

THE OECD **OBSERVER**

Cities and the Global Economy

France: FF24 elsewhere: FF30 US\$5 DM9



9 770029 705002

No. 197 December 1995/January 1996

Aging Populations and National Budgets
The New Competitiveness
The Agro-food Sector
in Transition

Housing and Social Integration in Cities

In the face of new forms of social exclusion and increasing disadvantage, it is becoming urgent that stronger links be developed between distressed urban areas – often inner city or peripheral social housing estates – and other parts of the city so as to bring these neighbourhoods and the people who live in them into the mainstream of economic and social life.

This publication, based on a wide range of experiences in 17 OECD countries, examines the role of housing policies as part of multi-sectorial strategies aimed at critical urban problems such as homelessness, the concentration of high rates of unemployment in specific neighbourhoods, safety in the home and the street, the impact of residential environments on health and well-being and the problems and requirements of young people living in distressed areas.

(04 95 07 1) ISBN 92-64-14663-6
France: FF240; elsewhere: FF310 US\$62 DM90

Women in the City Housing, Services and the Urban Environment

An environment that is better to live in must be created around homes and in neighbourhoods, and health and safety in cities ensured. Easier access to more affordable housing and to employment within reasonable distance from the home are called for. What are women's contributions to these issues? What are the gender dimensions of urban transport, for example? This publication covers many of the main issues facing city authorities as they plan for the future, and makes the case for increasing the role and contribution of women to urban policy-making, for the benefit of all – women and men, the young and the elderly.

(04 95 05 1) ISBN 92-64-14570-2, 170pp
France: FF140; elsewhere: FF180 US\$37 DM50

Urban Energy Handbook Good Local Practice

Cities in OECD countries are responsible for 60–80% of total energy consumption. This causes local pollution and contributes significantly to global environmental damage. This publication, based on more than 40 case studies, underlines the role cities may play in promoting less energy-intensive forms of urban development and management, provoking less environmental damage.

(04 95 01 1) ISBN 92-64-14335-1, 230pp
France: FF190; elsewhere: FF245 US\$46 DM75

ECMT (European Conference of Ministers of Transport) Round Table 98 Interurban Transport Costs

The perspective of pan-European integration places inter-urban freight and passenger transport alike in key positions in European economies. But related factors – accidents, disamenities, wasted energy and so on – make the overall cost of such transport extremely high. Because the international division of labour necessarily leads to heavier traffic flows, detailed analyses of the cost of long-distance transport are essential. Examining the economic and policy issues involved is a must.

(75 95 01 1) ISBN 92-821-1198-0, 118pp
France: FF120; elsewhere: FF155 US\$29 DM47

Urban Travel and Sustainable Development

Increasing car traffic in cities causes congestion, air-pollution and accidents, and creates risks of global warming. This trend is becoming progressively unacceptable to the governments of many countries. A number of national and local authorities are now endeavouring to reduce car travel in cities.

This publication, covering 20 countries and 132 cities, concludes that sustainable urban development requires strong new policy-instruments, a mix of better traffic management, improved land-use planning, higher standards and substantially higher charges for using cars.

(97 95 04 1) ISBN 92-64-14370-X, 240pp
France: FF200; elsewhere: FF260 US\$48 DM79

Cities for the 21st Century

Improving urban quality of life requires new visions of what cities are, and can be. Social disaffection, poverty, joblessness, environmental deterioration and economic decline are all exacerbated by local community difficulties in adjusting to structural economic change. Decision-making must be shared among private-sector entrepreneurs, citizens' groups and government to address problems of modern architecture, the conservation of resources, voter apathy, welfare expenditure and the globalisation of trade. Can participation and integration be achieved on issues or policies that have a direct impact on cities?

In this eclectic arena of city life, taking effective steps toward improvement is daunting. This report addresses these issues and challenges local and national authorities, urban dwellers and entrepreneurs, to unite their efforts to improve the city.

(04 94 01 1) ISBN 92-64-14287-8, 178pp
France: FF160; elsewhere: FF210 US\$39 DM63

THE OECD OBSERVER

Published every two months
in English and French by the
ORGANISATION FOR ECONOMIC
CO-OPERATION AND DEVELOPMENT

Editorial Address:

OECD Publications Service
Château de la Muette
2 rue André-Pascal
F 75775 PARIS CEDEX 16
Tel. (33 1) 45 24 82 00
Fax (33 1) 45 24 18 15
Internet: OBS.MAG@OECD.ORG

© OECD 1995

Applications for permission to reproduce
or translate all or parts of articles from
The OECD Observer,
as well as other correspondence,
should be addressed to:
The Editor, *The OECD Observer*,
2 rue André-Pascal,
75775 PARIS CEDEX 16, FRANCE
Reprinted and translated articles should
carry the credit line 'Reprinted from the
OECD Observer' plus date of issue. Signed
articles reprinted must bear the author's
name. Two voucher copies should be sent
to the Editor.
Signed articles express the opinions
of the authors and do not necessarily
represent the opinion of the OECD.
The Organisation cannot be responsible
for returning unsolicited manuscripts.

Single copies:

France: FF24
Elsewhere: FF30 - US\$5 - DM9

Annual Subscription Rates:

France: FF120
Elsewhere: FF130 - US\$25 - DM46

Tel. (33 1) 49 10 42 69

Fax (33 1) 49 10 42 76

Editor

Ulla Ranhall-Reyners

Associate Editor

Martin Anderson

Assistants

Françoise Douaglin

Carol Thornton

Design

Codicom/Bonté Divine!

Layout

Frédérique Bidaux

Photo Research

Silvia Thompson

Editorial

Urban Affairs	Why Cities Matter to the Wealth of Nations	4
	Jean-Claude Paye	

Analysis

Urban Affairs	Cities and the Global Economy	6
	Josef W. Konvitz	
	Entrepreneurial Towns	9
	Mario Pezzini	
	Cities on the Information Highway	12
	Nicola De Michelis	
	Coping with Urban Disasters	15
	Atsushi Ichikawa	
	Improving the City Environment	17
	Josef W. Konvitz	
	Urban Transport in Eastern Europe	23
	Mary Crass and Jack Short	
	The Hidden Potential of Disadvantaged Districts	26
	Geneviève Lecamp	
	Integrating Immigrants in Urban Life	31
	Jean-Pierre Garson and Kristen Neymarc	
Finance	Aging Populations and Government Budgets	33
	Willi Leibfritz and Deborah Roseveare	
Industry	Globalisation and Industrial Competitiveness	38
	Hanspeter Gassmann	
Economies in Transition	The Agro-food Sector in Transition	43
	Ferdinand Kuba	

Spotlight

Economy	Sweden: Tackling Unemployment	46
	Hans Christiansen	
	The United States: Developing the Workforce	48
	Kathryn Gordon	

Observer Exclusive

Economy	Indicators	50
----------------	-------------------	-----------

Bookstore

Just Published	New OECD Publications	56
Addresses	Where to Obtain OECD Publications	62

Cover: The 'global city' has to respond to a world where people, goods and financial investment are increasingly mobile.

© Pix S.A. J. Blank

Why Cities Matter to the

Jean-Claude Paye, Secretary-General of the OECD

More than 70% of the people in OECD countries live in cities, and the degree of urbanisation worldwide is rising to over 50%. Within the next fifteen years, China is expected to build additional cities to house a population larger than that of the European Union. Urban living conditions therefore define the quality of life of more than half of mankind, and increasingly affect the lifestyles and opportunities available to people in rural regions as well.

Cities support three processes that are critical to economic development: the cultural familiarisation of social groups and peoples to modern life, with its emphasis on education, information and communication; the integration of different sectors and markets, providing more productive uses of labour and capital; and innovation in institutions and enterprises that develop new services and products to meet peoples' needs.

The global economy is increasingly organised around urban settlements. There was a time when only three or four cities dominated the world economy – Venice or Constantinople in the Renaissance, London and New York in the era of industrialisation. But today the global economy has no centre; it is polycentric, composed of regional clusters or networks of cities that thrive within different parts of the world, linked by trade and communications.

This polycentricity is increasingly viable now that national governments are decentralising their functions and trying to reduce deficits. The older pattern of smaller and medium cities in a country linked to the world through a single major trading centre corresponded to a time when national governments regulated the relations between their internal economies and the world at large; then it made sense to treat urban policy as a kind of domestic policy. Now, by contrast, given the reduction of trade barriers and the expansion of world trade at a rate faster than that of domestic economic activity, cities of all sizes must be recognised for their capacity to participate in and contribute to the global economy. Cities that are more competitive, and more open to investment and innovation, are

better able to develop economic strategies that build on their strengths. They can no longer be treated only within a national framework.

Over the past decade cities have sustained enormous changes in their infrastructures, in their economic activities and employment patterns, and in social behaviour and lifestyles. Indeed, their adaptability has been a major factor in the speed with which globalisation has changed economic patterns, as people have learned to cope with change and manage risks more rapidly. It is thus tempting to draw the conclusion that they will have the capacity to do so in the future. But there are limits to how much change they can absorb. It is therefore critical to ensure that the cities of the OECD countries have the means and ability to master the consequences of rapid economic change. They can do much on their own – but not everything. If national governments fail to ensure a viable future for cities, global economic and social development will be compromised.

A well-rounded national economic strategy cannot ignore the spatial structure of the economy, and the qualities and characteristics of the cities in which so much economic activity is located. Macro-economic policies and urban development are more and more interrelated. A clearer understanding of these links is essential. The property market, housing and infrastructural investment are more and more sensitive to the behaviour of a globalised economy, to foreign investment and to patterns of mobility. Innovation in science, technology and business is increasingly shaped by the institutions of research and higher education located in cities. And the evolution of transport and communications infrastructures shapes land-use and environmental conditions for business, government and households.

These considerations are of vital importance to local government, to the people who live in cities, and to the firms based there. How these issues are addressed will affect the climate of confidence and the readiness of people and communities to confront change creatively and constructively. And when these questions are neglected or policies badly

Wealth of Nations

designed, the consequences can be fairly immediate and dramatic. Housing markets can be distorted, making it difficult for people to obtain affordable housing or to move. Banks and households can find themselves saddled with unmanageable volumes of debt. Municipalities can face unanticipated expenses, with implications for taxation and the quality of public services. Firms can face problems with space or labour, meeting environmental standards, and controlling costs. The cumulative impact of such problems in individual cities can affect national economic output, the availability of credit and consumer demand.

Indeed, to an extent that has not yet been appreciated, the problems of national economies are in part caused by the social, environmental and economic problems accumulating in cities. Urban-based policy can thus contribute to restoring growth, especially through improving the operation of cities as market economies that favour entrepreneurship.

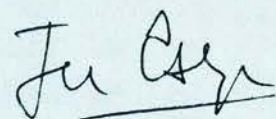
Meeting these challenges will require new forms of public policy, adapted to local circumstances. If the role of central government is more and more to establish broad guidelines, the cities that are left to meet their various goals will require the resources necessary for the task, and the flexibility to work horizontally across metropolitan regions and with the private sector. It is not simply more urban investment that is necessary but more investment in new ways if what already exists is to be modernised and what is missing to be added.

The new approach requires the capacity to set priorities and direct resources, to co-ordinate between different tiers of government, to improve public participation, to integrate all sectors of the population into the productive economy, and to take account of the environmental consequences of urban activities and lifestyles. This is a complex and broad agenda which challenges the sectorial structure of government – municipal, regional and central. Economic growth, by itself, will not be enough: without changes in policy, cities will be less productive than they might be, with results that will be detrimental to societies and economies everywhere.

This task will require political leadership and active participation in local democracy, as well as the close involvement of the private sector. Such co-operation will be critical if OECD and non-OECD countries alike are to find new ways to govern themselves wisely – indeed, urban issues provide an excellent basis on which countries at many different stages of economic achievement and wealth can co-operate. Unless representative democracy and civic culture can be made effective on these issues, cities will not evolve in ways which meet the collective purposes of their inhabitants.

