribute to the quickest progress in the adjustment of industrial infrastructure to the requirements of a market economy as well as performing ownership, organisation, financial and technical restructuring.

The main fields of activities include:

1. ownership changes (privatisation),
2. changes in industrial structures (supporting the development of small and medium enterprises, restructuring of selected sectors, development of technical infrastructure of the state),
3. impact on the regions of highly concentrated industry,
4. internal restructuring of enterprises.

Within the policy of structural changes the following sectoral programmes have been elaborated and approved by the Government:

- iron and steel industry,
- hard coal mining,
- electro-energy,
- liquid fuels,
- defence industry,
- shipbuilding industry,
- pharmaceutical industry,
- heavy organic synthesis (heavy chemistry).

Estimation of the situation of the industry in the third year of industrial policy implementation

The progress in the restructuring of the Polish economy and its gradual liberalisation and opening to the world may be measured by such facts as:

- accession to WTO,
- acquisition of OECD membership,
- improved opinion of international rating organisations,
- classifying Poland by the European Union Commission among the countries of the first group with which negotiations on accession will be held,
- rapid growth of direct foreign investments.

For five years a systematic growth of GDP was ca 6 per cent. Industry is the economic sector that decides upon the dynamics of economic growth of the country. The share of industry in GDP generation was about 30 per cent in the last years and the dynamics of growth 12.1 per cent in 1994, 9.7 per cent in 1995 and 8.7 in 1996.

The highest rate of growth was noted in the processing industry whereas there was a production decrease in mining industries. A constant growth of the share of the private sector in the sold industrial production was observed (1992 - 31 per cent; 1995 - 44.5 per cent; the first half of 1997 - 49 per cent). The dynamics of export growth which used to be very high in 1993-1995 (above 30 per cent), decreased to the level of 6.7 per cent in 1996. At the same time a dynamic increase of imports took place (31.9 per cent in 1996) that was to a large extent caused by investment increase and a growing inflow of foreign capital.

In spite of a rapid growth of investment outlays, the expenditures on the purchase of machinery and equipment did not exceed 12 per cent of their gross value. That points out to still too slow technical modernisation of the industry and a vast range of needs in this regard, as the average decapitalisation level is above 60 per cent.

During the last four years the total production growth in the industry was achieved at a stable employment level, and only due to the growth of the work efficiency. In 1996 the work efficiency was ca 10 per cent higher than in 1995.

Within the structure of the sold production, the share of raw material intensive sectors was lowered in favour of the share of technology intensive sectors. No changes have been noted with regard to the share of workforce intensive sectors.

The implementation of sectoral programmes was carried out at a slower rate than assumed, which was mainly caused by the deficit of national investment means and the lack of noticeable inflow of direct foreign investment to “difficult” sectors. The toughest problem, both from economic and social points of view, is the restructuring of the hard coal mining sector.

Considerable progress has been achieved in the modernisation of the electro-energy sector, the proof of which is the linking of the Polish power system with the West European UPCTE. In the iron and steel industry, the share of continuous casting process in steel production increased from ca 8 per cent to 60 per cent. Modernisation investments are being carried on in refineries on a large scale. However, the implementation of all the sectoral programmes is far from completion and it will be continued after 1997.

The assumptions of long term industrial policy

In the Ministry of Economy, which since 1 January 1997 after the reform of the central administration of the country, has taken over the responsibilities of the Ministry of Industry and Trade, the assumptions of long term industrial policy have been elaborated, and in June 1997 they were approved by the Economic Committee of the Council of Ministers. The main strategic objective of this policy is the growth of international competitiveness of industry. Perceptively, this policy is to have the character of being:

- market-oriented,
- horizontal,
- anticipative, *i.e.* foreseeing changes of market conditions with the aim to undertake appropriate activities in advance.

In such formulation, industrial policy defines activities and instruments of a horizontal, sectoral and regional character that serve to increase the international competitiveness of the industry, interacting in the following areas:

- pro-innovation policy,
- export-oriented policy,
- the policy of increasing market efficiency,
- the policy of competitiveness and of private sector development,
- privatisation policy,
- the development of economic infrastructure,
- restructuring of sensitive sectors,
- promotion of development trends in industrial production,
- regional policy.

An inseparable element in each of the listed areas is a pro-ecological activity. The development of the industry will be harmonised with the rules of sustainable development.

An equally important element of industrial policy occurring in all the above mentioned areas will be the support of the development of small and medium enterprises. A significant step undertaken in this respect was approved by the Government in March 1997 “The Programme of Support to the Development of Regional Institutions for Technology Transfer” whose purpose is to develop innovativeness in the sector of small and medium enterprises through the intensification of the transfer of modern pro-ecological technologies.

The Ministry of Economy focuses its activities on the creation of stable conditions for enterprises’ activities. To reach this goal, a new “Industrial Law” is being elaborated that is to replace a number of regulations originating from the times before transformation. New regulations are also under preparation connected with state aid and its monitoring.

PORTUGAL

MAIN ORIENTATIONS OF PORTUGESE POLICIES FOR INDUSTRIAL DEVELOPMENT AND COMPETITIVENESS

by
Ministry of Economy

Industrial policy in the period 1987-1995

Principles of the state intervention

- State intervention restricted to the creation of the best framework conditions, allowing private economic agents to make their decisions autonomously;
- horizontal approach of industrial policy;
- selective interventions directed to industries in crisis, or to emergent industries needing strategic support (*e.g.* capital goods, information technologies and eco-industries).

Horizontal goals

- Improvement of functioning of the markets;
- promotion of the intangible competitive factors;
- introduction of environmental concerns in the industrial structure;
- reduction of energy contents of industrial products;
- development of entrepreneurial culture;
- promotion and support of internationalisation of Portuguese companies.

Sectorial guidelines

- Modernisation and restructuring of traditional industries;
- industrial exploitation of natural resources;
- consolidation and development of the electromechanical sector and related industries;
- encouragement of higher technological contents in goods and services;
- development of an international services sector.

PEDIP and PEDIP II programmes

The main industrial policy instrument during the 1988-1993 period was PEDIP -- Specific Programme for the Development of the Portuguese Industry, a programme co-financed by Portugal and the European Community.

Following PEDIP, a new programme was created, PEDIP II -- Strategic Programme for the Stimulation of Portuguese Industry, to be implemented during 1994-1999. PEDIP II contains some significant differences compared to the former programme:

- lower proportion of grants to support production investment, and increase of zero interest rates loans;

- reinforcement of financial engineering mechanisms, namely by creating venture capital funds and stimulating the accession of small and medium-sized companies to capital markets;

- increased support to the development of the intangible competitive factors;

- strengthened support to environmental sustainable entrepreneurial investments;

- reinforcement of physical infrastructure supported by PEDIP.

The government in office since November 1995, though not having questioned the rationale and the main guidelines of PEDIP II, has introduced some significant changes in this programme, such as more demanding, selective criteria concerning the appraisal of projects, thus creating conditions for more efficient resources allocation. Moreover, those changes emphasise the feature of horizontal, technological modernisation and internationalisation.

Industrial policy guidelines for the medium-term future

General principles of policies addressed to the productive sector

- Respect of market mechanisms, which should be based on transparency and stability;
- central role of human resources, their training and qualification;
- recognition of the importance of quality, innovation and product differentiation;
- participation in partnerships between government, workers and private sector.

Main guidelines of the industrial development policy

- Flexibility of policy measures, which should take into account the diversity of industrial tissue and support, simultaneously, the modernisation of small and medium-sized industries, the reinforcement of the national-based industrial groups and structuring foreign investment projects;

- creation of a competitive environment that encourages companies to design autonomous strategies open to innovation and internationalisation, leading to the creation of a competitive and dynamic industrial base;

- continuity of modernisation trends of the last two decades, and of the development programmes inscribed in the 2nd Community Support Framework (CSF II), though with the appropriate adjustments deriving from the new general goals of the economic policy and from experience.

Main instruments and measures of industrial policy

- To create conditions for a co-ordinated response, both by government and companies, to the increased competition in all markets, resulting from globalisation and European integration;

- to promote an economic environment of effective competition, providing more balanced conditions to operators in fast opening and competitive markets;

- to implement an effective system of support to the internationalisation of Portuguese companies and the Portuguese economy as a whole;

- to create the appropriate conditions to the attraction of structuring foreign investment, well inserted in the national business tissue and in the scientific and technological system;

- to improve the effectiveness of the incentive systems and programmes of support to industry, through the introduction of more flexible, selective and demanding criteria;

- to create the appropriate fiscal and financial conditions in order to generate a more favourable climate for investment, assumption of risk and profitability of capital allocated to industry;

- to promote continuous increase of productivity, as an essential condition to the economic convergence with European partners;

- to support actively the entrepreneurial initiatives in the fields of quality, R&D, energy efficiency, environmental protection and production flexibility;

- to encourage industrial co-operation.

SPAIN

SPANISH INDUSTRIAL POLICY: A NEW MODEL

by
Ministry of Industry and Energy

The battle to create employment in the Spanish economy and to strengthen industrial competitiveness requires the development of a *New Model of Growth* which will divert factors of production in the long term away from stagnant sectors with weak growth towards sectors of the future, with high technology and high value added.

Spanish industry faces a twofold challenge: 1) to restructure its enterprises and the production and organisation systems within them; and 2) to create new markets and products, based on the search for solutions to problems related to the environment, health, culture, information society, etc.

For these reasons, the intention of *Spanish Industrial Policy* is not only to create an efficient and stable industrial and business environment, but also to:

- foster innovation, knowledge and new production and organisation systems;
- speed up the process of structural adaptation;
- and promote co-operation among enterprises.

This realignment of industrial policy requires a change in our institutional and legal framework. Changes in the rules of play and in the mechanisms for allocating resources, both public and private, for adapting universities and schools to business, in vocational training to satisfy the demands of modern production processes in an efficient manner, modernisation of the public sector, reform of the labour laws, etc.

This new orientation is taking the form of two policies, developed simultaneously and in co-ordination:

- a MACRO-ECONOMIC STABILITY POLICY, which will enable enterprises to expand and new jobs to be created;

- a STRUCTURAL REFORMS POLICY, aimed at improving the performance of the markets for products, services and labour.

The structural reforms policy is made up of a series of actions designed to:

1. *Consolidate competition* in the industrial and services sectors.

2. *Promote infrastructures*

   physical-transport, telecommunications and energy

   technological -- technology parks and institutes.

3. Encourage *intangible investments*

   R&D and innovation, training, design, quality and "economic intelligence".

4. *Geographical organisation and balance*

   Local production systems, business services, agglomeration and localisation of economic activity, costs of factors, etc.

5. Support for the *strengthening of industrial SMEs*

   Administrative simplification; local employment and development initiatives; programmes to *inform and advise enterprises and foster co-operation*, access to EU programmes, access to technological research, improved funding, etc.

Of these actions, those aimed at consolidating competition and at encouraging intangible investment should be considered especially important.

Industrial aspects of competition policy

Competition Policy is an essential, complementary instrument of industrial policy. Competition Policy will be the first and basic axis in support of the competitiveness of industry, in order to ensure that it is conducted in a system of open markets.

The major lines of action being adopted are:

i) To develop a new model of competitive public service

   The Competition Policy which it is intended to introduce in Spain is based on the need to adapt *public services of an economic nature* to users' needs, to the new scenario of a globalised economy and fast technological changes.

   Public services in the field of economic activity are being reviewed in depth and realigned according to the following principles: 1) co-existence in all cases with public liberties; 2) a public service will be the exception to the general rule of free market; 3) the solutions adopted must be compatible with and equivalent to those of other EU countries; and 4) reduction in the number and extent of public services.

ii) To reduce and restructure the public corporate sector

Taking this new model of public service as its starting point, Spain is undergoing an extensive *process of reduction, financial restructuring and redefinition of its public corporate sector*. This process will lead to either *privatisation*, in some cases, or *liberalisation*, in others, of some of the major sectors that until now have been state-owned monopolies, or were subject to extensive regulations, exclusive rights, fixed prices, etc. Moreover, a *new regulatory framework for competition* is being set up in all cases.

The energy sector (electricity, gas, oil), transport sector (air, sea transport), steel, shipbuilding, defence and mining sectors are the most important ones affected by this redefinition of the public corporate sector. Activities to improve their competitiveness focus on; 1) reform of the institutional and regulatory framework, 2) support for intangible investment -- especially research, development, innovation and training -- and 3) promotion of business co-operation.

iii) To speed up the adaptation of industrial structures to new markets

In this sphere, Competition Policy is an important component of Spanish Industrial Policy. The two policies complement each other to attain the objectives of growth, competitiveness, employment and economic and social cohesion.

Since some “sensitive sectors” are unable by themselves to adapt to the swift technological changes and global markets, it is necessary to provide public support for their structural adjustment. However, any public aid granted to particular sectors -- textile, steel and shipbuilding -- in strict application of specific EU provisions, will be temporary, aimed at feasible projects and will always link the adjustment of production structures to competitiveness.

National aid on a *regional level*, in co-ordination with EU support frameworks, attempts to promote internal investment in less developed regions or those in industrial decline.