The OECD can help promote and diffuse innovations in policy, maintain progress toward freer trade, and provide governments with a framework for policy co-ordination. New solutions to urban problems may emerge anywhere in the world, and be adapted elsewhere. The real flow of information and expertise, of goods and of services, will be essential. Already, in the years following the UNCED conference on the environment in Rio, scores of cities worldwide have joined together in new networks to make progress toward environmental goals.

Critics of conurbations have always argued that cities – or at least very large ones – are a threat to economic, social and political stability because urban conditions are difficult to predict and control. In the past, apocalyptic predictions of collapse have tended to exaggerate their vulnerability to external shocks or to internal problems; in truth, cities have demonstrated considerable resilience. History shows that people learn to resolve problems that are as difficult to anticipate as they are complex. Now, in a more and more densely populated world, spreading the capacity to adjust across a number of cities – rather than concentrating it in a limited number of megacities – may well be a wiser basis on which to organise the capacity of the OECD countries to adjust and grow.



Cities and the Global Economy

Josef W. Konvitz

In the 1980s cities contributed to the growth and development of the global economy by providing opportunities for firms and households to make use of innovations in transport, manufacturing and information. Yet, paradoxically, those years did little to provide a basis for long-term, sustainable urban growth.

Rapid economic growth in the 1980s encouraged planners and investors to enlarge cities through outward expansion and by increasing the size and number of buildings, with consequences that included pressure on rural areas and coastal zones, and wide swings in property and housing markets. An increase in economic activity enabled people to travel more, principally by car, leading to increased congestion, a deterioration in air quality and an aggravation of noise problems and heightened dependency on oil. Changes in the role of basic manufacturing in the economy, and of the income and family structures of households, altered the economic viability of many neighbourhoods, provoking a redistribution of population within cities and international migration on an unprecedented scale. These fiscal strains between central governments and municipalities affect the ability of cities to adapt to social change, technological innovation and environmental problems.

In a global economy increasingly characterised by the mobility of capital and of people, the quality of life is a major factor in strategies for economic development. Not only does the

quality of life affect the productivity of people and their willingness to invest in their community; it also influences decisions by firms to locate offices and plants. Although less tangible than a port facility or a manufacturing complex, the factors governing the quality of life can be defined and, in some instances, measured: journey-times to work; the ratio of house prices to income; the quality of the housing stock; ease of access to other cities and leisure areas; openness to other cultures; the quality of the education available; responsiveness of the public sector; the quality of legal and financial services and of institutions to resolve conflicts and disputes; the mental and physical health of the population; and the number of new firms and jobs.

These factors matter more now because individual cities are no longer as closely associated with particular economic sectors as once they were. Many cities thus no longer enjoy a comparative advantage based on past successes, or on the fortunes of geography. Human development, social infrastructure and environmental conditions¹ all influence economic potential.

The divorce between a city and its primary business can be illustrated with the example of Detroit, whose name still symbolises the American automobile industry. Most manufacturing in Michigan now takes place outside of the city

proper, in the suburbs, or in one of Michigan's medium-sized cities, such as Lansing, Flint or Ypsilanti. The physical decay of Detroit and the widening gap between urban and suburban incomes create a spiral of decline that is difficult to arrest when businesses can easily locate their activities elsewhere. Increasingly, manufacturing plants are to be found along a superhighway that extends from northern Ohio to Tennessee; Japanese and European car companies have all located plants outside the traditional area of car production. In this instance the name Detroit has come to refer to the economic power of a sector, not to its spatial organisation.²

Another example of how the ties between cities and sectors are unravelling is provided by the relationship between the financial sector and some areas of New York or London. In both cities, port facilities explain the emergence and growth of the financial sector. In both, the port has declined in its importance in the local economy. And in both cities, the financial sector was able to grow despite the collapse of maritime activities. But now many back-office operations are being transferred to suburbs or, in some cases, to cities remote from the headquarters of banks and investment firms. In London and New York, indeed, the recent dominance of the financial sector in the local economy may become a liability for the future, if nothing else emerges to generate employment and concentrate business.

Several characteristics of the new global economy have a bearing on cities. International

1. See pp. 17-22.

2. It is revealing that some traditional terms of economic geography such as 'port', 'hinterland' and 'foreshore', which refer to monocentric, hierarchical networks, are used less frequently than 'region', 'cluster' and 'network', which describe interdependent and polycentric patterns.

3. See pp. 12-14.

Josef W. Konvitz works in the Urban Affairs Division of the OECD Territorial Development Service.



Pictor Uniphoto

One of the hallmarks of the global city: ease of access to other parts of the world.

capital movements give them access to credit worldwide. Telecommunications permit firms to co-ordinate work in many places without the friction of time.³ Container shipping and air cargo can move unprecedented volumes of goods over long distances at lower cost and with minimal handling.

During the commercial revolution of the 16th–18th centuries, and the industrial revolution of the 19th, cities sited near primary resources or on major navigable routes enjoyed a comparative advantage. Pittsburgh, for example, sat at the confluence of two rivers with access to coal, and between the Atlantic seaboard and the Middle West.

Today, by contrast, accessibility is no longer the privilege of a few cities. As a result, the world's networks of communication, trade, manufacturing and finance are increasingly polycentric, and give rise to clusters of regional or metropolitan networks. The economic channels of today are no longer hierarchical, passing from one of a small set of world cities (New York, London, Paris, Tokyo) to those on the rung below (Chicago, Manchester, Osaka), and so on

down, until provincial towns are reached. Cities now require multiple pathways and connections to one another within a region, and to other clusters of cities in other countries. As a result, opportunities to participate in the global economy are more widely accessible to alert entrepreneurs and city leaders.

What Cities Have to Offer

The ease of relocating economic activities from one place to another means that cities have to offer business something more than access to a supply of labour, resources and markets. Cities want to draw attention to the high quality of life they can offer, through investment, innovation and the institutions they contain.

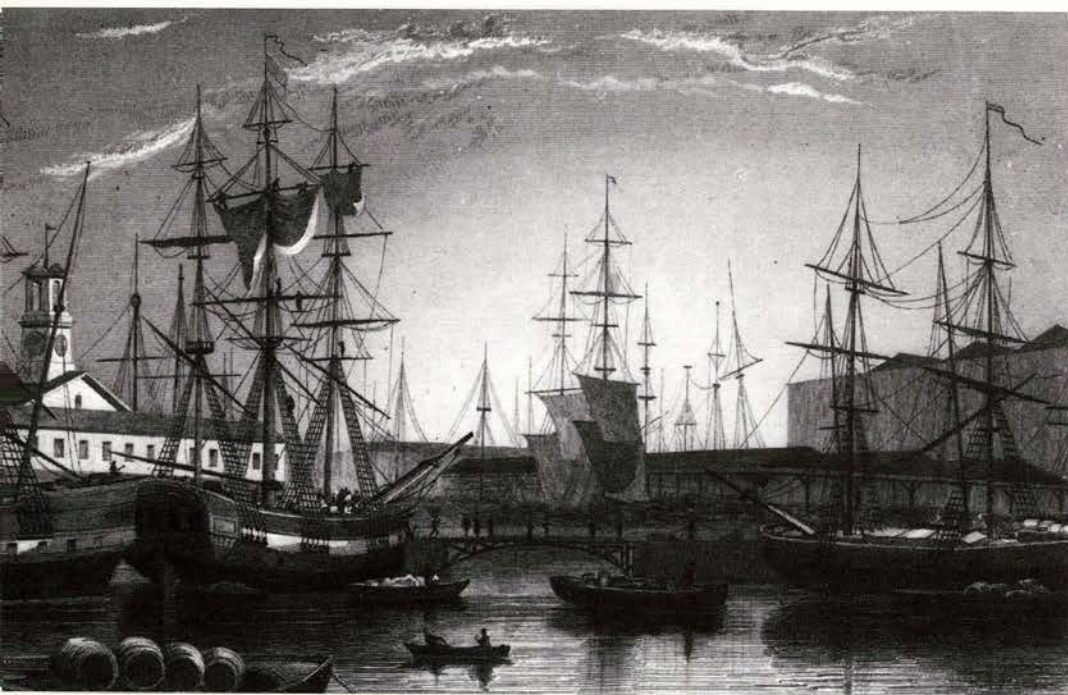
What a city can offer to investors depends on its capacity to raise taxes and moderate spending, provide basic services for physical and social infrastructures, and maintain a long-term perspective on such matters as transport planning and environmental quality. The capacity of

municipal governments to invest in their own development should reassure firms that they are unlikely to face major local shortages or bottlenecks, or environmental constraints.

But two factors limit the capacity of cities to develop long-term investment plans: voters resist fees and taxes; and the existing volume of debt may limit the amount of money that can be borrowed and serviced now and in the future. As national governments decentralise and deregulate, these local constraints may force cities to compromise projects for long-term investment (expanding the capacity of their infrastructure and improving the quality of the services they provide) so that in the short term they can maintain essential services.

Innovation is increasingly associated with what is called the knowledge-based economy. And the institutions of education and research and the facilities of large companies are predominantly in cities. The new ideas they produce are responsible for many of the productivity gains in manufacturing and for many of the new services offered by the expanding financial and communications

Cities and the Global Economy



Mary Evans Picture Library

The docks allowed London to grow as a financial centre – but what sector will emerge to support the city as financial operations are transferred to the suburbs and elsewhere?

sectors. In addition, the cultural sector, the media and the entertainment industries, all largely urban activities, generate employment for highly skilled labour. Indeed, the capacity of individuals to move from one task to another, and their capacity to develop fresh skills and absorb new information, are keys to understanding the capacity of many urban economies to shift from one sector to another.

Increasingly, local and national governments alike recognise that cities in the broadest sense, composed of suburbs and urban cores, organise and concentrate the key functions of the economy: design and production, distribution, finance, and the service sectors. It follows that how urban problems are addressed and how the future demands of cities can be anticipated are two critical dimensions of how regions and nations can improve their competitiveness. These are institutional tasks. Community organisations in particular have a role to play. But the fragmentation of cities over larger areas and more jurisdictions makes it difficult for people to come together to focus on general problems. For the same reason, it is difficult for elected officials in

different parts of an urban region to identify a common basis for development plans. It has yet to be seen whether cities have the capacity to develop the institutions for decision-making that will work effectively in decentralised metropolitan areas.

Cities have confronted similar challenges before. At the end of the 19th century, for example, when the beginnings of the global economy tied the hinterlands of North and South America to the industrial centres of the Atlantic, new institutions were created for metropolitan government and for the management of major infrastructural systems on a regional scale – the unification of the City of New York and the port and water authorities, say. Private and public funds were committed to modern rapid transit systems (streetcars, subways) and to public health clinics and hospitals. And new research institutions, universities and an expanded public school system created a better educated public and a range of new inventions and ideas that transformed technology. But the opportunities provided by social change, economic growth, technological innovation and environmental aware-

ness today have yet to find their expression in visions of cities of the future that are at once bold and practical.

■ ■

Successful cities are characterised by several common features. They have a wealth of information about current conditions, and a capacity to undertake policy-oriented research. There are strong links between business, educational and cultural institutions, and community groups. They house organisations that generate public participation in decision-making. They have a sound investment plan that includes environmental criteria and goals. They contain institutions and mechanisms that improve co-ordination horizontally, across different sectorial units in government, and vertically, between different tiers of government. And they are home to thriving local markets which enable local firms to supply one another and which respond to demand by expanding the range of goods and services available, both through imports and exports.

A strong economy is not enough, on its own, to solve urban problems. Whether a city is new or old, or growing slowly or rapidly, matters less than whether local and national governments are prepared to develop policies and guide investments that are appropriate to their requirements. And an international perspective is increasingly necessary even when local issues are at stake. Already there are innovative cities responding to the challenges of the global economy. In a world that is increasingly urbanised, the global economy can grow only if cities can absorb the impact of economic change. ■

OECD BIBLIOGRAPHY



- Cities for the 21st Century, 1994
- Globalisation and Regionalisation: The Challenge for Developing Countries, 1994
- Josef W. Konvitz, 'Global Cities and Economic Growth', *The OECD Observer*, No. 190, October/November 1994
- Development Co-operation: 1993 Report, 1993
- Nicole Massignon, 'The Urban Explosion in the Third World', *The OECD Observer*, No. 182, June/July 1993.