Regulation for competition

The “*regulation for competition*” now being introduced in many industrial sectors are characterised by: 1) freedom of entry to the sector; 2) free access to the market and to the infrastructures on which the performance of the services depends (electrical networks, oil and gas pipelines, airports, telecommunications networks, etc.); 3) freedom of procurement; 4) competitive price setting; 5) determination of the public service obligations of the operators; and 6) creation of an independent regulatory authority.

The liberalisation of the electrical sector, air and road transport, telecommunications and commercial distribution will increase production in the Spanish economy as a whole by 2.25 per cent, thanks to a reduction of 0.16 per cent in salaries, a 1.45 per cent improvement in productivity and a fall of 1.6 per cent in unit labour costs (Estimates published by the OECD in its last Annual Report on Spain).

From amongst the current regulation for competition forming part of Spanish economic policy, the *new regulatory model for the energy sector* needs to be emphasised. Spanish energy policy is based on three fundamental principles: a secure energy supply, regulation for competition, and environmental protection. The regulatory reform undertaken in the energy sector represents a determined commitment towards the *liberalisation of the energy markets.* But, what is more, the new regulation for competition will lead to greater competitiveness in the economic system as a whole, as a result of the fall in energy prices, thanks to the free play of the market.

Royal Decree-Act 7/1996, of 7 June, on urgent fiscal measures, promotion and liberalisation of economic activity, constitutes the initial law liberalising the energy sector, in the fields of both electricity and natural gas and oil-based fuels.

Liberalisation of the *electrical sector* is one of the relevant features that will be defined in the new Electrical Sector Regulation Act (currently under parliamentary consideration). Other priority objectives of this Act are: competition in generation; non-discriminatory access to networks; progressive increase in the number of consumers able to choose their supplier; greater influence of supply and demand over electricity price setting. A transitory period is envisaged for adaptation of the Spanish electrical system to competition and in order to comply with directive 96/92/EC for the electrical energy internal market.

The major objective in the *natural gas sector* is its liberalisation, through valuation of natural gas infrastructures (in which the Maghreb-Europe gas pipeline occupies an extremely important place). The tariff systems for natural gas for industrial and household use have also been modified, leading to reductions for the specific tariff consumption of 20 per cent, and 1 per cent, respectively. In the natural gas sector, Royal Decree 2033/1996, of 6 September, adapts and corrects a number of features of Royal Decree-Act 7/1996. In the near future, Spain will incorporate into its national law the EU Natural Gas Directive, currently under discussion, by which the thresholds necessary to get access to the network will be reduced.

In the *oil sector* a liberalisation policy was set in motion with Royal Decree-Act 7/1996, of 7 June, which regulates access conditions to oil fuels transport networks. Maximum prices for diesel fuel have been abolished, while those in the gasoline market are still pending, since its characteristics have so far made this impossible. EU environmental laws are also being introduced in this sector.

Privatisation process

The *Privatisation Process* is required by our membership of the European Union based on the principles of free market, equality of opportunity to compete in it, and downsizing of State aid. State-owned enterprises, in principle, are to be managed by the principles of profitability and risk that guide private investors.

The privatisation process is being conducted in Spain according to the following principles:

1. Privatisation is to be carried out in completely liberalised markets, to prevent the process from becoming a mere transition from a public to a private monopoly.

2. There should be guarantees that privatisation procedures are ordered and transparent, in order to attain the best price. For this purpose, the *Consultative Privatisation Council* has been set up, the major function of which is to improve guarantees of compliance with the principles of publicity, transparency and free competition.

Privatisations are conceived as the means to improve corporate efficiency, to strengthen the industrial fabric and to enable these enterprises to respond to the challenges resulting from the global nature of the economy, innovation and training. For these reasons the sale of state-owned enterprises to the private sector forms part of a broader process, aimed at stabilising and liberalising the economy.

The basis of the reform and modernisation of Spanish public enterprises is the *Public Corporate Sector Modernisation Programme*, passed by the Spanish Government on 22 June 1996. The Programme proposes an overall, tendential conception of the privatisation process. It will affect all state-owned enterprises, despite taking into account the specific circumstances and existing interests in each case. This programme has entailed, in some cases, the sale of shares on and outside the financial markets -- energy, telecommunications and transport sectors. In other cases, public enterprises are being subjected to restructuring or reconversion activities, through financial reorganisation plans, within the EU regulatory framework. The ultimate objective is that all public enterprises should be profitable by the year 2001 and that none of them should require State funding.

The *Programme* is based on the premise that the private sector is capable of contending with the privatisation process. It establishes four large categories of enterprise. The first is made up of enterprises that are already well-established on the market and, thus, are in a position to be privatised immediately. A number of enterprises in the banking, energy and telecommunications sectors are to be found in this category. The second group comprises those enterprises that operate in sectors that, prior to privatisation, must be deregulated and opened up to competition. In this category are a number of enterprises in the electrical energy sector. The third group is formed by those enterprises that require a process of consolidation to guarantee their future, as a prior step to privatisation. In this category there are a number of enterprises in the capital goods, aerospace and air transport sectors. Finally, the fourth group is composed of those enterprises whose survival depends at present on the National Budget. What is being considered is not the closure of any of them, but a reduction of public aid. This group consists of a number of enterprises in the shipbuilding, steel, energy and defence sectors.

The *Programme* does not envisage a fixed timetable for these operations, but it proposes that the time for each privatisation depend on the situation of the markets and the international context.

The aim of the privatisations is to *reduce* the size of the public corporate sector as far as possible so that the State is no longer an entrepreneur and shareholder, but it can focus all its efforts and resources on providing citizens with public goods and services that it does not necessarily have to produce itself, as is the case of health, roads and security. At present, a process is under way to redefine the role of the State and to reduce the public corporate sector. The strategy chosen is that of speeding up the sale of financially sound state-owned enterprises, taking advantage of favourable market circumstances and using the majority of the resources generated to invest in infrastructures and write off public debt. In no event will income accruing to the State from privatisations be destined for current expenditure.

The bodies managing privatisations in Spain are:

1. *State Industrial Holding Society* (SEPI)

   The SEPI holds stakes in the enterprises now detached from the National Budget, mainly those in the electricity, oil and gas sectors.

2. *State Industrial Agency* (AIE)

The AIE manages companies in sectors undergoing restructuring or reconversion, and receiving public aid or subsidies: shipbuilding, steel, defence and mining in deficit.

Support for intangible investment

Of the specific activities conducted by the Ministry of Industry and Energy, its *technological and innovation policy* plays an especially important role.

One initiative -- ATYCA -- brings together the different activities aimed at promoting technological capacity, innovation, quality and industrial safety during the period 1997-1999.

The purpose of the *ATYCA Initiative* is to foster innovation in the business world, with special emphasis on small and medium enterprises, with a view to improving their competitiveness through the development and penetration of horizontal, diffusing technologies and the introduction of quality and safety in all industrial processes, thus speeding up the process of bringing the Spanish industrial sector up to the level of its European counterparts.

This initiative comprises two programmes: the *Industrial Technology Support Programme* (organised into different technological areas: information and communications; production; bio-technology; chemicals; food; materials; pharmaceuticals; industrial environment; and industrial development and design), and the *Industrial Quality and Safety Programme* (divided into several areas of action in the fields of quality and safety: diffusion, training and information; infrastructures; industrial products and installations).

SWEDEN

POLICIES FOR INDUSTRIAL DEVELOPMENT IN SWEDEN

by
Ministry of Industry and Trade

Summary

Slow industrial growth has been a concern in Sweden for more than 20 years. Since 1970 the Swedish growth performance has been clearly worse than that of nearly all OECD-countries. In 1970 Sweden's PPP-adjusted GDP per capita was the third highest in the OECD area. In 1993 Sweden ranked as number 17. During the 1990s the challenge to improve growth has become even more urgent against the background of persistent high rates of unemployment.

The main objective of industrial policies in the 1960s and early 1970s was to promote economic growth by facilitating structural adjustment. The measures were marginal. However, in the late 1970s the government became entangled in repeated rescue operations in crisis-ridden industries. As this policy did not prove successful, but threatened to undermine government finances, the Swedish parliament in 1982 decided to put an end to selective aid measures. The government launched a growth strategy based on a large, "once-and-for-all" devaluation of the Swedish krona, and a restrictive macro-economic policy. The idea was to stimulate a transfer of resources from the public to the tradable sector. Macro-economic instruments were, in a sense, used for industrial policy purposes.

The devaluation strongly improved the competitiveness of Swedish industry, and paved the way for a strong recovery in the export industry in 1983-84. The crisis-ridden industries were restructured in a successful way, but the desired gradual transformation of Swedish industry from resource-based and medium-technology towards knowledge-intensive and high-technology industries seemed to be too slow. By the end of the 1980s the effect of devaluations on structural performance was increasingly debated. Many economists pointed out that devaluations boosted profitability in an artificial way, and weakened the incentives for innovation and restructuring. And this had led to a productivity slow-down in industry and retarded economic growth. Furthermore, macro-economic mismanagement during the 1980s paved the way for increasing inflation and soaring wage-costs. By the end of the decade, policy makers increasingly understood that the growth performance of the Swedish economy could not be improved unless extensive structural reforms were undertaken. The pressure for structural change had to be increased, and the incentives for investment and innovation to be strengthened. And it was realised that in an increasingly internationalised economy, the rate of return on investment must be at least as high in Sweden as in other countries.

Eventually, a new strategy for industrial growth was developed, based on broad horizontal measures "to stimulate the structural adaptation required to meet increased international integration and

increased international competition". Focus was put on initiatives to improve infrastructure, human resources, R&D, and measures to intensify competition in the product markets.

A number of structural reforms were implemented during the first half of the 1990s *e.g.* tax reform (1990-91), reform of the Competition Act (1993), deregulation of telecommunications, domestic air traffic, railroad services and the electricity market, and privatisation of state -owned enterprises.

Equal access to the European internal market for domestic firms was considered as a necessary condition for Sweden to remain a competitive business location. Intensified integration with the European economic community was also seen as a powerful means to strengthen the pressure for structural change in Swedish industry. A first step towards integration with the internal market was the EEA-agreement which went into effect on 1 January 1994. Sweden then became a member of the EU on 1 January 1995.

By the mid 1990s, the concerns to reduce the persistent, high rate of unemployment, had led to an attempt to develop a more comprehensive and co-ordinated growth policy. A broad framework for such a policy was presented in the Bill: *A Political Agenda for Work, Welfare and Growth* (1995). In addition to industrial policy in a narrow sense, the *Agenda* also included measures in the areas of fiscal and monetary policy, labour market policy, education and research policy and environmental policy. Industrial policy was to focus on various measures to increase supply of risk capital for SMEs, improve the skills and competence of employees and management in SMEs, promote R&D and diffusion of new technologies, and measures to further intensify competition in the product markets.

Recently increasing attention has been given to the geographical dimension of economic growth. Focus is being put on regional and local networks of firms and organisations, and on regional initiatives to promote industrial growth. A new regional development programme will be presented to the Swedish parliament in autumn 1997.

Globalisation of industry implies that the international perspective on industrial policies is increasingly important. Against this background, Sweden supports the efforts to strengthen the European internal market by continued deregulation, and to intensify economic relations with the rest of the world. In the future, measures to strengthen the global institutional frameworks, *e.g.* concerning intellectual property protection and competition, will be increasingly important in order stimulate further proliferation of international businesses on the basis of fair competition.

A brief historical background

Industrial policies in the 1960s and 1970s -- managing "socially acceptable restructuring".

Industrial policy in Sweden may be traced back to the mid 1960s, when various support measures were introduced to stimulate regional business activities, mainly in certain areas in the northern parts of the country, which suffered from severe unemployment. Subsequently the government also became involved in the restructuring of a number of industries (*e.g.* textiles and clothing, foundries and manufacturing of hand-made glass) facing structural problems, caused to a great extent by increasing imports from low-wage countries. By the end of the 1960s a number of sector specific programmes intended to promote structural adjustment were in operation. The Ministry of Industry was established in 1969. The idea was that the government was to plan and promote a "socially acceptable" restructuring of industry in order to enhance economic growth[1]. However, until the mid 1970s the measures were still marginal.

The recession in the world economy following in the wake of the oil crisis in 1973, and a domestic wage-cost explosion in the following years, led to a deep and prolonged recession in Swedish industry. A number of heavy industries (*e.g.* shipbuilding, iron ore mining, steel and forest products) met with severe problems caused by world-wide over-capacity and domestic cost increases. The government tried to bridge the crisis with extensive financial support measures, in order to avoid closure of plants that would have lead to massive unemployment in the regions where these industries were concentrated. As a result public aid to industry increased rapidly in the second half of the 1970s. To a great extent the aid was in the form of firm-specific measures. And eventually the State became the owner of the main Swedish shipyards, a major steel company and a number of other failing companies.