Entrepreneurial Towns

Mario Pezzini

What benefits do firms competing in a global market draw from remaining concentrated in towns, particularly in small and medium-sized towns? And what conditions should a town offer to give these firms opportunities and an environment that supports and maintains their comparative advantages?

Firms do not grow in autarky, alone and isolated from external developments. Their competitiveness evolves as much as the result of the industrial fabric in which they are rooted – a phenomenon of metropolitan cities and provincial towns alike – as of their individual internal capacities, habits, skills, routines and cultures.

Some of the reasons are obvious. A firm in close proximity to its subcontractors and customers, as well as to ports, airports and rail facilities, has obvious advantages in transport costs. Moreover, if it can rely on high skills from the local labour market, complemented by formal and on-the-job training, it will have clear advantages in its ability to exploit innovative techniques. Not least, recent developments such as 'just in time' manufacturing, 'zero quality defects', and 'single-minute change-of-die' (rapid tool-change) techniques call for consultative and sustained co-ordination between firms and their customers and suppliers to prevent bottle-necks.

Most of all, the quality of the local industrial fabric is crucial for small enterprises which, because of their size, cannot internalise all the phases of production and services they have to master and are thus heavily dependent on ex-

ternal sources of supply, product designs, and services if they are to be able to specialise and thereby attain advantages in quality and cost. Of course, improvements in information technologies and data transmission allow some kinds of communication to be extended over longer distances.¹ The quality of relationships between firms, as well as between skilled workers, is nonetheless often improved by physical proximity. When knowledge and experience are difficult to codify, store and transmit, and when experts with complementary specialisations must simultaneously decide whether and how new techniques and machines are to be used or adapted to meet ever-changing operating requirements, client firms and subcontractors have to be physically close to one another. The same is true of the development of trust in working relations. Indeed, the sense of physically belonging to a community is a basis for the sharing of conventions, norms and repetition which help in establishing inter-firm co-operation. For without trust, transaction costs are high, lawyers flourish and the drafting of contracts takes time and



Industrial fabric? Carpi, a small town of 60,000 inhabitants in the north of Italy, is home to 750 micro-companies which, through 1,900 subcontractors, sell clothes to the international market.

Mario Pezzini specialises in social and industrial issues in the Urban Affairs Division of the OECD Territorial Development Service.

effort, the division of labour between firms is limited by the fear that any party to an exchange can hold up the others, with the result that specialisation and flexibility are difficult to establish.

1. Georges Ferné, 'A New Electronic Tool for Business', *The OECD Observer*, No. 196, October/November 1995; see also pp. 12–14.

Entrepreneurial Towns

Logically, then, inter-firm relationships frequently develop within the same town or provincial area. They have given rise to a wide range of types of industrial agglomerations, baptised by researchers as 'industrial districts', 'local productive systems', 'network-firms', 'local clusters', and so on. There are numerous examples in the clothing industry. In the town of Carpi (which has 60,000 inhabitants), in northern Italy, there are as many as 750 micro 'final firms' (those selling finished products) working with 1,900 local and independent sub-contractors to produce and sell together into international markets products similar to those of the more famous Benetton firm, which has some 380 subcontractors in the area of Treviso working solely for and around the mother firm. In turn, Benetton competes with the Lacoste brand produced by Devanlay, a corporation with large plants and subcontractors concentrated in the town of Troyes (France). And these firms compete with others agglomerated in the towns of Leicester and Nottingham (both in England), Alcoy and Mataro (Spain), Cholet (France) or the Sentier neighbourhood in Paris, and so on. An almost endless list could follow with illustrations from footwear, machine-tools, micro-mechanics, ceramic tiles, toys, furniture, glasses, panty-hose – although this is, of course, an ages-old phenomenon, observed a century ago by the economist Alfred Marshall, writing then of Sheffield and Lancashire.

In all these instances, the industrial input-output chain of conception, execution, marketing and commercialisation is organised in a variety of different ways, each with its own peculiar combination of techniques, methods of transferring information, incentives, decision-making models and control procedures. The common thread is the interaction between firms which

share the same location. Once a particular economic community has emerged, the local environment in which firms are situated is a crucial source of competitive advantage. Industrial fabrics like these represent an important part of the economic structure of industrialised countries, a characteristic that has been neglected because, though they are visible in metropolitan urban settings, they are less evident when located in provincial towns.

Policies intended to foster the competitiveness of firms should thus increasingly take account of the local productive fabric as a focus for analysis and initiative.

Endogenous Development

Until now this has rarely been the case. First, national policies are conceived to focus almost exclusively on individual firms as if they were isolated units. They therefore underestimate the extent to which firms are bound together in divisions of labour and through proximity, so that the fate of one particular firm is tied to that of other productive units and benefits from local externalities. Second, local policies are often almost exclusively focused on attracting exogenous investment. But since there is a limited number of 'nomadic' branch plants (those with no severe constraints on location) towns enter into tough, highly competitive games in an attempt to outbid one another, investing so much effort that even the winners do not get the returns they had hoped for, and resources are wasted.

Fortunately, in the last few decades various types of experiments to foster endogenous development have been tried by local authorities, sometimes encouraged by central government: local employment agencies, incubators, consortia, network hubs, industrial parks. Some small and medium-sized towns, for instance, have promoted special

financial arrangements for small firms in the area. They have good reason to do so. Banks prefer to secure loans with property, and find financial criteria an unambiguous means for assessment. But since new firms will lack financial statements (giving the re-sale value of property or precise measures of past performance), banks instead demand detailed market information and judgments of entrepreneurial potential. Yet this information will mean little to people outside the industry concerned, unless it is computed by sectorial studies, analyses of likely competition and market research, which are all extremely costly. The cost-benefit ratio of generating this



Small firms can make credit easier to obtain by grouping themselves in consortia.

kind of material in the case of small firms is thus prohibitively high, distorting the supply of credit.

Consortia of small firms can both help reduce these costs and smooth out market imperfections. Approximately 3,500 artisans in the Carpi area are members of an association that guarantees the loans its members take out with ordinary credit institutions, and negotiates the interest rate (usually 1.5% lower than the going rate). Each member pays a fee which is combined with contributions from local authorities. If a member requires a loan, he or she goes to a local office and obtains a report prepared and assessed by fellow business people. The report is forwarded to the board of directors of the financial consortium, which is made up of seven well-known artisans.

Such an arrangement can supply a low-cost insider assessment of entrepreneurial ideas and activities, since entrepreneurs of the same town, often of the same industry, are usually appointed to the board of directors; the consortium thus has an intimate knowledge of both the individual and the industry. Moreover, the consortium can provide a strong incentive to pay back loans, since a firm's reputation with banks directly influences its relationship with local suppliers and clients.

A second endogenous approach is through the creation of quasi-public centres which offer 'advanced services' to small firms in the main industries of a town. There are many examples: the Technological Institute in Elda, in the heart of the footwear-producing region of Valencia, the Institute of Toy Manufacturing established in Ibi, also in Spain; the Centre for Textile and Clothing in Carpi; the Istituto Ceramico, which provides services to the area of Sassuolo in northern Italy, where the world's leading producers of ceramic tiles are gathered; and Proteko in the textile- and clothing-manufacturing district of Borås in Sweden. The services involved are those that small firms are not able to internalise because of their size – say, the provision of sophisticated machinery in mechanics or CAD/CAM systems in clothing, the adaptation of water leather-cutting machines for small batches of production in footwear, the diffusion of information about prevailing trends in fashion,

information on standards and quality requirements for the export of mechanical products in distant markets.

Such centres use skilled professional management to organise support services for the dominant industries in the town (knitwear, footwear, ceramics, earth-moving and agricultural machinery are examples that are frequently encountered). They can also be integrated into existing related activities, such as training, technology, financing and market analysis. And the firms themselves participate actively in organising the services they desire.

The market could supply many of these services. But there may be insufficient demand to sustain private supply in a provincial town. In practice, that requires a centre to diffuse information until the importance of its message is understood by the industrial community, at which moment the market can be left to operate by itself.

A third endogenous approach in provincial towns and big cities alike is to establish networks. Small and medium-sized firms can thereby link complementary skills, improving their competitiveness by attaining degrees of specialisation and efficiency comparable to those of large firms. Because of its size, as with the purchase of advanced services, a small firm will generally not be able to spread the costs of overhead functions, such as marketing and research, over a large range of products or volume of output. It is thus obliged either to raise costs, which reduces its competitiveness, or it must avoid potentially important areas of business. Specialisation – in one product and phase of production, buying in other specialist processes or services when required – is an alternative and can thus also achieve economies of scale. In many cases this strategy is underexploited.

The managers of small businesses often disregard opportunities for inter-firm co-operation even when some clearly identifiable economies of scale are available to increase the competitiveness both of individual firms and local areas as a whole. In such an environment government can provide a framework to moderate mutual doubts about the reliability of potential partners. In these cases, the measures recently in force –

in Denmark, for example – range from grants which offer incentives to establish networks with other companies, to vigorous marketing campaigns. An external catalyst or broker is required to ensure transparency of information, the successful resolution of conflicts between firms, and continuity in running the network. This role can be played by different individuals or institutions, according to local circumstance and existing institutions. At present, advisers from trade associations, banks, accountants and private consultants are most in tune with the market-oriented perspective of such networks – and they also have a personal interest in their success.

■ ■

The reasons for the success or failure of the experimental projects that have been undertaken all have to be understood if a long-term policy approach is to be developed: whether they meet the requirements of firms, how they are financed, and how they are linked with measures introduced by central government. But no in-depth analysis has yet been undertaken. And the enormous diversity of towns and cities – in economic performance, internal organisation and in social complexity – precludes a standard model of development.

But one central feature of these experiments can be identified: the direct participation of all the individuals and institutions involved, not least the firms themselves, is essential. All these local elements could come together to constitute a more or less formal policy network within which tailor-made solutions to similar problems could be jointly discovered, discussed and implemented. ■

OECD BIBLIOGRAPHY

- The Economic Dimension of Electronic Data Interchange, OECD/ISO, 1995
- Georges Ferné and Richard Hawkins, 'A New Electronic Tool for Business', *The OECD Observer*, No. 196, October/November 1995
- Boosting Business: Advisory Services, 1995
- SMEs: Technology and Competitiveness, 1993.



Cities on the Information Highway

Nicola De Michelis

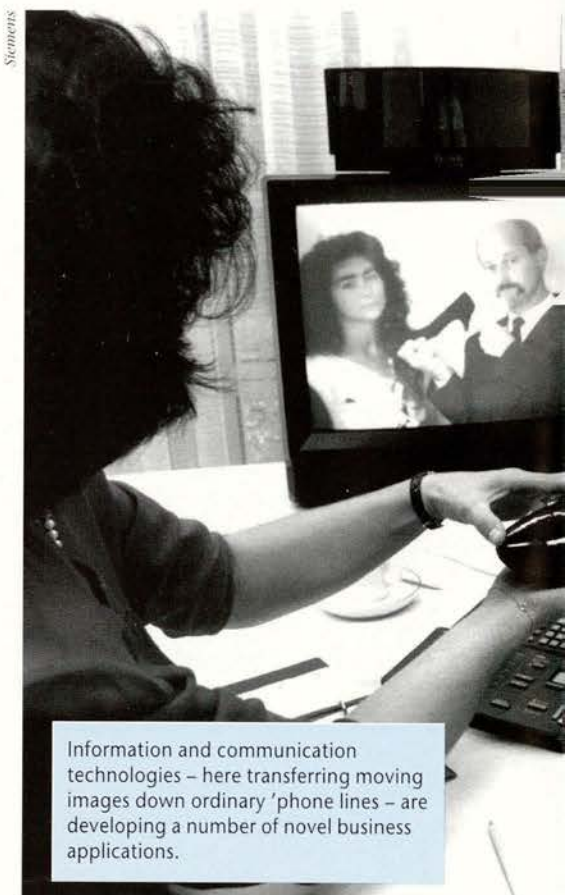
The growing economic importance of information is bringing about the global integration of national and regional economies by providing firms with unprecedented degrees of flexibility in where they choose to locate their activities. And information and communication technologies are beginning to make capital more sensible to small differences in local factor endowments (such as labour skills, educational facilities, transport infrastructure, access to financial services, the quality of the environment, and so on) by diminishing the importance of distance.