Industrial policy in the 1980s -- "The third road"

At the beginning of the 1980s, the Swedish economy was in a rather depressed situation, marked by slow economic growth, persistent current account deficits and soaring government financial deficits (in 1982 the central government's deficit reached 13 per cent of GDP). The key issue was to improve the competitiveness of Swedish industry. The policy makers understood that the course chosen in the 1970s was not sustainable. The selective aid policy could not continue. The need for financial assistance in crises-ridden industries seemed bottomless, and the prospects for them did not seem any brighter. Therefore, in 1982 the Swedish parliament decided to put an end to firm-specific aid, and to restructure the crises-ridden industries. The ambitions to manage structural developments in industry were abandoned. In the future industrial policy was to be more horizontal, providing "a stable and favourable environment for industrial growth and renewal". Measures would be directed *e.g.* towards promotion of small and medium sized companies and R&D, "deregulation, simplification and the removal of bottlenecks" and "increase flexibility and adjustment capabilities". Direct interventions in industry would only occur in exceptional circumstances.

The government tried to stimulate growth in the export and import-competing industries by an "offensive" devaluation of the Swedish krona (the combined effect of the devaluations in 1981 and 1982 was 24 per cent against the currencies of Sweden's main trading partners). At the same time public expenditure was to be cut in order to restore balance in government finances, and a strict monetary policy be pursued in order to control inflation. The idea was that these measures would stimulate a transfer of resources from the public to the tradable sector. The strategy was called "the third road" to economic growth[2].

The "third road" was successful in strengthening the competitiveness of Swedish industry, and paved the way for a strong recovery in the exporting industries in 1983-84. The increasing demand for labour in industry facilitated the restructuring of the crisis-ridden industries (which involved *e.g.* closure of the major shipyards, rationalisations and reduction of capacity in the steel industry). State aid to industry was drastically reduced. However, the "third road" was not successful with respect to its fiscal and monetary objectives. The recovery in industry led to overheating of the Swedish economy, with rapid inflation and rising wage costs. As productivity growth did not recover, the competitive advantages of the devaluations in 1981 and 1982 soon evaporated. The deregulation of the credit market in 1985, the high rate of inflation, and the generous tax treatment of credits, stimulated speculation in real estate and financial assets. Investment in industry (with a longer time horizon and higher risks) could hardly compete with investment in financial assets. The renewal of industry was therefore neglected.

As the structural problems in the crisis-ridden industries were gradually solved, industrial policy ceased to be a hot political issue. Furthermore, the deregulation of the domestic credit market and the liberalisation of international capital movements reduced the need for government involvement in business finance (that had been an issue during the 1960s and 1970s)[3]. The economic debate during the second half of the 1980s focused on macro-economic and structural issues, *e.g.* soaring inflation, over-heating in the labour market, sluggish productivity growth, and increasing outflow of direct investment, *i.e.* symptoms that indicated that something had gone wrong with "the Swedish model".

Economists argued that the expansion of public services during the 1970s and 1980s had crowded out industry, and that financing through taxes of increasing public expenditure on services and social welfare programmes, had lead to serious distortions of incentives in the Swedish economy. Furthermore, economists pointed out that the devaluations in 1977-1982 had damaged the structural performance of the Swedish economy: devaluations boosted profitability in an artificial way, and weakened the incentives for restructuring in industry. The political commitment to maintain low unemployment, tended furthermore to create an inflationary atmosphere, where nominal wage increases exceeded the underlying rate of productivity growth. Most economists stressed that the institutional framework must provide stronger incentives for investment, innovation and productive efforts. Eventually policy makers realised that in order to improve the growth performance of the Swedish economy extensive structural reform was needed.

Industrial policy in the 1990s: A new paradigm

Rethinking industrial policy

The increasing internationalisation of capital and industrial activities, and the transformation of industry towards more knowledge-based production, eventually led to a reconsideration of industrial policy. Previously focus had mainly been on manufacturing. But as the borderline between manufacturing and services became increasingly blurred, the interdependence and complementary between the two sectors was being emphasised. Furthermore, internationalisation of capital and knowledge, and the increasing competition among nations for investment, seemed to require broader structural measures to improve the business and investment climate in Sweden.

The Advisory Panel on Productivity

In 1989 the government appointed a special *Advisory Panel on Productivity* to examine the causes of the slow growth of productivity and poor growth performance of the Swedish economy, and to provide an analytical basis for the government's growth policies. The Panel presented its findings in 1991. The report -- *Forces of productivity and prosperity* -- pointed out that in the long run resources are not static: "productive resources, competitive capacity and comparative advantages, accordingly, are something which is *created* and *upgraded*. In this perspective, the vital question concerns the forces existing for elevating the quality of production resources and improving their utilisation." The main conclusions were that productivity could be improved only if the *incentives* for renewal and innovation were strengthened, and the *pressure for change* in the economy was intensified. The Panel stressed the importance of sound macro-economic conditions (low inflation and low interest rates), and the need to enhance competition and intensify internationalisation, improve incentives work, save and invest in human as well as physical capital. Foreign investment was seen as a powerful instrument to introduce new technologies and intensify competition in the home market. However, to attract foreign investment the rate of return on investment must be sufficiently high to compensate for Sweden's disadvantages, *e.g.* the small home market and the long distance to the major European markets. Moreover it would be necessary to further improve Sweden's advantages, *e.g.* the infrastructure and the quality of the labour force.

The formation in 1990 of a special Cabinet group to co-ordinate industrial policies indicates the increasing weight given to growth policies by the government. The group was chaired by the Minister of

Industry, and included the Ministers of Communications, Education, Environment and Agriculture. Its prime task was to develop a growth strategy for the Swedish economy. The programme, *A co-ordinated policy to increase economic growth* (1990/91:87), was presented in February 1991. It stated that the "objective of measures in the area of industrial policy is to promote sustained economic growth by stimulating structural adjustment". The challenge in the short run was to reduce the rate of inflation. And in the long run, "against the background of intensified internationalisation and increasing knowledge intensity", to improve infrastructure (*i.e.* roads, railways, public transport and telecommunications), enhance human capital and R&D, and intensify competition and improve the functioning of the markets. It was stressed that "industrial policy had to be seen in a broad perspective, where policy measures in various areas and on different levels interact".[4]

Sweden's relations with the European economic community were seen as a strategic issue in this context. Equal access for domestic firms to a future internal market with free movement of goods, services, labour and capital was considered a necessary condition for Sweden to remain a competitive business location. The internal market was also considered as a powerful vehicle to strengthen competition (especially in sectors that traditionally had been sheltered from competition from abroad), and to increase the pressure for structural change. The agreement between the EC and EFTA in 1991 on the creation of a European Economic Area (EEA), was not considered a sufficient solution in the long run. Therefore the Swedish government applied for membership in the EC in July 1991.

Towards structural reform

The first half of the 1990s was a period of severe macro-economic imbalances. The deep recession that started in 1990, forced the enterprises to review their activities, concentrate on "core activities" and cut unnecessary costs. The positive effect was that the rate of productivity growth picked up (labour productivity in manufacturing increased by 8 per cent in 1991-93). But extensive rationalisation in industry also led to massive lay offs (employment in manufacturing decreased by more than 20 per cent 1990-93). And unemployment rose to levels that had not been seen since the 1930s. Expenditure on unemployment relief and labour market policies exploded, and the government's financial position deteriorated in an alarming way. An acute crisis of confidence (large currency outflows forced the Bank of Sweden to increase interest rates sharply to defend the krona) in the autumn 1990, led to a reorientation of macro-economic policy. Fiscal policy was tightened and the government declared that reduction of the rate of inflation was necessary in order to achieve balanced growth and sustainable employment levels. To demonstrate its determination to maintain low inflation, the government in May 1991 pegged the Swedish krona to the ECU. The government had previously appointed a special commission ("Rehnberg kommissionen") to participate in the wage negotiations. The result of these negotiations was an agreement for the years 1991 and 1992 covering nearly the entire labour market, which led to a gradual reduction of wage inflation.

The new government that took office in September 1991 put structural reform on the top of its agenda.[5] Focus was put on certain institutional features considered as to weakening the growth performance of the Swedish economy, *e.g.* taxes, welfare provisions, and the absence of competition in the expanding public service sector. Therefore a number of measures were taken to stimulate private business initiatives, *e.g.* removal of wealth tax on capital employed, deregulation and opening up to competition of public services and other sheltered sectors, and strengthening of competition rules to ensure fair competition in all markets. Privatisation of state-owned enterprises was also seen as an urgent issue.

The EEA-agreement and EC-membership implied far reaching institutional changes. Many of the structural reforms implemented in 1991-1995 were in fact motivated by the need to harmonise the Swedish institutional framework with EC-rules. Among the structural reforms were:

- A *tax reform* in 1990 (which was put into effect in 1991) greatly simplified the structure of both personal and corporate income taxes. Marginal tax rates on personal income were reduced.[6] The reduction was financed by a substantial broadening of the tax base and of the VAT base (which was made more similar to that in the EU). The statutory corporate income tax rate was reduced from 52 per cent to 30 per cent. The reduction was, as in the case of the personal income tax, compensated for by a substantial broadening of the tax base. Many of the former deductions and reservations, that mainly benefited large and capital intensive enterprises, were removed. The new corporate tax system was in general more neutral with respect to enterprise size than the former. In 1994 the tax rate was lowered again to 28 per cent, and the tax base was further broadened.

- *Restrictions on foreign shareholdings* in Swedish enterprises were abolished in 1991.

- A reformed *Competition Act*, which harmonised the Swedish regulatory framework with EC legislation, went into effect in 1993. The adoption of the so-called prohibition principle (prohibiting abuse of dominant position and agreements restraining competition) as a basis for the new legislation, and the extension of the powers of the Swedish competition authorities to act against infringements of the law, strengthened competition.

- A new *Public Procurement Act*, making public production and purchases above a certain level subject to tender, went into effect in 1994.

- A review of the *Swedish Corporate Act* was initiated in 1990. The objective was to adapt the Swedish system to EC rules, and to design a corporate governance framework conducive to structural changes, *e.g.* by facilitating changes in the structure of ownership and ensuring a strong ownership function.

- A new *electricity legislation*, which introduced competition into the electricity sector, went into effect on 1 January 1996. The main principle behind the reform was to achieve a separation of the production and sale of electricity from the distribution of electricity (network). The production and sale of electricity was made subject to competition, while the distribution of electricity (which is a natural monopoly) was to remain a public utility in order to ensure efficiency.

- A *privatisation programme* was launched in 1991. The Swedish parliament authorised the government to sell the state's shares in 35 companies. Twenty of these (several of them were quite small) were fully or partly privatised in 1991-94 (*e.g. Swedish Steel, Celsius, Procordia*). Furthermore, a number of public utilities were converted to limited companies, *e.g. The State Power Board (Vattenfall AB), the National Forest Enterprises (Domän AB) and Swedish Telecom (Telia AB).*

While the government was successful in bringing down the inflation rate, budget consolidation measures were not so successful (the central government's financial deficit increased from 1 to 10 per cent of GDP in 1990-1992). Confidence in Sweden's economic policy was faltering. In the turmoil on the international exchange markets in autumn 1992 the fixed exchange rate could not be maintained (in spite of rather desperate efforts by the Bank of Sweden and the government), and the krona was floated. The result was an effective depreciation of around 25 per cent. The large depreciation stimulated export growth. However, domestic demand was further depressed by declining real household incomes, high interest rates and falling government consumption. While the exporting and import-competing industries were booming, the sectors oriented towards the home market, *i.e.* services and construction, remained in deep recession.

An agenda for work, welfare and growth

The recovery in industry in 1994-1995, did not lead to a marked declined in registered unemployment. More than 12 per cent of the labour force was still either unemployed or engaged in various labour market programmes. In this situation the prime concern of the Social Democratic government that took office in September 1994 was to increase employment.[7] Since the government's financial position (the central government's budget deficit reached a peak of 14 per cent in 1993) did not permit expansion of employment in the public sector, new jobs had to be generated in the business sector. The challenge for the government was to make convincing moves towards budget consolidation without pushing the economy deeper into recession. Co-ordinated measures in a number of policy areas were considered to be required in order to enhance industrial growth and increase employment. Therefore, in November 1995 the government launched a comprehensive programme for growth policies: *A Political Agenda for Work, Welfare and Growth* (1995/96:25).

The main objectives of the *Agenda* were:

- To restore balance in the government's finances in order to lay a sound *macro-economic* foundation for economic growth. This implied a restrictive fiscal policy. Further cuts in expenditure and increases in taxes were announced. Local governments were required to balance their budgets. The goal of the *Convergence Programme* adopted in June 1995 in order to ensure compliance with the Maastricht criteria was to limit the general (central and local) government deficit to less than 3 per cent of GDP in 1997, and to bring public finances into balance by 1998. Price stability was to be the prime target for monetary policy. The Bank of Sweden declared that its goal was to limit the annual increase in consumer prices to 2 per cent within a margin of one percentage point in either direction.

- To enhance flexibility in *the labour market* in order to increase employment possibilities. In this context the objectives of labour market policy were to increase flexibility, impede inflationary wage drift, enhance skills, and prevent permanent exclusion from working life. A need for reform of labour legislation was also perceived in order to achieve more flexible terms of employment, wages etc.

- To enhance human resources, *i.e.* the *skills and competence* of the labour force. Raising educational attainment of the population was considered essential in order to enhance welfare and employment: Swedish industry should be competitive on the world market in terms of quality, design, product reliability and deliverability, not in terms of low wages. A broad programme to improve education and enhance skills was therefore to be launched. The programme would include, *e.g.* expansion of adult education and higher education. Special attention would be given to science, technology and languages.

- To improve the business climate and maintain a strong pressure for adjustment. It was pointed out that a stable institutional environment, which facilitated long-term planning, and encouraged enhancement of competence and skills, especially in small and medium sized enterprises (SMEs), was essential to improve conditions for economic growth. SMEs were considered vital for business sector dynamism, and for employment.

- To use protection of the *environment* as a lever for industrial growth. The Agenda stressed that economic growth must take place "without further degradation of the environment". But concern for the environment should not be seen as a restriction on growth, but as an emerging market opportunity. The increasing awareness of the natural environment as an intrinsic value in the industrialised countries, has led to growing consumer demand for products perceived to be environmentally friendly. The environmental industry is among the sectors with the fastest growth in the OECD. Against this background, a leading position in the area of environmental protection may represent a major competitive advantage in future.

SME policies

There are about 460 000 small and medium sized enterprises in Sweden, employing close to 1.4 million[8]. They are generally oriented towards the home market. The majority is in services. Most of the net job creation in industry in Sweden since the mid-1980s has been in SMEs, and SMEs have been given a crucial role in job creation in the Government's *Agenda for Work, Welfare and Growth.* But unfortunately the majority of the small enterprises seem unwilling to grow any bigger[9]. Improving the institutional environment for individuals wishing to set up enterprises, and for small business to expand, is therefore an urgent issue, in order for Sweden to have "more enterprises and more entrepreneurs".

A wide range of programmes for SMEs with respect to investment, exports, technology, management and education have been implemented over the years. Many of them are administered by the *Regional Development Companies*, partly owned by the State through *ALMI Företagspartner AB,* ("ALMI Business Partner"), and by the regional counties[10], Another important institution is *Industrifonden* (the Swedish Industrial Development Fund), which participates in financing of development projects in SMEs.

One weakness of the Swedish business environment is the lack of a properly functioning venture capital market[11]. Therefore, a number of measures have been taken by the government during the 1990s specifically to improve the supply of risk capital for SMEs. In 1992, two portfolio investment companies, and six new venture-capital companies were established with public funds to increase the supply of seed capital. The companies were to operate on commercial terms. Another initiative was the introduction in 1993 of a new type of loan for newly established enterprises, which made it possible for entrepreneurs to redistribute capital cost over time. More recently the *ALMI Företagspartner and Industrifonden* have been given increased funding, and 10 billion SEK has been earmarked for a sixth *National Pension Fund* entitled to invest in SMEs. Furthermore various tax breaks have been introduced in order to promote SMEs, *e.g.* tax reliefs for owners of small-businesses, and for individuals who start business enterprise or buy shares in unlisted companies. Furthermore, employer's fees have been reduced in a way that particularly favours SMEs.

Apart from financial support, promotion of SMEs also includes other forms of assistance *e.g.* with marketing facilities and information. One of the tasks of the *Regional Development Companies* is to help small enterprises and entrepreneurs with advice and business support. Similarly the *Swedish National Board for Industrial and Technical Development* (NUTEK) gives advice concerning strategic development and innovation. Enhancement of skills and competence is also crucial, particularly management skills.

The regulatory system and red tape may be especially difficult to handle for small companies since they typically have very small administrative resources. Attempts to simplify regulations and administrative procedures have been going on since the late 1980s. In 1995, a comprehensive review was initiated in order to identify unnecessary regulation. A special *Small Business Delegation* was appointed and given the task to work out concrete proposals for reforms in this area.

R&D policies

The R&D intensity of Swedish industry is among the highest in the world. However, R&D expenditure is concentrated in a few manufacturing companies.[12]

Public support to R&D has traditionally been focused on basic research, and has mainly been granted to universities and publicly funded research institutions. Funding of basis research remains an important issue, but in the last couple of years emphasis has increasingly been put on dissemination, transfer and industrial application of research results. Initiatives have been taken to strengthen the links between the research system and industry. The *Industrial Research Institutes and the Competence Centres* have played a crucial role in this area. Furthermore, a number of *Technology Bridge Funds* have been established in order to stimulate commercial exploitation of university research. To improve access to information is considered particularly important for small firms, which in general have neither the capacity nor the competence to obtain relevant information concerning new technologies and potential markets. A number of institutions, e. g. the *Swedish System of Technical Attachés*, the *Swedish Trade Council, NUTEK*, and the local *Chambers of Commerce*, are assisting in this area.

National prosperity depends increasingly on the use of information and knowledge, with the aid of the enormous progress in information and computer technologies (ICT). In March 1996, the government presented a Bill (1995/96:125) with an overall strategy for broadening and developing the use of information and computer technologies. It emphasised that in order to increase the efficiency and knowledge-intensity of industry, “The ICT-content of Swedish products and services” must increase. The Bill pointed out that the lack of skills in the area of information technology, particularly among SMEs, prevents a wide dissemination in industry of ICT. Therefore, the government will be giving priority to “measures within the framework of industrial policy which promote the use of ICT in industry, particularly in small and medium sized enterprises, and the development of a Swedish software and information industry”.

International aspects

For a small country like Sweden the ability of companies to compete and expand sales in international markets is essential for industrial growth and welfare. Sweden has therefore traditionally pursued a policy of openness in trade and industrial relations. A reorganisation of the Ministries in March 1996 entailed i.a. that certain foreign trade issues were transferred to the Ministry of Industry. In this way a more powerful organisation has been created which can combine national and international perspectives on industrial policies.

Membership in the EU has led to a deepening of the integration between Sweden and its main trading partners. A European framework has been developed. The priorities of this programme, *i.e.* to promote intangible investment, develop industrial co-operation, ensure fair competition and modernise the role of public authorities is well in line with the orientation of Swedish industrial policies. The various European initiatives, *e.g.* R&D framework programmes and structural funds, are considered as valuable complements to Sweden's national programmes. Even before joining the EU, Sweden participated in the European framework programmes for R&D and the SME programmes.

As a member of the EU, Sweden participates in the development of European industrial policies. In this area Sweden supports the efforts to complete the internal market by continued deregulation. Sweden is also working for removal of existing barriers between the EU and the rest of the world. This applies i.a. to the countries of Central and Eastern Europe and the far East .

Growing international interdependence among nations means that national policies to promote industrial development must be seen in a global context. This means i.a. that policy measures must be designed in such a way that they do not distort competition in international markets. Sweden has been working actively for several years for increased transparency and control in the state aid area, *e.g.* in the framework of GATT, and for reduction and removal of state aid in certain sectors, *e.g.* the shipbuilding industry.

Future developments in industrial policies

Growth in Swedish industry is still sluggish. In April 1997, the rate of unemployment was 8.3 per cent. And in addition 4.5 per cent of the labour force was engaged in labour market programmes. However, the government expects growth in industry to pick up during this year. But even so, there is still a long way to go to reduce registered unemployment to 4 per cent by the year 2000. Therefore, it seems safe to predict that growth policies will remain an important issue for the rest of the 1990s.

Even though it is futile to speculate on future events (in Dante's *Divina Commedia* fortune tellers are rightly condemned in hell to move forwards into eternity with their heads turned backwards), a few remarks will be made on some policy issues of importance for Swedish industry in the medium and longer term.

The macro-economic situation

For the first time in 20 years, the macro-economic situation does not seem to be a major problem. The consolidation of the central government's budget has been successful, and the objective of budget balance in 1998 is expected to be reached. The rate of inflation has been brought down to very low levels (the annual rate is close to zero), and the long-term interest rates have declined considerably (even if there is still a certain premium on Swedish interest rates). The three year wage agreement concluded in 1995 (covering 75 per cent of wage earners), is likely to reduce wage inflation in the coming years. Against this background, expectations of increasing inflation appear not to be an overwhelming threat in the medium term. The challenge for the government now seems to be to consolidate the gains from the fiscal consolidation, and to resist claims for increased public expenditure in order to stimulate employment. With this reservation, the macro-economic conditions for growth in the medium term seem bright.

EMU

One outstanding macro-economic issue is Sweden's participation in the Economic and Monetary Union (EMU). A decision in the EU on the countries that are to take part in the EMU on 1 January 1999 is expected at the beginning of 1998. A decision will therefore have to be made by the Swedish parliament in the autumn of 1997. However, it seems unlikely for the moment that Sweden will participate in the first round of the EMU. This gives added emphasis to the need for fiscal and monetary restraint in order to sustain confidence in the Swedish economy.

Energy policy

The energy market is obviously an important framework condition for industry. Especially for Sweden, where resource-based and energy-intensive industries (particularly pulp and paper and iron and steel) have an important economic role. In 1980, a referendum was held concerning the future of nuclear power in Sweden. On the basis of this, the Swedish parliament decided that nuclear power (which presently accounts for ca 50 per cent of total consumption of electricity) should not be used beyond the year 2010. Early this year a plan to dismantle two reactors by the year 2000 was adopted by the parliament. However, the government has declared that the transformation of the energy system will be carried out in such a way that industry's access to electricity at internationally competitive prices will be secured. In order to pave the way for the transformation of the energy system, a number of measures have been launched to reduce electricity consumption and to identify alternative sources of energy (*e.g.* wind and energy forests).

Regional growth policies

Traditionally, regional development policies have not been considered part of a general growth policy. Concern for a balanced regional development has rather been seen as a restriction on the rate of structural change in industry (since structural adjustment often has serious regional implications). Regional policy has to a great extent been a policy of redistribution of income and jobs. The idea has been that everyone in Sweden shall be able to find a job and have access to a reasonable supply of social services wherever he chooses to live. Considerable amounts of public aid have been granted during the years to support economic activity in regions with ailing industries and areas lacking infrastructure and differentiated industry. Gradually, however, more emphasis has been placed on long-term growth-promoting in disadvantaged areas[13] *e.g.* improvement of infrastructure, transportation and the business climate.

Recent thinking on growth policies has put increasing focus on the geographical dimension of economic growth, recognising the simple fact that industrial activities take place (in a literal sense). At the same time the importance of industrial clusters or network (including suppliers, buyers and industries in related technologies) has been emphasised. Special attention is given to the relationships, and mutual dependencies, that exist between enterprises in various industries, as well as between firms and various supporting institutions, *e.g.* research establishments, organisations and public authorities. In this perspective the competitiveness of a country, or a region, depends to a great extent on the quality of such clusters or networks of firms. Often governments and public authorities have a decisive impact on the development of clusters, *e.g.* through regulations and tax policies. The public sector is also a major buyer of products, particularly in defence equipment, telecommunications equipment, health care, transportation etc. Since there are external economies in the networks, the role of the government as a broker between various agents in order to build and sustain networks may be emphasised more in the future.

The network approach has been considered particularly fruitful in regional development policies. The quality of the industrial networks, as well other factors affecting the potential for economic growth, varies among regions. Therefore, the government has considered it practical to decentralise more of the responsibilities for regional development policies to local authorities, since they ought to be in a better position than the central government to assess what needs to be done in order to improve the local business environment. Against this background, a broad system of collaboration has recently been initiated at county level. The county governors have been given the task to draw up plans for regional development, and to co-ordinate regional efforts to promote industrial growth. In this way, a great number of actors have been involved in the planning of regional and local initiatives. A Bill on regional development policies was to be presented to the Swedish parliament during 1997.

Enhancement of human capital

It is widely recognised that globalisation of industrial activities and the rapid proliferation of information and communication technologies (ICT), make the capacity to adjust to continuous changes crucial for competitiveness. A well educated, trained and motivated labour force is able to adapt more easily to new processes and new techniques, allowing productivity to rise more rapidly. In the past, education and vocational training in youth was often sufficient to prepare people for the rest of their working life. In the globalised information society, however, continuous "life-long" learning is required to cope with the rapid changes of consumption patterns and technologies.

The number of places in the regular education system in Sweden was considerably increased during the 1990s. Basic initial education remains an important issue. But in the future, other forms of education, both formal and informal, will be increasingly important. In the traditional industrial organisation, there was a demand for personnel with particular (specialised) skills to perform specific functions. The knowledge-based organisation, on the other hand, typically requires personnel with a wider field of technical, economic and scientific knowledge in order to enhance flexibility. Furthermore, there seems to be an increasing need in the information society for other, more personality-related, skills, *e.g.* social skills, communication skills, creativity, flexibility and initiative, and ability to acquire new skills. Against this background, the challenge for the education system seems to be to respond to the emerging need for new, multiple and frequently uncodifiable skills, which may be difficult to fit into traditional curricula, and to cope with the continuing and rapid proliferation of new knowledge.

In this perspective, an important future industrial policy issue seems to be to develop institutions and incentives to encourage continuing learning and enhancement of skills. This is likely to imply that focus increasingly will have to be put on initiatives to promote adult education, to encourage industry-based training, and to stimulate interaction between various organisations, *e.g.* the regular education system (initial primary and secondary education, and higher education), the social partners, specialised private education facilities and the enterprises themselves.