Nobody knows how information and communication technologies (ICTs) will influence the way people and firms use space. They might allow firms to manage complex organisations that span wide areas and time zones, to reach remote markets and permit firms to tap under-used reserves of labour (through, for example, teleworking) to compete more efficiently in the global economy. Moreover, they might allow households to obtain new services, and help to relieve part of the 'diseconomies of agglomeration' that make large cities less attractive (congestion, pollution, overpopulation).

Yet ICTs might also contribute to a more uneven pattern of urban development, since they depend on investment in infrastructure. With the deregulation of the telecommunications market, the basis for decisions on investment in ICT infra-

structure is likely to shift from a supply-led, universal-service concept to a demand-driven approach, focused in particular on major corporate users and, geographically, on large metropolitan areas. In the United Kingdom 60% of data-communication traffic is generated by 300 large companies; in Norway, only 25 companies account for 40-50% of communications traffic on the national data network; and in Canada, 65% of data communication traffic generated by large multilocal organisations converges in computer centres located in Metropolitan Toronto. In a liberalised environment, competing suppliers would tend to target the most profitable sectors first.

In the United Kingdom, for instance, though cable is developing rapidly, regional differences are still substantial. Using as indicator the percentage of franchise homes passed by, and therefore potentially able to connect to cable systems, a pattern of slow decline emerges, moving out from the core (where 17.9% of franchised homes had been passed in January 1993) to the emer-



Information and communication technologies – here transferring moving images down ordinary 'phone lines – are developing a number of novel business applications.

gent regions (15.2%), followed by a sharp drop in the industrial heartland (9.8%) and marginally lower still in the periphery (9.5%).¹

Such differences could affect the ability of particular cities to attract new investments and retain existing business. Indeed, according to a survey of over 500 of the leading firms in Europe,² the quality of telecommunications provision in a city is second only to ease of access to markets, customers or clients in defining the final choice of location.

A central reason for the concentration of economic activities in urban areas has been the opportunities they provide for interaction between the customers and suppliers of goods

Nicola De Michelis is a consultant in the Urban Affairs Division of the OECD Territorial Development Service.

1. 'Cable Systems, Telephony and Local Economic Development in the UK', Telecommunication Policy, Independent Television Commission, London, November 1993.

2. European Real Estate Monitor, Healy & Baker, London, 1991.



and services. The city is and always has been the focus for processing and exchanging information; and as information becomes more important in both production and distribution, the strategic role of some cities is reinforced. Many cities are, indeed, becoming the nodes of this network-based economy, and in these 'world cities' 'intelligent' buildings – individual buildings or groups of buildings whose functions (heating, lifts, lighting, air conditioning, security, and so on) are fully controlled and managed by electronic systems – along with teleports, fibre-optic networks and other advanced technologies – are already part of the emerging infrastructure. There are many examples in Japan: the MM21 Teleport Project in Yokohama City, the TWIN21 buildings in Osaka, the Makuhari New Town in Tokyo, and the Kansai Cultural and Scientific Centre in the Osaka Region; and teleports in New York and Paris.

But other cities, located at the periphery of the emerging network economy and where jobs, income and public service depend on the branch operations of large firms, may find themselves increasingly vulnerable to processes of disinvestment and de-industrialisation – which take place extremely rapidly. Yet even if the provision of ICT infrastructure tends to be concentrated in metropolitan areas, ICTs do offer a range of opportunities for improving the competitive position of peripheral areas, by generating new economic activities and by developing a number of applications – teleworking, delocalisation of back-office functions (data processing and software development), telephone booking and reservations, customer inquiries, insurance operations, telebanking.

All of these support a more even distribution of information, services and, ultimately, of wealth across territories. Advanced communication in lagging regions allows firms to reach the main hubs of economic activity and to become more thoroughly integrated in the economic system. The decentralisation of certain economic activities – through ICTs – can relieve pressure on urban centres (for example, by reducing traffic congestion and improving air quality). Tele-working, for instance, may well moderate the impact of commuting.

Can Policy Bridge the Gap?

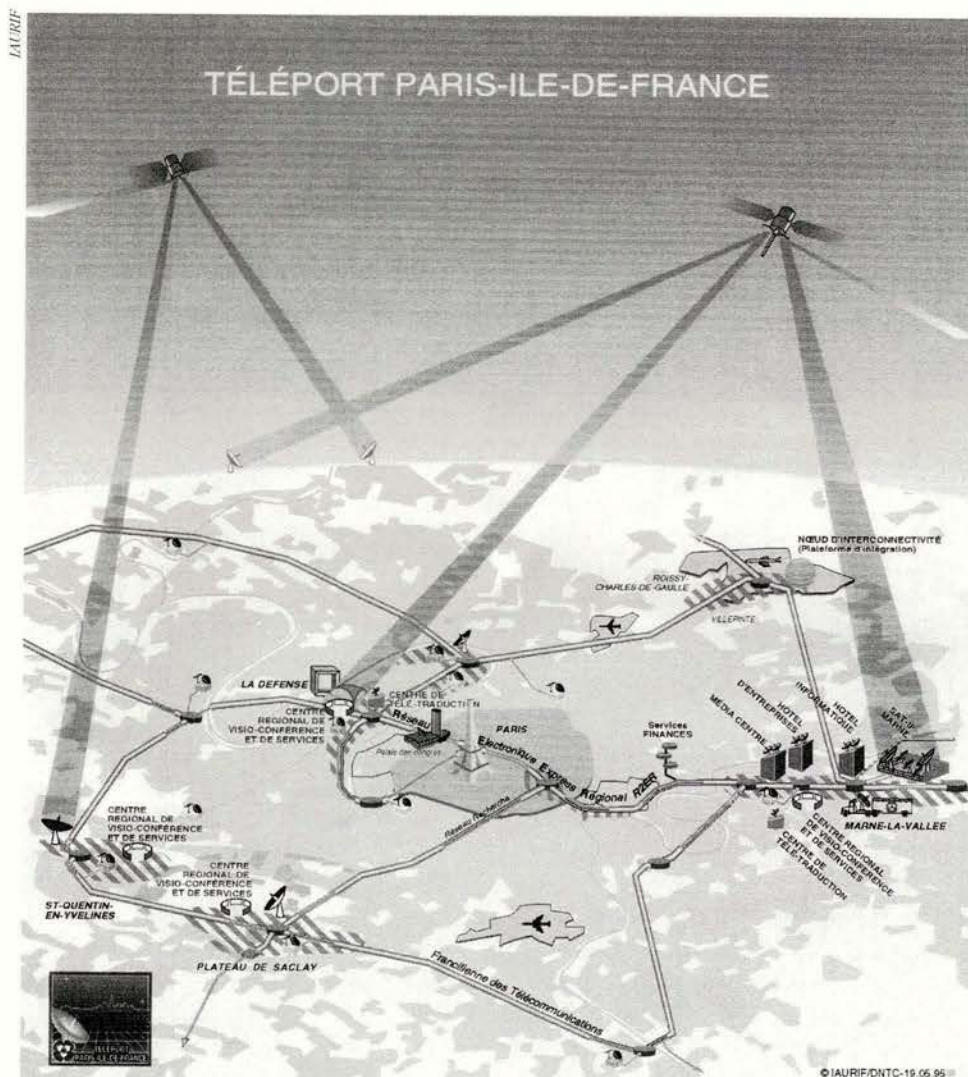
How can national and local governments guide the growth of ICTs so as to diffuse development opportunities evenly across regions and cities? Indeed, as the gap between the leading cities with a strong position in the information economy and the rest of the territory widens, the possibility of global integration and national fragmentation is already being perceived locally. But although the central policy question is not

one of introducing (or maintaining) complex mechanisms of cross-subsidisation between areas that are information-rich and others that are poor, government action could nonetheless be critical in supporting the local development of applications so as to show more clearly the economic advantages of using these technologies in peripheral areas, both in cities and the countryside. Only such action could accelerate the generation of the demand necessary to make these areas profitable for companies thinking of investing in ICT infrastructures.

Vigorous initiatives by the public sector could also provide some evidence of the potential contribution of ICTs to making public services more efficient and bringing government closer to citizens. The involvement of users – firms, households and individuals – could be crucial in tapping local resources and meeting local requirements.

Local government could concentrate on devising financial mechanisms to subsidise the connection of less favoured areas to the information network, creating, where necessary, the critical mass of demand to allow the private sector to come in. This is, for example, what the city of Bologna is trying to do. The administration established a public local network (with limited access to the Internet) where they provide a range of traditional municipal services (information about city events and local traffic, access to municipal databases, the opening times of city offices, and so on). The aim of the initiative is to establish a two-way exchange of information with citizens – and to promote the understanding and use of ICTs. As the number of people connected grows, so does the interest of firms and business in using the network to offer their products or services. Eventually, the system will become self-financing, the municipality will step back and become a provider of services among others, and the running of the network will become economically attractive, with enough customers to entice private suppliers. But without the initiative of the municipality, there would have been no network. Bologna is a rich city and can afford such measures. But groups of smaller towns could pool their resources to finance this type of initiative across wider areas.

Cities on the Information Highway



From intelligent buildings to intelligent urban areas: the Paris-Île-de-France teleport is part of the emerging information infrastructure.

Some cities are already exploring the potential of ICTs in addressing a variety of social, economic and community issues. In Bristol, in the United Kingdom, for example, experiments are underway to develop an ICT infrastructure to circumvent transport problems and provide access to information in run-down communities. Cables linking houses, business, schools and other organisations will provide access to local, national and international information for Hartcliffe, an area of Bristol that is isolated by

several miles from the city centre with no rail service and poor road connections. The hope is that it will improve the skills of the labour force, encourage life-long learning and help to rebuild a sense of community.

The Manchester 'Host' initiative provides a wide range of services to all the groups and sectors of the city. It is the first municipally controlled ICT network in the UK adopting quasi-public methods of allocation to provide cheap, effective and wide-ranging information and com-

munication services (electronic mail and personal mailboxes, fax and full telex facilities, bulletin boards, gateways to other databases, and more) to the voluntary sector, small and medium-sized enterprises, disadvantaged groups, ethnic minorities, disabled people and women's groups. It is being run by a co-operative, and a set percentage of revenues from the commercial services the system offers are recycled for non-commercial applications, cheap access and special applications – for disabled people, for example.

In Germany, the city of Bochum has installed a network as a basis for a radical improvement in the delivery of public services by the council; and Cologne is undertaking a large-scale inner-city redevelopment based on media, cultural industries and telecommunications.

■ ■

ICTs offer possibilities for development, but they do not themselves define the direction it may take. Telecommunications policy should therefore be harnessed to other, complementary, initiatives – such as regional policies, education programmes and training schemes – if the quality of the information environment is to be uniformly enhanced across cities, rural areas and regions. In addition, policies should remain flexible enough to be adapted to new circumstances, particularly in view of the uncertainty surrounding the evolution and use of ICTs. ■

OECD BIBLIOGRAPHY

- Economic Dimension of EDI, 1995
- Georges Ferné and Richard Hawkins, 'A New Electronic Tool for Business', *The OECD Observer*, No. 196, October/November 1995
- Communication Outlook 1995, 1995
- Jeremy Beale, 'The Information Explosion', *The OECD Observer*, No. 196, October/November 1995.

Coping with Urban Disasters

Atsushi Ichikawa

Natural calamities – chief among them earthquakes, hurricanes and floods – hit cities particularly hard. Advance planning can help reduce their impact.

In January 1995, in the space of 20 seconds, the Japanese harbour city of Kobe was devastated by an earthquake. The death toll reached 5,500, with total damage estimated at \$150–200 billion, or about 4% of Japan's annual GDP – although, in view of the economic and cultural prominence of Kobe, the wider effects on the regional and national economy are difficult to forecast. The catastrophe is one of a series that has brought world-wide attention to the particular vulnerability of modern cities to natural shocks.

The impacts of natural hazards are magnified by inadequate or ill-suited human actions, such as investment in hazard-prone locations or insufficient safety measures, which play almost as large a role in disasters as the forces of nature themselves. Yet scientists, policy-makers and the public alike have been slow to make the basic distinction between preparedness for a disaster and the event itself. Most of the research effort and money devoted to disasters have been directed towards the study of climatological and geological causes, over which humans have very little control, rather than of the wide range of human actions which can make cities less vulnerable.

Economic losses from natural disasters throughout the world have increased at least five-fold since the 1960s. In the United States, for

example, insurance pay-outs from 1990 until early 1994 were more than four times those accumulated throughout the 1980s. The annual average number of natural disasters across the globe remained at about 250 from 1980 to 1992, but the average annual economic loss jumped from \$15 billion in 1980–84 to \$40 billion in 1990–92.

This increase in losses has several interrelated causes: high population-density, the concentration of economic activities, the growing interdependence of urban systems such as transport and telecommunications, the resulting complexity of urban infrastructures, buildings that are still designed without due attention to their resistance to natural impacts, and environmental degradation because of poor land-use patterns.

Kobe, with a population of nearly 1.5 million, had been growing strongly as a centre of trade and tourism within the Osaka metropolitan area. Although Kobe is geographically vulnerable to earthquake damage (it is situated on a narrow strip of land between mountains and the sea, and much of it is built on soft alluvial soil rather than rock), it also illustrates the importance of preparedness for natural shocks in urban planning.

First, much of the housing stock consisted of congested old wood-built neighbourhoods, often mixed with small factory sites. They were burnt out in the fire that followed the earthquake. Although considerable efforts at fire-proofing had been made through redevelopment and renewal

schemes in the city as a whole, the areas which were developed largely before the Second World War were not given a high priority in urban planning, partly because they were more difficult to develop and therefore would have been less profitable. Moreover, infrastructures, such as trunk roads, green zones and other open spaces, were not widely enough dispersed to halt the spread of the flames.

Second, vital supply-lines such as water and gas pipes and telephone cables had been installed in a haphazard, disorganised manner and were thus swiftly disrupted, impeding the provision of emergency measures.

Third, the highways, railways and port facilities proved to be more fragile than expected (partly because of delays in improving the resistance of existing infrastructure), and the resulting interruption of services has done much harm to manufacturing and trading. Japan's largest container facility is at Kobe; what was a hub of international trade is now in a state of crisis because of the delay of reconstruction, and ports in other Asian countries are benefitting from the paralysis of Kobe.

Some of these characteristics (the preponderance of wooden housing, for instance) may be specific to Japanese cities but structural vulnerability in urban agglomerations can also be found elsewhere in the world. The earthquake that struck Mexico City in 1985 forced the government to revise its plans for urban development to take more account of measures intended to increase resistance to earthquakes. Limits to population density, restrictions on the height of buildings and revised redevelopment plans of the inner-city area were incorporated, backed by new regulations.

Mitigating the Impact

Historically, most government efforts to limit the losses from disasters have concentrated on massive investment in 'disaster-proof' facilities, such as high-standard roads, dams, levees and other structures – all facilities which have nonetheless been destroyed by disasters. Measures

Atsushi Ichikawa works in the Urban Affairs Division of the OECD Territorial Development Service.

Coping with Urban Disasters

to bring physical relief and assistance to affected areas (politically, the most popular policy) obviously do little to reduce the long-term growth in economic losses.

Similarly, enormous resources have been employed in devising forecasting and warning systems in hazard-prone countries, although the uncertainty that inevitably attends natural phenomena means that these systems cannot be reliable. One Japanese research centre has estimated that a mistaken public warning issued on the next 'big one' (which has been a pre-occupation for decades) could cause an economic loss of approximately \$7.2 billion per day.

Cities therefore have to be better prepared for the advent of a disaster, better able to mitigate its impact, and thus to recover more smoothly. The United Nations has designated the 1990s as the International Decade for Natural Disaster Reduction, one of the main targets of which is that all countries should have national and/or local mitigation plans to address long-term prevention, preparedness and community awareness. The vulnerability of each city to natural shocks then has to be assessed, the results of this examination integrated into pre-disaster urban planning, the link between natural and socio-economic scientific analysis of disasters strengthened. Such planning should begin by examining the existing environment and infrastructure. How well prepared is a city to handle an emergency, and how smoothly can reconstruction proceed? And what sorts of measures will make cities more resilient after natural shocks? Many lessons can be generalised from previous disasters and the ensuing rebuilding, and how pre-disaster practice affects losses and post-disaster development.

Although, in the aftermath of a major catastrophe, disaster policy attracts intensive media coverage, mitigation and preparedness policies are routine tasks that attract less attention. A basic step in strengthening political commitment and mobilising resources is the continued dissemination of information, through information campaigns on urban risks.

It is mainly the individuals and firms who own or manage properties who are responsible for improving the effectiveness of mitigation and

preparedness policies. Public awareness and community consensus thus have to be focused on planning to change peoples' priorities. And could governments provide the private sector with financial or tax incentives to induce more investment in safety?

In many of the hazard-prone countries, the insurance market is well enough developed to share the risks of natural disasters. But insurers have recently had difficulty in coping with the mounting cost of catastrophic events; in 1992, for example, Hurricane Andrew cost America's second-biggest non-life insurer \$2.5 billion, and several smaller companies went bankrupt. In western Europe, too, insurance losses from storms and floods are rising. It may be that insurance schemes do not provide clear incentives to encourage urban residents and governments to reduce risk. Urban-planning measures, such as strict zoning regulations and building standards, should thus be reflected in insurance premia.

A main factor in the speed (or otherwise) with which an urban economy recovers, both socially and economically, is the resilience of urban functions after a disaster. They thus have to receive priority in investment decisions according to evaluations of their relative importance. And back-up systems should be developed through the setting-up of alternative facilities and services.

Reconstruction after a major disaster offers opportunities for reducing future losses and improving the attractiveness of cities. But the uncertainty that disaster brings in its wake tends to result in undesirable building which again exacerbates future vulnerability. A fixed moratorium on reconstruction is often set as a compromise between the opportunities and the immediate needs of the victims. But an enormous number of decisions have to be taken in a short span of time on the building of temporary facilities and on long-term reconstruction, usually provoking substantial controversy among residents. Reconstruction policies, using land acquisition and compensation schemes established in advance of an emergency and in consultation with residents, would help ensure that the rebuilding was of high quality.



The Kobe earthquake caused over 5,000 deaths and damage estimated at \$150–200 million. What lessons can be learned to prepare other cities at risk of natural disasters?

In most cases, it is local governments that operate disaster-mitigation programmes, although central government often has a substantial amount of control over them, as well as providing much of the funding. It is frequently unclear how responsibility should be shared between central, state or regional and local governments. National authorities could shift to lower tiers of government some of the resources allocated to relief programmes to support pre-disaster initiatives.

■ ■

Safety is a vital element of a sound urban economy, as well as a precondition for the quality of life. Although major natural disasters are rare, international co-operation in exchanging experience and information on urban disasters would do much to discover and design more policy options that make it easier to cope with, and recover from, them. ■

Improving the City Environment

Josef W. Konvitz

All around the world cities are under severe environmental pressure. Water supplies, traffic congestion, air pollution, noise and waste disposal cause very similar problems in cities that are otherwise quite diverse. And attempts to improve conditions usually run into a range of difficulties. Indeed, environmental problems often persist for years before governments – national, regional and local – make any major effort to address them.¹

Some people refer to urban 'environmental sustainability' as if a city can be planned and built to minimise its impact on the environment. But cities, like ecosystems, are dynamic. The pursuit of sustainability – development without long-term environmental damage – requires constant adjustment and change in response to the interaction of man and nature.

An 'ecological city' is thus characterised by the degree to which environmental considerations are incorporated into decision-making in public and private sectors alike. A town with poor environmental conditions but with a strategy for dealing with them is thus closer to the ideal of the ecological city than one with relatively few problems but with no coherent plan for protecting or improving its environment.

Detailed documentation of conditions in the urban environment in past centuries is so inadequate that it is difficult to determine exactly how the present day compares with the past, although physical evidence, pictures and

verbal descriptions make it clear that congestion and pollution have been present for centuries. The burning of coal for heat produced warmth,

but the fires increased air pollution and thus led to a rise in respiratory problems – a problem that began to be addressed only halfway through this century. Rapid transport and suburban homes lit by electricity and heated by gas are obvious improvements over horse-drawn carts and homes heated by coal. But the pattern of development organised around ever-expanding suburbs contributes to the increase in accidents, air pollution, noise and congestion, and to a loss in open green areas.

These examples illustrate two important points. The first is that solutions can never be permanent, because new problems are always emerging. Second, new ideas, technologies and innovative strategies are required if cities are to adapt to change.

How the cities in OECD countries address their environmental problems is important for several reasons. First, improvements in the urban environment will bring improvements in the quality of life of all citizens. There are economic

¹ *The Ecological City: Urban Policy for Sustainable Development*, OECD Publications, Paris, forthcoming 1996.

A city that can be described as 'ecological' incorporates environmental considerations into its decision-making procedures. Copenhagen now insists that new firms be located within 500 metres of public transport – which takes traffic pressure off the city centre.



Jørgen Schytte/Bildhuset

Josef W. Konvitz works in the Urban Affairs Division of the OECD Territorial Development Service.

Improving the City Environment

FOCUS

Why Urban Indicators, and for Whom?

Ariel Alexandre

The OECD, in conjunction with the city of Rennes, the World Health Organisation (WHO) and the European Commission, held a conference on urban indicators on 3 and 4 April 1995. Its purpose was to find out whether urban change – economic, social or environmental – could be measured simply and quickly from within (by the city authorities or the community) or from the outside (by other cities, observers, central government or international bodies).¹

All those concerned with cities, in whatever position, require various kinds of measurements to judge a wide variety of local situations. Yet these measurements, if they are to be practical and manageable, have to be straightforward. Many mayors would like 'at a glance' tables to help them assess the state of their city at regular intervals. Central government would likewise appreciate up-to-date local information to help them modify their policies and adjust their financial aid.

What reference tables exist are all too often a jumble of unrelated, unweighted and largely meaningless statistics. Urban indicators, in a sense, are rather more than statistics while simultaneously being less than statistics. They are more, since they try to diagnose the reasons for problems rather than merely note the symptoms. They are less, since they sum up the ramifications of complex situations in a handful of synthetic numbers.

Straightforward figures on population, finance and taxation are no longer enough to understand, monitor and shape urban development; the time has come to develop supplementary standards of measurement. The main areas where new urban indicators are required are: population (demographic composition, foreseeable trends); local economy and employment; physical realities (housing, infrastructure, the condition of historic buildings); the urban environment (air pollution, noise, water

quality); social conditions (health, safety, poverty), quality of life (arts, leisure activities, the frequency and dependability of public transport).

It is probably more desirable to create several kinds of urban indicator. Some should lead to better communication between politicians, the local population and the media. Others, perhaps more detailed, should help in the day-to-day monitoring of city services, while taking into account the differences between neighbourhoods. Yet another set, of interest to central government and international organisations, might serve to keep track of urban development 'at a distance'.

If measurement of this kind helps to make urban policy more farseeing and effective, and provided it is reliable and universally understood, it could mark a big step forward in improving and bringing more transparency to urban management.

The OECD conference discussed all these issues. Several 'batteries' of indicators were put forward, dealing with housing, urban environment, public health, the management of city services, and economic development.

But the development of urban indicators is not only on the agenda of several international organisations: it is also the subject of active discussion among such cities as Rennes, Barcelona and Duisburg. It is therefore likely that in a few years' time city policy-makers will have at their disposal more efficient and varied tools for observation and management than they do today.