The global perspective

Globalisation of industry implies that international frameworks and arrangements for policy are increasingly important. Against this background, the work of international organisations like the WTO and the OECD potentially has great value. Among the issues in the area of international policy co-ordination are:

- Further removal of barriers to international exchange of goods, services, capital and labour.

- Strengthening of international discipline in the field of state aid. It seems i.a. desirable to introduce some common understanding among nations to avoid excessive public support to attract investment. Another issue is to avoid social and environmental dumping.

- Strengthening of international protection of intellectual property rights.

- Establishing international standards (ISO) and the negotiation of international agreements on mutual recognition of tests and certification.

- Developing an international framework for competition rules, *e.g.* to prevent strategic alliances to build up dominant positions world-wide.

- Developing international frameworks for environmental policies.

REFERENCES

The literature in English on the policies for industrial development in Sweden is not extensive. For those who would like further details the following publications may be of interest:

Economic Restructuring and Industrial Policy in Sweden, Ministry of Industry and Commerce (Stockholm, 1995).

Forces of productivity and prosperity: A summary (Stockholm, 1992).

Policies for Structural change in Sweden, Ministry of Industry, Ministry of Labour & Swedish Institute (Stockholm, 1991).

Swedish Industry and industrial Policy 1985, 1988, 1990, 1992/93, 1996, 1997
Ministry of Industry/Swedish National Board for Industrial and Technical Development (Stockholm, 1985, 1988, 1990, 1993, 1996, 1997).

NOTES

1. Active labour market policies, through job broking, training measures etc., also played an important role in promoting structural adjustment.

2. Because it was combination of restrictive and expansionary measures.

3. The Swedish credit market was until 1985 strictly regulated in order to maintain overall credit supply within limits considered consistent with macroeconomic balance. Credits were in the first place allocated to certain priority areas, *e.g.* housing and investment in the public sector, whereas lending to consumers and private enterprises was restricted. Foreign exchange control was abolished in 1989.

4. The need for a broad perspective on industrial development issues was point out already in 1987 in the Industrial Policy Bill: *Swedish industry facing the 90's* (1986/87:74). The strategy was elaborated further in 1990 in the Bill on "certain industrial policy issues" (1989/90:88).

5. A right-center liberal coalition.

6. Fiscal consolidation measures adopted in 1994-95 have since raised personal income tax rates.

7. The official goal is to reduce registered unemployment to 4 per cent of labour force by the year 2000.

8. Enterprises with fewer than 200 employees are considered to be a SMEs.

9. According to a recent study by the *Federation of Swedish Industries*, new enterprises that had survived for 10 years typically employed not more than three persons (including the owner). And around 50 percent employed only the owner.

10. There are 22 *Regional Development Companies*.

11. SMEs are typically more dependent on loan financing than larger ones. There may be various reasons for this, *e.g.* double taxation of dividends makes equity finance less attractive than debt finance, costs associated with equity issues, and lack of information on behalf of the investor concerning small enterprises.

12. In 1991 four engineering groups (ABB, Ericsson, Saab-Scania, Sandvik Volvo) and four pharmaceutical and chemical groups (Astra, Nobel Industries, Perstorp and Pharmasia) accounted for 75 percent of R&D expenditure in manufacturing.

13. The disadvantages may be remote location, low population density, weak infrastructure etc. Regions with these kind of handicaps comprise about 7 per cent of the total population, but cover more than half of Sweden's land area.

SWITZERLAND

MAIN ORIENTATIONS OF INDUSTRIAL POLICIES IN SWITZERLAND

by
Office fédéral de l'industrie, des arts et métiers et du travail (OFIAMT)

First, it should be noted that due to the institutional peculiarities of the Swiss administration and the Swiss tradition of non-interference in the market process, a particular industrial policy does not exist in Switzerland, but rather there are a series of policies in industry-related areas.

A brief description of the main objectives for the past ten years shows the following priorities:

- From the middle of the 1980s till 1991, Switzerland experienced a period of strong growth and our main concerns in that period were to prevent bottlenecks especially in the labour market. In order to provide the Swiss industry quantitatively and qualitatively with the labour force it needed, our priorities were the up-skilling of the domestic labour force and a migration policy that suited the needs of industry of that time. Besides these two policy areas, distributional aspects, especially regional development, dominated the policy agenda.

- From 1991 onwards, Switzerland experienced a historically long period of economic stagnation. Whereas migration policy became less important, the discussion about the way of economic integration into Europe as well as free market access for Swiss manufacturers emerged as dominant questions.

Economic stagnation also increased the needs for structural adjustment that already led to several decisions about future-oriented policies and plans for future measures, in particular:

- the new law on the interior market (more domestic competition);

- a recent programme to reduce administrative burden for SMEs (administrative regulatory reform);

- a new, liberalised labour law (social regulatory reform) that was reflected in a referendum by the Swiss people; a new compromise between social partners is currently negotiated;

- new initiatives of the Commission for Technology and Innovation (KTI) to promote the diffusion and the application of advanced manufacturing technologies (a paper on the effectiveness of this policy was presented at the OECD Conference in Stockholm, February 1997);

- deregulation of the telecommunication sector, the state owned Telecom will be privatised in 1998;
- deregulation of the electric power supply sector, planned for 1999;
- new laws in order to reduce the burden of taxation for the private sector;
- new laws on regional development to promote growth in so-called economically "weak" regions to improve social cohesion;
- a five year plan to promote Switzerland as a location for foreign industry to attract new foreign direct investment ("Standortpromotion");
- a new law on specialised technical and business high schools at a tertiary level ("Fachhochschulen") designed to provide industry with a highly qualified labour force, trained to meet the exigencies of the private and public sectors;
- a bilateral treaty with the European Union in seven specific areas, among them the free movement of labour. The treaty has so far not been ratified, however, already in 1993 Switzerland introduced on a unilateral base the free immigration of qualified labour force from the EU into Switzerland.

Besides this set of measures for which not only the Federal Office for Industry and Labour but also other Offices are responsible, our Office especially determines the effects technological progress and globalisation have on the labour market and industrial relations. One example is the just recently decided programme to stimulate the apprenticeship system with a financial aid of a sum of 60 Million SF p.a. for employers who offer new apprenticeships.

TURKEY

TURKISH INDUSTRY DEVELOPMENT POLICY: PAST AND FUTURE

by
Ministry of Industry and Trade

Priorities of the past decades

Over the last two decades there have been substantial changes in the Turkish economy within the scope of a comprehensive structural programme adopted in January 1980. A series of reforms have been introduced and designed to implement an export-oriented development strategy. The basic targets of this strategy were to abandon protectionist economic policies, restore a balance in foreign trade, minimise state intervention and reinforce free market economy.

Within the context of this strategy, industrialisation has been targeted as the major component of development during the past decade:

- establishing a competitive and external market-oriented structure;
- attaining continuity in exports and increasing production diversity;
- providing inputs at world prices in order to increase competitiveness;
- protecting the climate for competition against distorting factors such as dumping, low quality products or specific marketing activities causing unfair competition; and
- increasing the role of private sector in industry, have been the basic policies in this period.

Internationalisation

Measures to internationalise the Turkish economy and expand trade include:

- opening the economy to competition;
- the liberalisation of foreign trade;
- minimising protectionism;
- restructuring and developing the domestic markets;
- a flexible foreign exchange system maintaining international competitiveness;
- encouraging foreign investments;

- modifying the export system with a view to meeting internationally acceptable levels of support under the commitments of WTO and as an associate member of the EU;
- increasing the role of the private sector in the development process and giving priority to investments in resource allocation, all within a structure open to international competition;
- reducing gradually the tariff rates on the industrial products of EC origin to fulfil obligations as is scheduled in the Additional Protocol between Turkey and EU;
- reducing gradually the tariff rates on the industrial products originating in third countries', to common customs rate of the EU as scheduled by the Additional Protocol;
  - with the entry into force of the Customs Union in 1996, Turkey eliminated all customs duties and charges having equivalent effect applied to imports of industrial products from the Community;
  - for products imported into Turkey from third countries, Turkey started to apply the rates of protection specified in the Community's Common Customs Tariffs;
  - as for processed agricultural products, the parties have established a system in which Turkey and EU differentiate between the agricultural and industrial components of the duties applicable to these products and abolished the duties for the industrial components;
  - the Customs Union is reinforced with a Free Trade Agreement signed in 1996 on products covered by the European Coal and Steel Community;
  - in addition, negotiations already have been completed for the extension of agricultural concessions that the parties had granted each other.
- in order to adjust the Common Commercial Policy of the EU in the textile and clothing sector Turkey harmonised its legislation with the Community's Quota and Surveillance Measures;
- for realisation of economic globalisation process, a customs union between Turkey and the European Union officially started on 1 January 1996. Within the context of Turkey's harmonisation of EU's foreign trade regime, free trade agreements signed with Israel, Hungary, Estonia, Lithuania, Latvia, and Romania are expected to be put into effect by the end of 1997;
- turkey has also adopted most of the legislation deemed necessary for the smooth operation of Customs Union in the field of approximation of the Turkish legislation to the Common Competition Policy of the EU, a great degree of progress was achieved with the entry into force of Laws on Protection of Competition and Protection of Consumers as well as a Decree on Patents, Copyrights, Trade Marks and Industrial Designs; a Decree on State aids compatible with the system in force in the EU has entered into force.

Business Environment

Measures relating to the business environment include:

- legal and institutional arrangements for ensuring stability in financial markets and confidence in the financial systems;
- necessary institutional arrangements through the enactment of the Privatisation Law to increase economic effectiveness and productivity;
- the development of the level of the skilled labour force;

- vocational training;
- a Turkish Patent Institute was established for administration of the protection of industrial property rights, and necessary legislation on the protection of the patent rights, industrial designs, trade marks, and geographical indications entered into force.

Technology

Measures to encourage more R&D include:

- establishment of the High Council of Science and Technology Board for enhancing realistic science policy;
- establishment of the Turkish Academy of Science for promoting research in natural sciences, social sciences and humanities, granting awards complimentary to those of TÜBITAK (Turkish Scientific and Technical Research Council);
- establishment of some technoparks to facilitate co-operation between universities and industry throughout Turkey;
- developing the informatics industry in co-operation with the World Bank and the public and private sector agencies concerned.

Small and Medium Businesses

Measures to assist the establishment and growth of small businesses include:

- Establishment of the Small and Medium Industry Development Organisation (SMIDO) to upgrade the efficiency and share of the small and medium scale industry sector, to support SME's to get benefits from science and technology infrastructure to strengthen the industry. University collaboration to reach and transfer the technological knowledge and make it available for the use of small and medium sized enterprises (SMEs) to develop new technologies and innovations.
- To support the participation of SMEs at international fairs.
- To provide businesses fast and accurate information via BRE, BC-NET and EIC Network through SMIDO Information Centres.
- To provide credits to SMEs with low interest, through HALKBANK.

Industrial infrastructure

In order to spread industrial development more equally throughout the country, the Turkish government makes investments in infrastructure and puts more emphasis on energy, transportation and communication.

This policy includes:

- establishment and supervision of the Organised Industrial Estates and Small and Medium Industrial Estates;
- allocation of long-term credits with low interest rates for construction of infrastructure and social plants in Organised Industrial Estates and for superstructure construction in Small Scale Industry Estates.

Priorities for the next five years

Over the next period, industrialisation will also be one of the basic elements of the development of the Turkish economy. The development of industry will be ensured by setting up a proper macro-economic environment. An industrial structure will be composed mainly by the private sector within the framework of integration with the world markets and with the EU, equipped with the prerequisites of being outward-oriented, having great competitiveness and being export oriented, capable of utilisation of raw materials and human resources in the most rational way.

Structural problems will be solved within a relevant program, and privatisation will be speeded up.

Turkey will implement competition, state aids and other relevant parts of the EU legislation, ensuring their effective enforcement.

Internationalisation

Continue the process of the internationalisation of the economy through:

- the obligations towards the WTO;
- the obligations towards the EC, within the framework of the establishment of the Customs Union;
- developing relations with the EFTA countries, BEC (Black Sea Economic Co-operation), ECO, Islamic Countries and Central Asia Republics;
- the completing of the negotiations of Free Trade Agreements with Czech and Slovak Republics, Poland, Bulgaria and North African Countries by the end of the year 2000.

Business environment

As far as industrialisation is concerned, the basic aims are to improve productivity, quality and standardisation, the spread of a flexible production system and utilisation of modern technologies, the integration of small and large industries, and to take on a production structure with a high value added.

In this context:

- Investment geared towards R&D and technological renewal, the development of new employment opportunities, preserving the environment, increased competitiveness for small and medium enterprises and the reduction of regional discrepancies in levels of development and maintaining the structural harmonisation for Customs Union with EU will be supported.

- Industry will be protected against unfair foreign competition, specialised Customs departments will be upgraded to prevent import of commodities of low quality and not conforming to standards.
- To protect and improve competitiveness of the industry, it is aimed to provide inputs at world prices.
- The intermediary goods investments abroad that would serve for the improvement of competitiveness exports will be promoted.
- Encouragement will be provided to the organisation of the private sector in terms of introducing and marketing of export-oriented industrial products abroad.
- Turkey will have adopted the Community instruments for the elimination of technical barriers to trade; in other words, the Community legislation and instruments on standardisation, measurement, calibration, quality, accreditation, testing and certification by the end of the year 2000.
- The work of the Competition Board and a Competition Council which has recently been established will be accelerated. Liberal markets and competition systems will be overhauled by the Competition Board, especially laws on Public Procurement by Municipalities, Tax Legislation and Legislation on Industrial Property Rights, which will be adjusted.

The Board will make the principles contained in block exemption regulations in the field of competition law applicable in Turkey and will put this legislation into force.

Technology

The objective is to disseminate advanced technology applications by supporting both public and private sector activities and the rational use of information within the decision-making process. Priority areas include:

- providing support for increasing the share of the private sector in R&D expenditures;
- providing necessary resources for implementations regarding raising both the quality and the quantity of skilled manpower;
- working on setting up the infrastructure for international information networks;
- international co-operation in science and technology, in particular with the EU, Japan and the USA;
- providing support for joint research projects to be conducted by technological support and development centres, technoparks and technology institutes, pre-competition research consortia, public research institutions and universities and industry establishments of the private sector;
- re-arranging the public procurement policies so that the use of national R&D results will be encouraged and producers will supply commodities and services at world standard and prices;

- providing support to set up a technology institute aimed at generating and improving sectoral technologies and making them available to the public and private sectors;
- providing measures to improve co-operation between university and industry;
- continuing to realise the protection of industrial property rights by Turkish Patent Institute.

Small and Medium Business

Small and medium size enterprises are quick to adjust to economic change and innovations and they have a high capacity to create employment. Priority objectives include:

- supporting and developing these enterprises through a special programme taking into account the problems of adjustments they may face in the Customs Union process with EU;
- providing necessary legislation arrangements to allow them more financing opportunities;
- putting into effect the institution of risk capital along with a credit guarantee fund;
- providing the programme by the "Small and Medium Industry Development Organisation" to train new entrepreneurs and to provide financial, technical and management consultancy services for their projects;
- providing encouragement for the transfer of present establishments to organised industrial estates and small industrial estates.

Infrastructure

With a special emphasis on energy, transportation and communication, the nation-wide policies will be introduced and related investments projects will be conducted in the framework of master plans.

The private sector share in the infrastructural investments will be increased. Accordingly in financing the investments and services that require advanced technology and large amount of funds, the "Build-Operate-Transfer (BOT) Model" will be employed.

UNITED KINGDOM

UK POLICY TOWARDS INDUSTRY: PAST, PRESENT AND FUTURE

by
Department of Trade and Industry

Introduction

In the UK, a new Government took office on 2 May 1997. The section below on recent years reflects the specific priorities of the previous administration on trade and industry policy, while those in the following sections on the next five years and recent initiatives reflect the priorities and recent actions of the new administration in respect of policies towards and affecting business more generally.

Priorities in recent years

Helping British businesses compete successfully at home, in the rest of Europe, and throughout the world by:

- working for trade liberalisation world-wide;
- promoting competition and privatisation;
- reducing regulatory burdens;
- encouraging enterprise and small firms;
- promoting inward investment.

Trade liberalisation

Encouraging the competitiveness of UK companies through open markets by:

- implementing the European Union Single Market;
- working through GATT and subsequently the WTO to liberalise world markets.

Privatisations and competition

Free competition for free markets.

Promoting choice, investment and competitive prices in those industries fundamental to the effective performance of business, by privatising:

- the national telephone network and liberalising the supply of telecommunications apparatus and services;
- gas supply and introducing competition into the supply of gas to domestic and small business customers;
- electricity generation and introducing liberalisation of electricity supply;
- the nuclear (more modern parts), coal and water industries.

Reducing regulatory burdens

Reducing the cost and burden of excessive regulation on business by:

- streamlining existing regulation and making enforcement more business sensitive;
- ensuring that new regulation minimised burdens, through consultation with business and cost compliance assessments;
- measures allowing the amendment or repeal of primary regulation;
- working with EU Member States to improve European regulation.

Small firms

Encouraging enterprising small firms to develop new markets and exploit new products and services by:

- setting up Business Link, Business Connect and Business Shop networks in England, Wales and Scotland (respectively) to offer a range of advice and information (including benchmarking information) to all businesses, but particularly those with the potential to grow.

Inward investment

Encouraging inward investment, to maximise the business opportunities for UK companies and to improve national competitiveness by:

- marketing world-wide the benefits of the UK as a business investment location and establishing a single point of contact to assist overseas investors with all aspects of investing in the UK.

Priorities for the next five years

To work in partnership with business to improve competitiveness and prosperity for all, consistent with the goal of sustainable development by:

- providing a dynamic and supportive environment in which business can prosper and thrive; and

- promoting investment and employment for sustained economic growth while enhancing opportunity and fairness.

This will be achieved by:

- providing macro-economic stability, avoiding short-term inflationary dashes for growth and boom-bust cycles which have led to long-term damage to business confidence;
- improved education;
- encouraging the development of a skilled and flexible labour market;
- providing Britain with new leadership in Europe;
- promoting open and competitive markets at home and abroad;
- encouraging enterprise and innovation, including improving the environment for small firms;
- encouraging collaboration between researchers and business and encouraging the exploitation of science and technology;
- fostering local economic growth and regional competitiveness;
- welcoming inward investors, including as a catalyst for competitiveness;
- strengthening support for British business abroad.

Stable macro-economic environment

To ensure the macro-economic stability that is a necessary condition for business success by:

- maintaining inflation at or below 2.5 per cent;
- exercising tight control over public spending.

Education, jobs and a skilled workforce and flexible labour market

Putting education at the top of the Government’s agenda (“Education, education, education”...).

Creating jobs and in particular measures to alleviate long term, especially youth unemployment.

To work to create a high skilled and flexible labour market by:

- promoting social partnerships based on stable relations between employees and employers;
- facilitating a culture of life-long learning;
- establishing a University of Industry providing affordable training in IT and management skills in particular;
- signing the EU Social Chapter.

Europe

To work with European Union colleagues to improve the competitiveness of the European Union and to increase employment by:

- speeding up completion of the Single Market, thereby bringing down trade barriers within European markets and reducing trade distortions and State aid;
- taking forward the enlargement of the EU;
- reforming the Common Agricultural Policy and EU future financing (structural funds, etc.);
- spreading good practice as regards Member States' employment practices;
- adopting policies and initiatives that encourage small firms and innovation; and

Open and competitive markets at home and abroad

To provide effective and fair competition as a spur to UK firms to innovate and invest by:

- reforming UK competition law to give competition authorities new powers to tackle anti-competitive behaviour;
- reviewing the regulation of the utilities industries (electricity, gas, water, etc.);
- being open and outward-looking in trade relations;
- a new export initiative to improve the focus of efforts to back British business selling abroad, beginning with a review of current programmes and activities;
- vigorous support for the development of the WTO, with more effective action to tackle trade barriers and to open up financial markets.

Enterprise, innovation and small firms

To encourage new enterprises, innovation and the small growth firms that are the key to increased jobs and growth by:

- improving the support and information available to small firms, including better export support, affordable training through the University of Industry, an "Enterprise Zone" on the Internet and by enhancing the Business Link network;
- reducing the burden of regulation on firms, in particular on small firms and ensuring new regulations to encourage innovation and investment;
- improving access to finance for technology-based, innovative small firms with the potential to grow;
- introducing measures to tackle the late payment of bills.

The exploitation of science and technology

To translate excellence in the science base into business success by:

- putting science, innovation, technology and design at the centre of Government thinking and action;

- taking forward the Foresight programme fostering links between industry, the science base and government to identify and respond to emerging opportunities in market technologies;
- developing centres of research excellence through public and private sector partnerships;
- spreading the use of new technology and design;
- exploiting inventions;
- informing businesses of what IT can do for them.

Local economic growth

To promote economic growth and prosperity in all parts of the country by:

- establishing new Regional Development Agencies in England and strengthening the development agencies in Scotland and Wales;
- working with local partners to produce regional competitiveness strategies.

Sector sponsorship

To address the key factors of competitiveness in partnership with industry by:

- identifying and understanding through benchmarking the strengths, weaknesses and competitive position of each of our industries to better target business support.

Inward investment

To be welcoming to inward investment by:

- establishing a competitive and rewarding business environment;
- using the Invest in Britain Bureau to market the benefits of the UK as a business location and to assist overseas investors.

Recent initiatives

Partnership with business

- Launching a new initiative ("Competitiveness UK") to enhance the UK's competitiveness.

- Publishing (probably in Autumn 1997) an *audit* of the UK's competitive position. Will set out the UK's strengths and weaknesses.

- *Setting up an Advisory Group* of business people to report to the President of the Board of Trade on taking forward the competitiveness agenda, identifying priorities for action and developing proposals in partnership with Government.

- *Working Parties* to advise on specific aspects of competitiveness. Will take the views of business on the topics to be addressed. Expect the issues will include small firms, innovation and investment.

- Consultation will culminate in the publication of a *White Paper on Competitiveness, in Spring/early Summer 1998*, written by business and Government together.

Stable macro-economic environment

- Independence granted to the Bank of England. Governor now required to account for the Bank's performance against the inflation target. Bank to set interest rates.
- Reduction in corporation tax.
- A comprehensive review of all areas of Government expenditure.

Skilled Workforce and Flexible Labour Market

- Low Pay Commission being established to advise the Government on the level at which a national minimum wage will be set.
- Introduction of "Welfare to Work" programme to reduce unemployment.

Europe

- New ministerial posts established -- Ministers for Europe and for Trade and Competitiveness in Europe.
- Taskforces on EU Competitiveness and the Single Market and on the forthcoming UK Presidency of the EU.

Enterprise, innovation and small firms

- Export Forum established to improve the quality of Government export promotion programmes.
- New funding arrangements for trade fairs.

Exploiting science and technology

- A review of the Foresight business support programme to promote technology is underway to improve its effectiveness.

UNITED STATES

U.S. POLICIES TO PROMOTE GROWTH AND COMPETITIVENESS: PAST, PRESENT AND FUTURE

The Recent Past

During the 1980s and to a lesser extent the early 1990s, U.S. strategies to promote U.S. competitiveness and growth focused on two primary themes: One was economic deregulation and the other was to reduce size and burden of government. In the 1980s, these two efforts were seen as part of an overall strategy of reducing the role of government and its involvement in the lives of the American people.

Deregulation as an explicit strategy really was initiated in the 1970s during the Carter Administration. This was expanded on during the 1980s. For example, surface and air transportation were deregulated. Banking regulations, especially those involving thrifts, were liberalized. Major elements of the telecommunications industry were opened to competition as a result of court decisions and the AT&T consent agreement. Prior to the 1980s retail markets had already been largely liberalized allowing for price competition and the development of large scale discount chains. At the same time antitrust authorities took a less restrictive attitude toward mergers and market concentration.

Downsizing government became a broadly-accepted goal during this period. Initially this was an explicit policy to eliminate selected government programmes, but with the rise of the Federal budget deficit trimming government programmes became part of a broad initiative to reduce the size of the Federal deficit. While the largest growth in government expenditures had been in mandatory programmes -- particularly entitlement programmes such as social security and medicare -- the programmes most affected by the efforts to curb government spending were the discretionary programmes.

Table 1. **Federal Gov. Outlays (Measured in $87) Annual Growth Rates**

	1980-90	1992-96
Total Discretionary	1.4%	-2.5%
...Defense	3.5%	-5.4%
...Non-Defense	-1.1%	1.0%
Total Mandatory	4.1%	2.5%
TOTAL OUTLAYS	2.9%	0.7%
GDP $92	2.9%	2.6%

The effect on discretionary programmes was not even during the 1980s. Defense expenditures expanded rapidly while non-defense funding was cut. The effects of the reductions in non-defense discretionary spending are evident in the level of federal outlays for research and development.

Table 2. **Federal Outlays for Research and Development ($87 billions)**

					Annual Growth Rates	
	1980	1990	1992	1995	1980-90	1992-95
Total R&D	42.1	56.9	56.9	54.9	3.1%	-1.2%
Defense	21.2	35.6	33.3	30.4	5.3%	-3.1%
Space	3.9	5.1	5.6	5.9	2.9%	1.6%
Health	5.2	7.4	8.4	8.8	3.6%	1.6%
Non-Defense	21.0	21.3	23.5	24.5	0.2%	1.3%
...Non-Health	15.7	13.9	15.2	15.7	-1.2%	1.2%

Non defense R&D spending increased principally as a result of increased health R&D, especially for AIDS. Non-health R&D, non-defense R&D declined in real terms in the 1980s.

Current Policies

Beginning in 1993 when President Clinton took office, there have been some significant shifts in government policies to increase competitiveness and industrial performance, as well as some changes in emphasis in other areas. A central difference is in the role of government.