1. The proceedings of the conference will be published by the OECD in early 1996.

Ariel Alexandre is Head of the Urban Affairs Division of the OECD Territorial Development Service.

benefits, too, not least from more jobs in the environmental sector,² which already employs over 1.7 million people in OECD countries and is expected to grow at over 5% annually for the rest of this decade. And improved efficiency in transport and in the management of the built environment will reduce the rate of increase of energy consumption.³ Moreover, advances in the treatment of environmental problems, such as traffic-related air pollution, waste disposal, sewage treatment and degraded land sites, in cities in OECD countries may be adaptable for countries that are modernising rapidly, whether in central and eastern Europe, Latin America or the Asia-Pacific region. And unless urban environmental problems can be controlled, the rate of urban and of economic growth in Latin America and in Asia will have social, economic and political costs that will compromise the global environment as well as the global economy.⁴

Hidden Costs

Why is more effort not being made to tackle these problems? Traffic congestion, for example, is a major source of noise and air pollution because access to roads is generally free to the individual user and no one has a cost incentive to find the most efficient way of using the available – and limited – space on the highway; the OECD estimates the average costs for its member countries of congestion by urban traffic in energy, pollution and time at 5% of GDP.⁵ Businesses would never tolerate as large a reduction of productivity in their own operations, but they can do little on their own to reduce the losses caused by congestion. The same sense of helplessness about congestion, traffic noise and air pollution affects the communities where people live, whether in suburban neighbourhoods or city centres. For lack of any apparent solution people and businesses alike appear to tolerate the wasteful use of resources. The structure of government contributes to the problem: the division of responsibility and resources disguises the real costs of environmental difficulties from public officials, and impedes the

co-ordination of strategies and policies to address them.

Because environmental costs are distributed across large numbers of people and firms, they are easier to absorb. The 5% of GDP lost through traffic congestion and pollution does not come directly out of anybody's pocket. Governments, which are principally responsible for initiating solutions, thus do not feel any political pressure to act, and likewise do not have a cost-saving incentive. What makes this inactivity particularly serious is that solutions – such as changes in land-use patterns, co-ordinated with a restructuring of transit systems – would require immediate, and potentially large, initial expenditures, principally by the public sector itself.

Yet this neglect has a real cost both for cities and for the environment as a whole. When such problems accumulate, and when the social and physical costs associated with them appear unmanageable, people and businesses relocate, often to the urban periphery.⁶ Some (unknown) percentage of urban development may thus represent not the growth of cities to accommodate new arrivals but the relocation of those already in the area in the pursuit of a higher-quality environment. This trend can be verified to some extent where the rates of construction activity is several percentage points higher than the rate at which the population or businesses are expanding.

Moving Out?

Indeed, the market for land allows people to save money by moving away from urban areas that require investment before they can be improved. Moving is not costless, of course, but, because the growth of more attractive areas appears less risky and more profitable, the increased costs are more easily financed by lending institutions. By contrast, the fall in land values in less attractive areas is often not enough to attract mobile firms or households, and banks are less willing to lend for investment in such areas.

D. & G. Clutter/Pls



Suburban sprawl can leave facilities in city centres running at undercapacity.

As long as greenfield sites can be acquired and developed easily, the market pressures to redevelop older, inner-city areas will probably be inadequate. Cities in OECD countries are deconcentrating: population densities are declining as households and firms spread out over a larger area. In this way it can happen that some parts of the city may be left with an infrastructure that can accommodate a larger number of people or firms. And relocation simultaneously deprives municipal governments of taxes to support existing facilities which now run at undercapacity.

Paradoxically, the areas in decline often have, for a time at least, more of the assets generally considered to be important for long-term growth: reasonable density, proximity of shopping to housing, good transport networks, mixed-use land patterns. By contrast, the areas where growth is now occurring, on the outer edge of

urban regions, often have few of these assets, and will be difficult and costly to restructure.

In France, out of a total of 36,000 communes, 23,000 are 'rurban', that is, they are located on the periphery of suburbs. They are inhabited by 13 million people and are growing at a rate of

2. This sector provides goods and services for the purpose of maintaining, planning, managing and improving the quality of the land, air, water and other aspects of the environment. In the private sector, many environmental jobs are derived from efforts to reduce the impact of manufacturing and other activities on the environment (pollution control and reduction, for example). In the public sector, many jobs provide essential services (waste-management, water-supply, land-management and -remediation) used by virtually all firms and inhabitants.

3. Lee Solsbery and Peter Wiederkehr, 'Voluntary Approaches for Energy-related CO₂ Abatement', *The OECD Observer*, No. 196, October/November 1995.

4. Nicole Massignon, 'The Urban Explosion in the Third World', *The OECD Observer*, No. 182, June/July 1993.

5. *Urban Travel and Sustainable Development*, ECMT/OECD Publications, Paris, 1995.

6. See pp. 12-14.

Improving the City Environment

0.9% a year, which is slightly higher than that of the suburbs themselves. In the Toronto region, 33,000 hectares of rural land were converted to urban use between 1966 and 1986, an area more than half the size of the city of Toronto itself (including its first ring of suburbs). The number of hectares being developed to accommodate each additional 1,000 inhabitants in Greater Toronto has increased from a low of 23 hectares per 1000 to 36 hectares. In Australia, 25.2% of total population growth occurred in coastal zones, principally in non-urban areas in northern New South Wales and in Queensland, and often in areas where a fragmentation of political jurisdictions makes co-ordination and planning difficult.

In some countries where suburban development began early (in the middle of the 19th century) and took the form of single-family housing (Australia, Canada and the United States), government policies and investment programmes to promote suburban growth met a widespread popular demand fuelled by heavy immigration. The re-organisation of suburbs to reduce outward growth is now becoming necessary: land and water supplies will not be available in the future on the same scale and for the same cost as in the past, threatening to overwhelm budgets for firms, households and municipalities alike. In Toronto, Vancouver, Seattle, Brisbane and Melbourne, efforts to increase the density of suburbs and to re-organise transport are being made by local governments acting co-operatively on a regional basis. Widespread public recognition that particular environmental amenities are in danger gave government the signal to act.

Similar problems occur in European cities, even in those with vibrant historic cores where people of all incomes still live: more people than ever before commute from a wider spread of villages and towns. The region of Gothenburg, Sweden, has 740,000 inhabitants. Seven in ten of the region's jobs are in the city, but every third employee travels daily from suburbs to the city centre, mostly by car, and long-distance commuting is growing at a faster rate than short-distance travel. In Denmark the average commuting distance increased from 9.9 kilometres

in 1981 to 13.3 km in 1992-93. Car-use has increased (and public transport has declined) in part because three-fifths of new office space built from 1980 to 1990 in Greater Copenhagen was located over a kilometre from a railway station. (Regional plans have been revised to specify that new employment-intensive commercial space should be located within 500 meters of transport nodes.)

Comprehensive land-use and transport planning that involves all the political institutions and communities of an urban region is essential for the future well-being of cities and their environment – a delicate task in an open society which emphasises public participation in decision-making, since information about urban environmental trends is still far from complete.

What Signs for Hope?

Air or water pollution generally comes not from a large industrial plant that is identifiable and could then be made to pay but from virtually all households and firms which use water and land, travel more and more, and generate waste. So without a major change in pricing and taxing regimes (box, right) and fiscal policies affecting home ownership or the depreciation of new plants, for example, the 'polluter pays' principle simply won't change behaviour on the requisite scale. As long as it is government that has to bear the costs of improving the environment, government will be pressed to do more. But it cannot afford to do so. Instead, individuals, households and business have to be faced with the true costs of their decisions.

The business sector has today only a small role in handling environmental problems. Private firms are often best equipped to generate employment in the environmental sector because they can identify market demand and produce innovations quickly to devise solutions that are effective locally. But governments are only beginning to create markets for environmental goods and services by stipulating environmental standards in purchasing, by using fiscal and regulatory measures to stimulate demand, by lift-

Can Pricing Change Urban Travel?

Ariel Alexandre and Jack Short

Increasingly dispersed land-use patterns and under-priced private transport in OECD countries are leading to excessive travel by car in cities and their immediate surroundings. The result is a growth in congestion, road accidents, air pollution, noise and global warming. More and more governments, national and local, are coming to view this trend as unacceptable and are trying to adopt corrective measures in traffic management, land-use planning and motor-vehicle technologies.

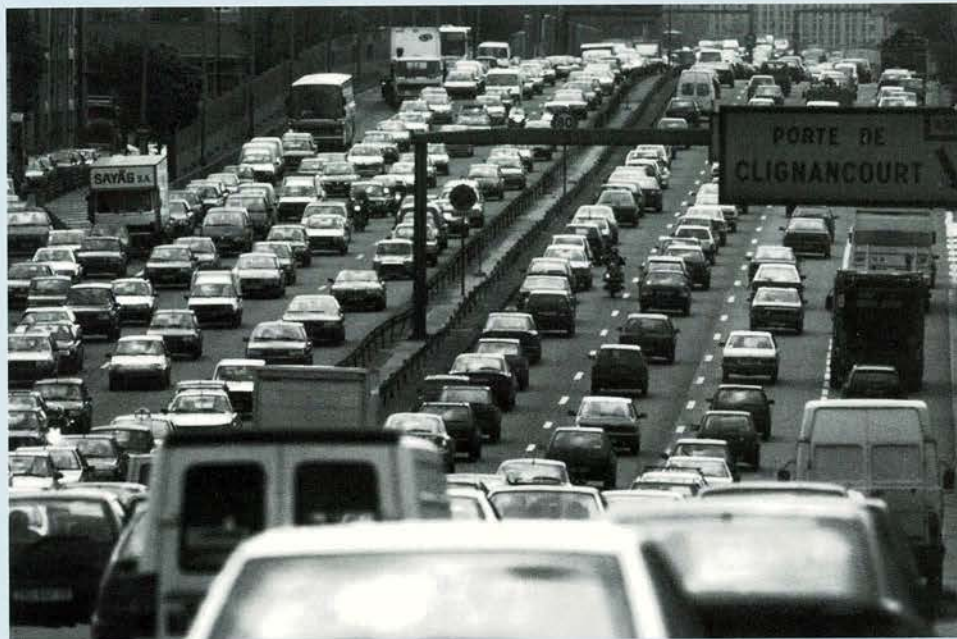
In the last ten years, traffic 'calming', a combination of physical and regulatory measures to reduce speed and accidents in residential areas, has been employed successfully in many Dutch and German cities. Land-use planning to control development has also been practised in some other cities – Stockholm, Vienna, Toronto and Portland, for example – and could be extended to create residential and work-place development patterns less dependent on automobiles and more attractive city-centres, subcentres and communities free from the intrusion of traffic and its attendant pollution.

In truth, though, there is little hope of reducing congestion without managing land-use through considering transport and land-use together, not independently, as is generally the case.

It is technological improvements in vehicles (especially the addition of the catalytic converter) that are responsible for the progress made in recent years, in Japan and the United States in particular, in reducing air pollution and noise from cars. And although some additional technological progress (in fuel efficiency, for example, and in better catalysts) can be expected in the coming years, it is unlikely to be enough in the long term to offset the predicted growth in traffic and the resulting environmental damage.

Indeed, official forecasts see a doubling of car and truck traffic in many European countries over the next three to four decades. In most countries, car traffic is growing while public transport is stable or declining. Moreover, the growth in traffic has been, and will continue to be, in the suburban areas which are more difficult to serve with non-car alternatives. Without strong new policies the result

FOCUS



Patrick Allard/REA

Prices that reflect costs could control the growth of urban traffic.

will very likely be a further deterioration in the urban environment. Air pollution, which has begun to decline in European cities, will rise again. Energy consumption and consequent CO₂ emissions are rising and seem destined to continue to do so.

National governments and local authorities will therefore have to act in concert to address this growing threat. Car dependency in cities can be significantly reduced only by an integrated 'package', employing measures that are mutually reinforcing. A policy package of this nature could contain three strands.

The first could be designed to apply the best of current practices in traffic management (including parking management, traffic calming, 'pedestrianisation', integrated traffic control) and land-use planning (control of urban sprawl, limited out-of-town shopping) to slow the growth in traffic volume and arrest the deterioration in the environment – but they would only arrest it.