Role of Government

In the past, there have been two opposing visions of the American economy. Set in extreme terms, one is a view of America of vigorous, self-sufficient individualism and the other of a world in which government is primarily responsible for the national well-being. The first view has its roots in the writings of Adam Smith, was refined into the classical liberalism of the 19th century, and has persisted into contemporary times in the rhetoric of the Reagan Presidency and its supporters. The second vision is one that distrusts markets. It sees pervasive market failures producing dire consequences, such as farmers and workers precluded from earning a decent living, and large parts of society -- particularly in the inner cities and impoverished rural areas -- simply left behind. In this vision, government, endowed with both omniscience and omnipotence, has the capacity to cure these ills through active intervention in the market. The New Deal crystallized these currents into a new kind of liberalism, in some ways antithetical to the old.

Since 1993, the current Administration has promoted a third vision, one that synthesizes and transcends these two polar world views. This vision puts individuals at its center. It recognizes that many have been left behind by the changing economy and may need government assistance, but that the role for government is limited: it can and should promote opportunity, not dependence.

This new vision includes a revised conception of the role of government -- one in which government recognizes both the market's efficiencies and its imperfections. The government can sometimes make markets work better, but it is seldom in a position to replace them. Government has its strengths and its limitations. The government cannot ignore the role of market forces in its own programmes: it needs to take advantage of the power of incentives to accomplish its objectives.

From this perspective, a few simple principles can serve as a guide to defining the core mission of government. The primary criterion for government involvement in any activity should not be how essential that activity is to the economy, or how many jobs it generates, or how much it contributes to the trade balance. In the overwhelming number of cases, the government cannot hope to surpass private firms at generating output, jobs, and exports. The proper question in circumstances where a choice between government and the market arises is whether any reason exists not to rely on markets.

The government should focus its attention on those areas in which markets will not perform adequately on their own, in which individual responsibility is insufficient to produce desirable results, and in which collective action through government is the most effective remedy.

Consistent with this perspective, evaluation of an existing government programme or the contemplation of a new one should recognize that the government cannot direct resources to someone without taking resources away from someone else. In a full-employment economy, such as the United States enjoys today and hopes to maintain, misguided subsidies pull resources away from more productive sectors and direct them toward less productive ones. Some individuals gain, but society as a whole suffers a net loss.

With this basic philosophy toward government, the current Administration's strategy for increasing competitiveness of U.S. industry and raising the standard of living can be seen as having three elements:

1. Expand and improve human and physical capital.
2. Maintain open and competitive markets.
3. Enhance and diffuse technology.

These are interrelated. Open and competitive markets encourage the development and rapid adoption of new technologies. A high level of investment and workers with appropriate skills are necessary to incorporate and make use of the new technologies.

The Administration has a multi part strategy to achieve these goals.

Macro-economic Strategy

The Administration has been committed to and has been successful in sustaining non-inflationary, steady economic growth. This is fundamental to promotion of a climate where business decision makers and individuals are willing to take risks and make new investments.

A critical part of the Administration’s macro-economic strategy has been the successful reduction in the Federal Budget Deficit. This tends to increase national savings and lower interest rates which increases the incentive to invest.

Regulatory Reform

The Administration has continued and expanded earlier deregulation efforts in order to promote competition. The Administration adopted an aggressive policy of reforming regulatory structures in key and rapidly growing sectors: in particular, telecommunications, electricity, and banking. In reforming electricity and telecommunications regulation, the Administration’s belief was that the proper regulatory structure would enhance competition, leading to valuable new services and lower prices. Recent financial reforms have provided greater incentives for competition and innovation, in ways that have reduced the overall cost of regulation to both the government and the banking sector itself while preserving and enhancing the safety and soundness of the Nation’s banks. On the environmental front, the new initiatives have shown that regulatory policies that recognize the importance of incentives can be both cheaper and more effective than traditional regulatory controls.

Competition and Open Markets

This Administration has taken a more vigorous approach to the enforcement of the antitrust laws, blocking anti-competitive mergers and, where warranted, prosecuting alleged violators. But competition is not viable in some industries namely, those called natural monopolies. Antitrust enforcement may be of little help in these areas; instead government regulation can help to ensure that monopoly power is not abused.

Today, new technologies have expanded the scope for competition in many sectors that have historically been highly regulated, such as telecommunications and electric power. Traditional regulatory structures, however, with their rigid categories of regulation versus deregulation, and competition versus monopoly, have become increasingly unhelpful in guiding policy in these areas. These new technologies do not call for wholesale deregulation because not all parts of these industries are adequately competitive. Instead they call for appropriate changes in regulatory structure to meet the new challenges. Such changes must recognize the existence of hybrid areas of the economy, some parts of which are more suited to competition, while others are more vulnerable to domination by a few. Market power in one part of a regulated industry cannot be allowed to manoeuvre itself into a stranglehold over other parts, or else economic efficiency may be severely compromised. The Administration's regulatory reforms in the telecommunications and electric power industries have attempted to achieve competitive balance.

Even as these changes have intensified competition in some parts of the economy, it remains limited in others. In particular, where goods and services are locally provided, and where transportation costs are high, consumers in some areas may have too little choice, even if providers in the country as a whole are numerous. In parts of the country, for example, a single hospital may be the only one serving a large rural area. In the health care sector, new guidelines for antitrust enforcement were recently issued in response to concerns such as these, and the Administration has resisted attempts to scale back antitrust enforcement in this area. The benefits of competition can be seen in our university system, where competition remains keen -- and perhaps partly accounts for the dominant position American universities hold in the world of higher education.

Opening Foreign Markets

It is not sufficient just to ensure that domestic markets are open and competitive. With an increasing proportion of the United States economy involved in the global economy, open and competitive markets for U.S. goods and services overseas are also critical. The expansion of trade leads to higher productivity and wages and lower inflation, not just for American, but for all nations that are opening in the world markets. The successful completion of the Uruguay Round, the implementation of NAFTA, the completion of the Information Technology Agreement, new initiatives in APEC, and rigorous efforts to reduce the theft of intellectual property are among the more important Administration efforts.

Education and Training

There are two key aspects to enhancing human capital. One is to improve the quality of education and the proportion of the population that obtain post-secondary degrees. The other is to improve the training and especially retraining of workers. While public education is the responsibility of the individual states, the current Administration sees a limited but a key role for the Federal Government: Ensuring that all children have access to the newest computer technologies. At the secondary and primary level it has pushed for higher standards that include nationwide testing to allow local authorities and parents to judge the quality of local education. At the national level the Administration has sought to reduce the cost of higher education through tax credits. Efforts are underway to revamp and consolidate the more than 100 Federal training programmes into a more comprehensive and effective program.

Enhancing Technology

Additions to the Nation's technological arsenal through research and development is an important contributor to efficiency. Private industry invests more than $100 billion in research and development each year. This is a huge sum, but it may not be enough. History and economic theory suggest that, left to their own devices, private firms will not invest sufficiently in improving technology, because they themselves do not obtain the full benefit of the research. While efforts to eliminate the budget deficit preclude large increases in R&D spending, there has been an increase since 1993 in non-military R&D while military R&D has declined.

Some have posed a false dichotomy between basic research, for which public support is almost universal, and technology, which they say should remain the province of the private sector. But government support of technology is not aimed at outguessing the market. Rather, it is focused on setting up partnerships and other structures to identify, together with the private sector, those areas in which large benefits to society are not likely to be produced by the market alone. The Administration has placed public-private partnerships at the center of its research and development policy. The Advanced Technology Programme (ATP) is a good example. ATP awards matching funds to industry, on a competitive basis, to conduct research on cutting-edge technologies and processes that, despite their great economic potential, might otherwise not have been pursued. Better diffusion and exploitation of technology, especially to and by small business, is also critical. Programmes such as the Manufacturing Extension Partnership have been designed on a cost recovery basis to assist smaller firms in making more effective use of available technologies.

The shift in philosophy regarding the appropriate role of government and greater emphasis on civilian technologies is evident in Tables 1 and 2. As can be seen, since 1992, non-defense, discretionary spending has actually increased, slower than GDP, but nevertheless is up. On the R&D side, the decline in non-health, non-defense R&D has been reversed.

Future Directions

In as much as a new national election will be held in 2000, longer term predictions of national strategies to promote competitiveness are really not possible. Nevertheless, there are clearly some basic strategies which are constant in general terms, but not necessarily in implementation. First and foremost, is deregulation. Four Presidents have strongly supported deregulation. With technologies continuing to open new possibilities for allowing market forces to operate more freely and globalization continuing, this trend should continue.

Efforts to reform regulation such as adopting market-based approaches versus command and control approaches will certainly continue.

With the elimination of the Federal budget deficit an agreed goal of the two major political parties, restraints on spending will have to continue. This means that the expansion in any government programmes must, of necessity, be modest. It would be unlikely, therefore, to see any major expansion in government support for R&D. However, the focus of government support and the mechanisms by which that support is provided could change.

EUROPEAN UNION

AN INDUSTRIAL COMPETITIVENESS POLICY FOR THE EUROPEAN UNION

by
Directorate General III

To promote the competitiveness of industry in the EU

Improving industrial competitiveness is an essential means for generating rising standards of living for the population as a whole whilst operating on markets open to international competition, namely promoting economic growth, creating jobs and strengthening economic and social cohesion.

Competitiveness relates to productivity and employment. Productivity expresses the efficiency with which industry uses inputs. The share of the population in employment expresses the ability of industry to make productive use of those who could contribute to rising living standards.

Amongst the most important sources of competitiveness are intangible and physical investment and innovation.

Based around the objective of competitiveness, the role of the Directorate General "Industry" is to:

- act as the main interface between industry and the Commission;
- promote industrial competitiveness through existing Community policies;
- develop new policies and instruments concerning industrial competitiveness at Community level.

The EU industrial policy is a horizontal competitiveness policy: it aims at increasing competitiveness by promoting a favourable environment for industry to operate in, while it is up to industry itself to exploit the opportunities opened up in this way.

This industrial policy implies the following functions:

- promoting a favourable legislative and institutional environment;
- fostering the integration of the EU industry in the global economy;
- encouraging innovation, the implementation of quality strategies, change and the take-up of new technologies;
- creating an efficient infrastructure for international and European standardisation;

- promoting the restructuring of industry where needed (for example, defence industries, steel, textile, etc.);
- stimulating the competitiveness of emerging industries (for instance, space, biotechnology).

Genesis of EU Industrial Competitiveness Policy

The concept of an industrial policy for the EU was the subject of some controversy in the 1970s and 1980s.

Industrial policy was seen as an expression of unwanted state interventionism by some Member States while others saw it as the means necessary for coherent economic development.

1. In 1990, the controversy was resolved with the adoption of the Commission's communication on "Industrial policy in an open and competitive environment"

This communication set general guidelines for industrial policy at European level.

> In a properly functioning **market economy** the drive for industrial competitiveness must come primarily from businesses.
>
> The public authorities must facilitate, on the basis of a **horizontal approach**, the coherent implementation of all the policies which can contribute to the strengthening of industrial competitiveness.

It made clear that while the primary responsibility for improving its competitiveness rests with industry, the **public authorities are responsible for**:

- creating a **stable environment** supportive to industrial activity,
- facilitating the requisite **structural changes**; and
- making sure that the markets work properly, by making co-ordinated use of all the **policies** with a bearing on industry, *i.e.* foreign trade, competition, internal market, research and development, networks, economic and social cohesion and small business policy.

Through horizontal policies that benefit all industries and economic activities, this industrial policy can promote productivity growth, innovation, and technological diffusion rather than target specific sectors or technologies.

2. In 1992, the Treaty on European Union then made industrial competitiveness one of the objectives of the Community by devoting, for the first time, a specific title to it (Article 130)

The Treaty invites the Union and its Member States to ensure that the conditions necessary for the competitiveness of industry of the Union are in place (Article 130, paragraph 1 of the Treaty).

In fact, the Treaty constitutes a **coherent set** of legal bases for an industrial competitiveness policy, with the following titles: Title XIII "Industry", Title XV (Articles 130 F and following) on research and technological development, Title VIII (Article 123) on social policy and the industrial changes, Title XIV on economic and social cohesion (Articles 130 A and B) and Title XII on trans-european networks.

3. In 1993 the White Paper on "Growth, Competitiveness and Employment" recommended an approach of industrial development based on global competitiveness

The White Paper set objectives and priorities designed to create the conditions for dynamic growth which will generate more jobs.

These are:

- to **exploit the advantages** of the EU (knowledge and human resources, trans-European networks, better organisation of production, economic and social cohesion and scientific and technological experience);
- to develop the **presence** of the EU on **growth markets**;
- to ensure the most favourable **conditions** for the **industrial transition** towards the 21st century, in particular, in the information society.

4. In 1994 the development of the EU's industrial policy reached its fourth stage

Consistent with the above guidelines, the communication on "An Industrial Competitiveness Policy for the EU" defined how to attain the above objectives and indicated the action needed to make the EU's industry more competitive.

The EU industrial competitiveness policy is based on a **limited number of priorities** which, however, are the key points on which to concentrate in order to make the EU's industry more competitive.

Priority areas are the promotion of investment in intangible assets, the development of industrial co-operation, the strengthening of the competitive environment, and the modernisation of the industrial role of public administrations (including the Commission itself).

a) The promotion of intangible investment

Therefore, the Commission proposes:

- to give increased priority to **intangible investment** in all the policies which support investment and **vocational training and promotion of human resources**;
- to develop an integrated approach to **intellectual property**;
- to take better into account the needs of the **market in research** policy, notably by closer involvement of end-users.

b) *The development of industrial co-operation*

The development of industrial co-operation has both **internal** and **external** components.