The second strand would apply recent innovations in land-use and transport planning in an integrated and concerted manner. Development could be planned so that office developments, shopping centres and other sites that generate intensive transport occur near public transit services. Living environments could be better integrated with employment and shopping through

mixed land-use in a manner that encourages walking and cycling. Pricing for congested roads (with charges varying by time of day and area), telecommunications, allowing people to work at home (not least through teleworking¹) and better public transport could all work together to slow traffic growth. These measures would abate environmental damage and bring about improvements in the urban transport system.

But they would probably not succeed in reducing traffic and environmental damage to within tolerable limits, mainly since the pricing measures would be applicable only in city centres. In particular, they would not help resolve the problems of suburban traffic or of CO₂, which would require very large improvements in vehicle fuel-efficiency and a decline in the distance each car travels.

A third strand therefore deploys a key additional measure, which is a regular and long-term real increase in fuel prices (quadrupling over the period of implementation). A Project Group on Urban Travel and Sustainable Development, set up jointly by the OECD and the European Conference of Ministers of Transport, has recommended an increase of 7% per annum over 20 years, on the basis that such an increase is necessary if the 60% reduction in CO₂ emissions suggested by the UN's International Panel

on Climate Changes is to be achieved. This action, in conjunction with the other two earlier policy packages, ought to reduce vehicle kilometres to about 85% of current figures and would bring about a 55% decline in fuel consumption by 2015. These reductions would come from shorter trips, diversions to public transport, walking and cycling, lower rates of vehicle-ownership, shifts to smaller, more fuel-efficient vehicles, and improved engine-designs. This additional measure is thus the most efficient way to achieve a substantial reduction in global warming due to transport, both in cities and globally.

Why Pricing?

There is a substantial body of work which shows that transport generates costs which its consumers do not pay. Thus existing prices do not reflect real costs. To 'internalise' these external costs, some transport must become more expensive. Car-use in cities is one such activity where costs and prices are out of line.

Politicians always favour easier solutions, encouraging, for example, a move to public transport. All the analysis of recent years confirms that this approach is not enough and that direct actions aimed at reducing car travel in cities are required. One can ration or one can price. Pricing is more efficient. Yet it is unrealistic to expect politicians to advocate an annual escalation of 7% in full prices – not, at least, for twenty years or so.

Paradoxically, increasing the cost of transport can bring economic benefits. People and firms which put a high value on their journey by vehicle will continue to use their cars. Service delivery, freight and emergency vehicles will be much aided by freer traffic, and their costs substantially reduced. The money saved can be used for environmental purposes, for public transport – even to reduce other taxes.

These proposals present a tough challenge to governments. But if they are serious about solving urban transport and environmental problems and yet are unable or unwilling to introduce strong pricing measures, they must offer some feasible alternative strategy.

1. See pp. 12–14.

Ariel Alexandre is Head of the Urban Affairs Division of the OECD Territorial Development Service and Jack Short is Deputy Secretary-General of the European Conference of Ministers of Transport.

Improving the City Environment



Cities share the same environmental problems – sewage treatment, air pollution, waste disposal, land degradation – the world over.

ing regulatory barriers and removing subsidies that act as disincentives to change, and by promoting ecological consciousness. Deregulation, privatisation and expanding international communications and trade all foster the competitive pressure to develop a wider array of environmental goods and services.

Indeed, globalisation can support urban environmental policy, in three ways. First, because it calls attention to the mobility of international investment, globalisation highlights the degree to which urban environmental conditions influence business location. Second, it brings pressure to abolish subsidies that foster wasteful practices because they affect the costs of production; and by maintaining pressure to keep inflation low, globalisation and free trade make it increasingly costly for governments to borrow against the future by printing money. And third, it encourages the diffusion of goods and services, including those for the environmental sector.

Urban design, new technologies and pricing structures, and strategies for public participation are means to an end – having places where people want to live, in healthy and pleasant sur-

roundings. Information therefore becomes another key to success, not just about local conditions and how effective particular problem-solving strategies are, but about developments anywhere that encourage the transformation of existing cities into sustainable entities. The drive towards the 'ecological city' gives many different institutions an agenda for action.

Central governments could provide regional and local administrations with the means to meet (and exceed) regulatory standards or environmental goals, and latitude in setting priorities. And higher taxes and prices on the use of cars could be combined with land-use planning and improvements to public transport.

Urban and regional administrations should improve their records and their information services, and should recruit staff and purchase equipment to monitor and evaluate environmental conditions. And they should adopt personnel policies that reward people who work to implement integrative strategies for sustainable development.

Research by government institutions will allow politicians and planners, public and pri-

vate, to understand how people adapt to change, and the factors that promote or inhibit their adjustment.

Business could try to develop new products and services that will help consumers reduce their consumption of energy and water and their generation of waste. And banking and other credit institutions should develop ways to assess and manage the risk of investments that will yield environmental benefits.

■ ■

Without action on a substantial scale, the economic distortions, social dislocations and environmental damage of current ways of living and working in cities will only grow worse. As accumulating congestion and noise pollution, inadequate facilities for waste disposal, shortages of water and energy supplies become less and less easy to ignore, change will become inevitable, but under conditions of crisis and at much higher cost. To suggest that nothing radical has to be done is to ignore the consequences of doing nothing. ■

OECD BIBLIOGRAPHY



- **Motor Vehicle Pollution: Reduction Strategies beyond 2010, 1995**
- **Voluntary Approaches for Mitigating Energy-Related CO₂ Emissions, IEA OECD Publications, Paris, 1995**
- Lee Solsbery and Peter Wiederkehr, 'Voluntary Approaches for Energy-related CO₂ Abatement', *The OECD Observer*, No. 196, October/November 1995
- Laurie Michaelis, 'Cars, Congestion, CO₂ and Choice', *The OECD Observer*, No. 195, August/September 1995
- **Urban Travel and Sustainable Development, ECMT/OECD, 1994**
- Ariel Alexandre and Jack Short, 'Reducing Car Use in Cities', *The OECD Observer*, No. 184, October/November 1993
- **Environmental Policies for Cities in the 1990s, 1990**
- Ariel Alexandre, 'The Case for the Urban Environment', *The OECD Observer*, No. 175, April/May 1992.

Urban Transport in Eastern Europe

Emanuel Domic/REA



Independence of movement comes at the price of growing congestion.

Mary Crass and Jack Short

In the cities of central and eastern Europe rapidly rising numbers of motor vehicles are flooding streets, choking city centres and emitting alarming volumes of air pollution. Decision-makers in the region face difficult choices in the design and development of their urban transport systems. Saddled with the legacy of transport networks conceived under central planning – aged, often obsolete fleets, facilities and equipment – they must find ways to address the economic, social and environmental pressures caused by the skyrocketing growth in the use of cars and lorries. They also have to reconcile a decline in demand for public transport with tight budgetary constraints and pressure to recover more of their costs through rises in fares.¹

>

1. These issues were the focus of a Workshop on Transport and Environment in Central and Eastern European Cities, held in Bucharest, Romania, 28–30 June 1995, organised jointly by The European Conference of Ministers of Transport (ECMT), the Urban Division of the OECD Territorial Development Service and the Non-Member Countries Branch of the OECD Environment Directorate, with the close co-operation of the Romanian Ministry of Transport and the City of Bucharest. The workshop was supported by the OECD Centre for Co-operation with Economies in Transition. It was attended by more than 50 transport, environment, and urban experts, public transport operators, ministry representatives and municipal officials from both central and eastern Europe and OECD countries.

Mary Crass is a consultant to, and Jack Short Deputy Secretary-General of, the European Conference of Ministers of Transport at the OECD.

Urban Transport in Eastern Europe

Since the economic and political reforms of the late 1980s and early '90s, the use of motor vehicles has soared in central and eastern Europe. In 1980, automobile ownership in Warsaw amounted to 157 cars per 1,000 population. By 1989, this figure had grown to 247 and, by 1992, to 322. There are two main reasons: the opening of the market for cars and the desire to exercise newly acquired independence of movement.

Because of this growth in car traffic, the use of public transport is declining. Budapest, for example, has seen a move from 80% public transport in 1985 to 60% today. Existing road networks and parking structures in many cities have proven inadequate to handle the increasing volume of traffic.

In OECD cities, where car traffic doubled between 1970 and 1990, measures to control parking have been widely applied. Charging for street parking and controlled development of new parking capacity have been instrumental in alleviating congestion in city centres. Parking fees have also proven to be an important source of finance for municipalities, providing resources for improvements in the urban transport system and attracting private suppliers, thus taking some pressure off municipal provision.

Enforcement is the key to the effectiveness of these measures, and it remains a problem in the cities of central and eastern Europe. With few controls, parking in many cities – Bucharest and Warsaw, for example – is chaotic. Unrestrained parking in streets and on pavements is common, partly because no policy of time limits or charges exists. Policies aimed at controlling parking – such as the introduction of parking fees for use of existing space, assessing and enforcing fines for illegal parking, and construction of new parking facilities – may therefore prove effective in addressing the problem.

Other measures to restrain the spread of cars in the West, including the 'pedestrianisation' of city centres and promotion of cycling and walking, also contribute to reducing traffic congestion, especially when coupled with initiatives to manage parking. A number of central and eastern European cities have already designed plans to use parking management and car-restraint

measures together. Among these cities, Krakow has pedestrianised its historic city centre and established parking zones to accommodate motorists. And Budapest is taking steps to restrict car traffic in the centre and castle districts. Pedestrian zones have been gradually added in strategic parts of the city, and week-ends are car-free in tourist areas.

Land-use planning can also mitigate congestion by providing a framework for medium- and long-term decisions on development of real-estate sites, access to which often requires travel by car. If the patterns of economic growth follow those of many OECD cities, there will be increasing movement of commercial and residential development outside of city centres to areas that are easily accessible only by car.² Decision-makers throughout the region will have to find ways to channel this development along lines compatible with existing urban networks of public transport, or further develop networks as required so that links between urban, suburban and inter-city transport are better co-ordinated and the demand for cars reduced.

Financing Public Transport

Public-transport operators, working under severe budgetary constraints, are seeking ways of remaining competitive in the wake of rising car-use. Central planning left much of the region's transport infrastructure in poor condition, with fleet, facilities and accessory equipment dated or obsolete, and suffering from frequent breakdowns, unreliable service, inefficient fuel consumption and heavy emissions. Current financing for improvements is inadequate, so replacing vehicles and upgrading transport infrastructure is virtually impossible. Tramway systems, including that of Bucharest, are in jeopardy, although in the OECD area cities such as Strasbourg and Grenoble are enthusiastically reintroducing this mode of transport.

There are several historical reasons for this situation. First, the recovery of costs was not an issue under central planning. Today, it is a prin-

cipal pre-occupation of public-transport operators, and new management techniques are therefore required to allow cost-recovery practices to be introduced. Second, under the former regime, fares were low relative to the real operational and administrative costs of public transport. Moreover, widespread evasion of fares continues to deprive the coffers of the transport companies of revenue.

A further complexity lies in the incomplete decentralisation of responsibility for urban public transport. Decision-making power has been transferred from the central government to municipalities, but without control over sources of financing – not least the fiscal system. As a result, municipalities have been left without the means to support their newly acquired responsibilities.

Along with decentralisation has come a significant reduction in national subsidies for urban public transport. To offset this and improve cost-recovery, fare increases have been regularly introduced. In Budapest, for example, fares have shot upward since 1989; in that year alone, they went up by an average of 85% (in nominal terms). Tariffs increased twice again in 1990 and 1991, by averages of 60% and 50% respectively. In March 1995, they went up again by an average of 35%. (Inflation was running at 20–30% over this period.) Throughout the region, fare rises of this kind have been imposed without accompanying improvements in service. As a result, users are increasingly dissatisfied and are moving to cars.