- on the one hand, closer industrial co-operation within the EU must **accompany the completion of the internal market**;

- on the other hand, development of **industrial co-operation with the rest of the world** is part of the EU's strategy to strengthen European industry's presence on expanding markets and make it easier for certain third countries to convert to a market economy.

There is not any doubt that industrial co-operation schemes are, **above all**, the responsibility of the businesses and business people. Public authorities must however create the right climate for it, by ensuring that the **legal framework** favours co-operation and developing **fora** bringing **together** all interested parties.

The EU's role in this area is to promote exchange of information and co-operation exercises. Industrial Round Tables are regularly organised to encourage dialogue among economic decision-makers.

c) *The strengthening of competition*

The **opening of markets** to free competition is one of the objectives of the Treaty on EU.

This also has **internal** and **external** aspects. **Internally**, the Commission is advocating that **public aid** is reduced while, nevertheless, taking account of regional imbalances. **Externally,** strengthening of competition should ensure the EU reaps the full benefits of the GATT Agreements.

It is particularly important for the industrial competitiveness of the EU that the development of competition within the **internal market** goes together with the opening-up of international trade. An important component of the EU's policies is to improve **access to third markets**.

d) *The modernisation* [*of the industrial role*] *of the public authorities*

It is essential to modernise public administrations, including the Commission, and their [*support*] procedures so that they keep pace with industry's ability to adjust to new situations.

The Commission proposes to:

- **streamline** and to make more **transparent** all procedures;
- **eliminate legislative, administrative and regulatory disparities** between Member states which are a significant handicap for businesses.

Priorities of EU industrial policy for the future

The priorities of EU industrial policy for the coming years are the following:

1. Internal Market

To reinforce the Internal Market and to improve its functioning, it is necessary to strengthen and reinforce the management of the Community rules, to close the gaps and to ensure that the rules and their management are well adapted to market needs.

2. Benchmarking

During 1997 a number of benchmarking pilot projects will be launched. These pilot projects should demonstrate the feasibility of benchmarking in different areas and identify adequate working methods. Such methods will need to incorporate a programme element to decide priorities, monitor progress and diffuse results of the exercises.

3. Electronic commerce

To promote the development and uptake of electronic commerce in Europe concrete actions relate to:

- better focusing RTD workplans on the electronic commerce market needs;
- encouraging the take-up of electronic commerce through best practice pilots;
- stimulating awareness creation and large scale dissemination of best practice;
- promoting international co-operation in electronic commerce;
- launching a market-driven initiative on standardisation in electronic commerce;
- stimulating electronic access to the Commission’s services.

Industrial dimension of the 5th RTD Framework Programme

Increasing the competitiveness of European industry is a major objective of the RTD Framework Programme. During 1997, the Commission will work with industry to reflect its needs in the proposals for the technological scope and operation of both the Fifth RTD Framework Programme and its constituent specific programmes.

Preparation for EU enlargement

The pre-accession period will be used intensively to help accelerate industrial adjustment, with emphasis on “**institution-building**” and assistance to the public administration with regard to the management of the EU *acquis* and **support to industrial restructuring**, involving a single coherent restructuring programme and the mobilisation of EU industry.

SLOVAK REPUBLIC

DEVELOPMENT POLICY OF THE SLOVAK INDUSTRY

by
Department of Industry Strategy
Ministry of Economy

Priorities of the past decade

The main objective of the industrial policy in Slovakia was to transform the industry from a centrally planned economy system to a market-oriented system by:

- privatisation of the state-owned enterprises;
- restructuring and recovery of the industry;
- support of the SMEs;
- creation and support of the new service sector;
- macro-economics stabilisation;
- reforms of financial sectors;
- legal and regulatory infrastructure.

Internationalisation

The Slovak Republic as an export-oriented country, with a large overcapacity in industry, needs internationalisation measures. Measures to internationalise the Slovak economy by expansion of trade include:

- mutual recognition agreements on standards with CEFTA, EU, OECD or other countries;
- improve access to export finance and insurance;
- establish the investment promotion program.

Business Environment

Measures to lower the costs of and improve the returns from doing business in Slovakia include:

- Reduction in taxation on corporate income and the targeted broadening of the tax base.

- Promotion of foreign trade is based on the following principles and measures:

  – further liberalisation, as a basic principle of the Foreign Trade Policy of the Slovak Republic, realised in harmony with the conclusions adopted at the Uruguay Round of GATT, principles of WTO, concluded multilateral and bilateral agreements on free trade;

  – long-term trade and political strategy focused on the stabilisation and growth of mutually advantageous trade exchange applied by the Slovak Republic in relation to individual territories;

  – increase of foreign trade’s contribution to GDP in relation to the volume which shall be oriented towards making the export structure more effective through the increase of such commodity group’s share which have a higher content of value added;

  – promotion of the import of progressive technologies for the growth of export potential of the Slovak Republic.

- Regulatory reform: An act on fair competition was approved by the National Council of the Slovak Republic on 8 July 1994 as a tool for protecting fair competition. The new law establishes a more liberal environment for effective competition in favour of consumers, converges towards competition regulations of the EU member countries, and strengthens the position and powers of the Antimonopoly Office of the Slovak Republic in the investigation of anti-competition practices as well as the privatisation process.

- Improvement of the infrastructure (road-, rail-, and water-ways, telecommunication, energy supply).

- Further deregulation of the financial market.

- Slovakia has already a liberal foreign trade regime where tariffs are on average lower than in other countries of the region.

Technology

The stage supports the solution of R&D technology projects directly by “Grant Agency for Science” and “Grant Agency for Technology” and by:

- “The Regional Revitalisation Centres of Industry” -- established as new structures to support diffusion of the results of research, technology and know-how into industrial branches of the Slovak Republic (Technology Diffusion);

- international scientific and technology co-operation has new quality conditions, when the Association Agreement between the Slovak Republic and EU came into force;

- the priorities of the Slovak Republic in the area of science and industrial technologies are the following:

  – supporting the development of science, technology, education and culture;
  – increasing competitiveness and export ability of the economy;
  – maintaining and increasing the quality of life and environment.

Small Business

The Government of the Slovak Republic defined the SMEs development as one of its main priorities for the economic development of the Slovak Republic (in its Programme Declaration).

Other significant steps for the development of SMEs were: PHARE -- support, The National Agency for Development of SMEs (NAD SME), and programmes announced by individual ministries in co-operation with the Slovak Guarantee Bank, *e.g.*:

- Promotion Programme for Large Businesses and Privatisation;
- Programme of Small Guarantees for SMEs;
- Programme of Guarantee Scheme for PHARE;
- Promotion Programme for SMEs;
- Promotion Programme for Tourism in the Slovak Republic;
- Promotion Programme for Economic Activities Leading to Energy and Domestic Raw Materials Saving;
- Programme of Decreasing the Energy Use in Residential Buildings and Houses;
- Promotion Programme for Development of Combined Transportation in the Slovak Republic.

NAD SME together with the network of RAIC/BIC (Regional Advisory and Information Centres/Business, Information Centres) and other organisations provide services which are important for the SMEs development.

Labour-related measures

The economy's adaptation to the market conditions after 1989 has brought a decline in performance of the main industries which has been reflected in the employment decrease.

Unemployment, as a new phenomenon of the society, has evoked a change in the state administration related to the institutional provision of the labour market being formed. New legislative standards have been adopted governing the employment policy to achieve a balance of supply and demand on the labour market and to establish a network of labour offices in individual regions.

Recent initiatives

- Revitalisation programme of the industry based on the new "Revitalisation Law" (1997);

- Revitalisation of unfavourable quality of the banks' credit portfolios (heritage of the past);

- New strategies or policies:

  – concretisation of tasks focused on realisation of intentions of medium-term economic policy (the Government of the Slovak Republic/September 1996);
  – actualisation of the Industrial Policy of the Slovak Republic (the Ministry of Economy/July 1997, material not approved by the Government yet);

- conception of support and development of investments -- outlook to year 2000 (the Ministry of Finance/October 1996);
- system of the State’s participation in support of industrial competitiveness in accordance with OECD, EU, and WTO principles (the Ministry of Economy/July 1997);
- the State’s medium-term policy aimed at support of SMEs in the period to year 2000 (the Ministry of Economy/February 1997);
- development of strategic technologies (Office for Development Strategy of Society, Science and Technology of the Slovak Republic).

Priorities for the next five years

The Slovak enterprise sector will need to continue modernisation and restructuring in order to raise its productivity levels to ensure it retains competitiveness, essential for small, open economies -- especially in countries aiming to join EU.

Internationalisation

Continue the process of internationalisation of the economy through:

- continuation of the investment promotion program;
- export-supporting activities;
- technology transfer promotion;
- active participation in WTO and EU activities;
- active co-operation with OECD, EU and UN-organisations (UNDP, UNIDO, EEC, etc.).

Business Environment

Continue the Foreign Trade Policy of the Slovak Republic and the regulatory reform, as described above.

There are several new legislative initiatives under preparation:

- the Bankruptcy Act Amendment;
- new Act on Financial Reserves and Provisions for bad debts/receivables;
- new Act on so-called “Group Investing” concerning Pensions, Healthcare and other Funds, Insurance Companies and some other entities;
- amendment to Securities Act towards harmonisation with EU legislation (transparency of operations);
- new Banking Acts (both on the Slovak national bank and on Commercial Banks) with primary focus on harmonisation of the Slovak legislation with EU standards and banking supervision;
- new Act on Regulatory Framework for Stock Exchange with the target to create an independent supervisory body (currently under the Ministry of Finance).

On 11 December 1996, the National Council of the Slovak Republic approved Act N° 379 on the Fund for Foreign Trade Promotion as a special purpose fund, in which funds are concentrated for promotion of foreign trade development.

On 6 February 1997, the National Council of the Slovak Republic approved Act N°. 80 on the Export-Import Bank of the Slovak Republic. Passing the Act on the Export-Import Bank of the Slovak Republic solves systematic problems in funding export and import credits mainly of a medium- and long-term nature.

Technology

The focus to encourage firms to become more innovative, productive and competitive will remain.

With the aim to increase the competitiveness and export ability of the economy, these main priorities in the area of development have been defined:

- new materials and technologies;
- rationalisation of production and energy use;
- domestic raw materials and recycling technologies;
- development of transportation and communication systems;
- biotechnologies;
- information technologies: the Government of the Slovak Republic co-ordinates the informatisation process through the counselling body "Council for Informatics of Slovakia" and it has adopted new documents: "National Programme of Informatisation of the Slovak Republic" and "Standards for State Information System of the Slovak Republic".

Small Business

The support to SMEs, as an important instrument of industrial restructuring and development policy, will be continued through:

- legal environment and institutional framework;
- information services, training, and scientific support;
- financial support.

Industrial Programmes

In 1995, the Slovak Government adopted the document entitled "The Industrial Policy of the Slovak Republic" (IP) prepared by the Ministry of Economy. This document was actualised in 1997 for the 1998 to 1005 period.

According to these documents, the strategic aim of the Slovak Republic is to achieve a level of economic efficiency and people’s standard of living which will be comparable to that in developed European countries.

The main strategic objective of Slovakia’s IP is to induce transformation, revitalisation, and restructuring of the country’s industrial sector so as to achieve higher efficiency, output growth, and structural changes that will be able to provide competitive manufacturing with high labour productivity and value as well as with effective employment structures.

In addition to this strategic objective, IP has also defined a whole set of more specific objectives, short-term as well as medium and long-term. Among the short-term objectives of industrial sector restructuring and revitalisation are the following:

- to maintain the rate of economic growth;
- to start more fundamental structural changes, using privatisation process, transfer of ownership rights, and entrance of foreign capital;
- to continue a significant reduction of ineffective productions and to start revitalisation of companies in temporary crisis, respecting environmental considerations;
- to create a strategic link between the Government’s sectoral development programme and its export promotion program.

In the medium and long-term, however, IP has, among others, the following objectives:

- to contribute towards the establishment of the economic system that will enable Slovakia to meet Maastricht Treaty conversion criteria and, consequently, to integrate itself into West European economic structures on the turn of the century;
- to contribute towards economic growth, stability, and balance of the Slovak economy as well as towards its reduced vulnerability to external shocks;
- to maintain the competitive market environment and liberal trade policy both aimed at encouraging further structural changes;
- to increase the importance of the services sector as well as the importance of SMEs in the national economy;
- to support industrial sector’s structural changes aimed at long-term reduction of those productions that are highly energy resource intensive and/or are based primarily on imported resources;
- to increase the relative importance of high value-added final products in the industrial sector output and to increase export efficiency;
- to assure industrial development with an appropriate attention to the sector’s environmental concerns.

Innovation and technological development of the Slovak industry in the period of 1997-2005 will be focused on:

- electronics and microelectronics industries, and information technology;
- the complex of new materials and technologies to produce them;
- biotechnologies and their wide industrial applications.