Implementing Policies

Public-transport systems in many central and eastern European cities nonetheless benefit from several important features that could form the basis for the long-term, sustainable development of urban transport: a strong tradition of using public transport, extensive networks and urban land-use characteristics such as dense, multi-purpose city centres that are conducive to public transport. To take advantage of these benefits, existing public transport has to be rehabili-

Tom Crutcher



Transport administrators are faced with a dilemma: raising fares to compensate for lost subsidies – in Budapest, for example, they have more than trebled – risks losing passengers.

tated, upgraded and restructured. Development outside urban areas should then be guided by its current accessibility by public-transport networks, and connections considered before, not after, development occurs, as has been often the case in the OECD area.

Along with these initiatives should come a concerted effort to confront the problem of car traffic. That will probably require considerable political courage: automobiles are often associated with newly acquired independence and prosperity; public transport is often associated with the old regime; and efforts to manage the growth of car-use might be perceived as a constraint on individual freedom. Moreover, investing scarce financial resources in a sector which shows a decline in demand may be difficult to justify.

For these reasons, it is essential that information be supplied efficiently to the public so that it understands and supports the measures taken to enhance public transport and curb traffic

growth. Effective communication thus becomes a political imperative. Citizens must realise the damage that traffic congestion does to the urban environment, that they themselves have a role to play in assuring that their cities develop in a way that is economically and environmentally sustainable, and that the choices they make in transport will have a direct effect on the future of this development.

Krakow's progressive transport policy plan, implemented in 1993, exemplifies how political courage and effective public communication allow comprehensive initiatives to facilitate and enhance the sustainable development of city centres. The plan sets specific objectives to counter increased vehicle-use, declining public transport and rising congestion and emissions. It includes priority investment for public transport; a commitment to improved services so as to raise their attractiveness over motor vehicles; the elimination of traffic from densely populated areas; the integration of suburban and urban

transport systems; and the provision of 'park and ride' facilities. In addition, the local mass media provided valuable support in favour of the sustainable urban and transport policies.

■ ■

Political courage is required to introduce urban transport policies in OECD countries as well, where the major part of the world's car fleet and most vehicle-related environmental problems are found. To establish sustainable transport systems, the external costs of transport must be paid for, through bold pricing mechanisms such as fuel taxation and enforced parking charges, initiatives which often encounter public resistance.

Clearly, a concerted effort is required of both developed and transitional economies to manage the growth of motor-vehicle use and encourage use of public transport. With the right package of policies urban transport systems in both the OECD and central and eastern Europe can

follow a sustainable course of development. Most OECD countries recognise their numerous errors in dealing with urban traffic, including unrestrained growth in car use, which has led to serious congestion and air pollution and dispersal of communities into suburban areas poorly served by public transport. The transitional countries of central and eastern Europe should seize the opportunity now before them to avoid these same mistakes. ■

OECD BIBLIOGRAPHY

- Transport Infrastructure in Central and Eastern European Countries, ECMT/OECD, 1995
- Urban Travel and Sustainable Development, ECMT/OECD, 1995
- Light Rail Systems, ECMT/OECD, 1995
- European Transport Trends and Infrastructural Needs, ECMT/OECD, 1995.



The Hidden Potential of Disadvantaged Districts

Geneviève Lecamp

Poverty and a variety of other problems are affecting a large number of city-dwellers, who have to cope with widespread unemployment, precarious living conditions and little hope of change. The situation is fairly common in OECD countries but hits urban areas hardest, in both the inner city and the suburbs. These disadvantaged areas, lumped together and judged on preconceptions, do not always display the symptoms one might expect – a thriving black economy, rising crime, broken families and race-related problems. Nevertheless, the gap between people living in the same city is widening in spite of efforts from the 1970s onwards by governments, regional authorities and city councils to introduce urban or sectorial policies that provide support for jobs, housing and education. So innovative solutions, more successful than those used to date, will have to be found.¹

If policy-makers find the new urban poverty disconcerting, it is because it does not respond to the standard forms of treatment through government intervention. Remedies that used to work, based on integration through direct access to the labour market and social and career advancement, are proving inadequate. In spite of a series of measures taken by OECD countries over the past 25 years to prevent particular areas and members of the community from slipping into

poverty, the general situation has not improved satisfactorily. Large public deficits, compounded by income-replacement schemes that are increasingly seen as glaringly inadequate, now mean that current policies will inevitably have to be reviewed. 'Targeting' people or places on the

Geneviève Lecamp works for the Co-operative Action Programme on Local Economic and Employment Development (LEED) in the OECD Territorial Development Service.

basis of specific social indicators (educational attainment, income, family status, amenities and so on), and implementing schemes that can lack co-ordination in timing and geographical planning have not fostered a holistic approach. The limitations of such methods are becoming clear, particularly now that the authorities are finding it so hard to prevent and contain unrest in the inner cities and suburbs.

Yet there is a host of successful community-based initiatives to prove that so-called 'problem areas' can also generate new activities and blend into a city's economic fabric (box, p. 28, below), provided that local project-leaders go beyond a 'top-down' approach to become new entrepreneurs themselves. One central issue, which is stifling the working of modern economies, is lack of trust: between voters and their elected representatives, between economic actors in their transactions or partnerships. And it may be that not enough trust is placed in local people, who are not always given enough time to come forward or to play a direct, long-term role in a given project. In cities and firms alike, communication is vital if people are to be persuaded to participate in a project and share its objectives. But it must be in their own time and at their own pace, which will gradually adapt as trust and respect are built up.

That requires the asking of some serious questions about how to restore trust and thus to return to a more humane urban environment. There is a clear correlation with the spread of an 'enterprise culture', which calls for a shared vision of progress and development and is based essentially on the idea of ongoing, demand-driven innovation. Any excess will automatically be ironed out by a mix of social pressure and market forces, before proposals are formally codified into (for instance) city by-laws. The basic idea is to draw people out of their isolation and foster initiative and creativity. Practical examples

¹ The OECD is preparing a report on this theme, to be published in 1996.

involve the setting-up of associations, organising cultural events and, more mundanely, opening catering businesses – even giving concerts in a disadvantaged urban area.

Rethinking Urban Policies

In spite of the diversity of their historical backgrounds and their administrative, political and institutional systems, cities in OECD countries all face basically the same problems. They are rich in material and human resources and are best described in spatial terms as a series of layers containing, or attempting to integrate, an enormous range of policies. But most city authorities lack the variety of expertise necessary to cope with complexity on this scale, especially in the more disadvantaged areas. They also lack the ability to stand back and diagnose what has to be done to work sustainably on behalf of, and with, residents who have been excluded and marginalised. Apart from a few differences of perception, there is a broad consensus on a number of points.

First, poverty has not been eliminated by the accumulation of wealth or various forms of income redistribution; indeed, it is re-emerging in spite of social welfare systems and renewed growth.

Second, most forecasts have failed to allow for the impact that specialisation in land and property markets would eventually have on land-use and housing, and how that would affect the provision of services in the immediate vicinity of disadvantaged areas. Housing markets, for instance, now determine access to education, employment, security and health care. Affluent areas enjoy a wealth of facilities and a wide range of excellent services, while poor areas suffer from a dearth of facilities and poor services. Spatial segregation, or zoning, is now widening the divide between business and residential areas, trapping the poor on industrial estates or in a no-man's-land deserted by firms.

Third, restructuring tends to do away with a number of skilled and unskilled jobs and encourages insecure employment. Economic

FOCUS

Minneapolis: The NET Links Employers and the Unemployed

The Neighborhood Employment Network (NET) helps the residents of Minneapolis (Minnesota) to find, and keep, jobs near their homes. The NET was set up over 13 years ago, on the basis of a feasibility study by a task force of some 40 business and community leaders under the leadership of the mayor. It was clear that the benefits of economic development were not being felt by some members of the community, who were finding it hard to gain access to training and employment. This innovative urban strategy now places nearly 1,000 people a year in jobs appropriate to their skills and experience. It covers the entire urban area (with a population of 368,000) which has a flourishing economy – the unemployment rate in 1994 was under 4%. Yet as many as 70,000 people, the majority of them women, are thought to be living below the government-defined poverty line.

The NET makes a specific effort to help women enter the workforce through innovative training schemes, particularly in non-traditional sectors and jobs (in construction, fire-protection and law enforcement).

It is a community-based strategy that recognises that the causes of joblessness are often a complex intertwining of personal, social, economic and environmental conditions which erect barriers to productive, successful employment. The NET strategy is aimed at breaking down these barriers by setting up appropriate services and making them available to unemployed people and employers in their own communities.

Diagnosis and the NET Approach

These barriers to employment range from illiteracy to a lack of reliable transport, from limited skills and low self-esteem to lack of childcare, from family instability to a lack of co-ordination in employment-related services and agencies. In Minneapolis, these barriers necessitated a highly flexible approach that would allow for adaptation to changing economic and social realities and foster innovation.

The task force that had completed the feasibility study therefore began by dividing the city into ten geographical units covering areas of the city where conditions were most pressing. Each district contained 'hard-to-employ' individuals – people who found it hard to fit into society and the labour market – as well as small-scale local employers and several larger companies. If there were no large employers in the district, the area was matched with a major employer in the central business district or further out.

Dividing the city into small districts was seen as a way of integrating all the different employment-related support-services and making them available near people's homes, reducing service overlaps and making the provision of assistance for those in difficulty more manageable.

This community-based strategy was designed to encourage closer contact between the unemployed and the very small companies who often present the most opportunities for new jobs and flexible working situations, and to help larger firms focus their employment programmes on a single section of the city for maximum impact. One of the strengths of the strategy is that it was designed to allow businesses to meet their requirements in the process of working with the hard-to-employ.

The strategy involved assigning a 'community facilitator' (usually a neighbourhood group or community social-service agency) and a 'lead business' in each area to work together, bringing job-seekers into contact with employers and with the providers of support-services. Over time, the boundaries of the original ten districts have been modified, extending some areas and combining others to provide more effective services.

Today, there are seven NET districts served by community-based NET offices and one NET agency providing city-wide services to the American Indian community in Minneapolis. The partnerships and joint action upon which the NET strategy was based have become institutionalised – the NET has established itself as a vital link between job-seekers, employers and the multitude of education, training and social programmes available in Minneapolis.

The Hidden Potential of Disadvantaged Districts

FOCUS

Entrepreneurship Training in Problem Areas

In New Bedford, Massachusetts, 17-year-old Ed Penches has set up a business providing a \$40 birthday-party service for young children. New Bedford has one of the highest rates of unemployment in the United States. And in Newark, New Jersey, Danah Foster, who is still at school, has opened her own lingerie boutique.

Ed, Danah and others like them are all from 'problem' suburbs where unemployment, drugs and crime are rife. They have attended training courses in entrepreneurship organised by Steve Mariotti, a former businessman who has changed careers to help young 'pre-delinquents' from disadvantaged urban areas find their place in society again.

It was after being attacked by a group of children in the streets of New York that Mariotti decided to devote himself to helping problem teenagers. He became a teacher and set up a foundation to teach entrepreneurship to youngsters penalised by their economic and social

background. Every year the foundation takes some 1,500 children aged from 12 to 18 from the poorest parts of 15 American cities and gives them a grounding in business practice.

Mariotti's idea is unusual from a number of standpoints. First, there is his analysis of the situation. If problem youngsters from the suburbs want to survive, they must take risks, be resourceful, single-minded and tough and display a talent for business. On the streets, they naturally develop some of the qualities required of a businessman – but put them to entirely illegal ends.

Such qualities can be channelled into more beneficial activities by offering the youngsters practical training in the workings of business. The foundation offers an 80-hour training scheme in learning to be a young entrepreneur.

Of course, the course does not necessarily result in a flurry of new businesses, but it does have a strong psychological impact. It helps to

halt the spiral of despair, curb resentment against society, open up new avenues and restore confidence.

The scheme is just as unusual in practice as it is in theory. It is a 'hands-on' course on how to draw up a business plan, contact banks, write business letters, sell goods, keep accounts and make a profit. All these topics are covered individually in the handbook Mariotti has written to describe his method and set practical exercises. Each student is given a 'bizbag' containing a copy of the handbook, an accounts book, a calculator, a checklist, a follow-up guide and other items.

The aim of the foundation is to show youngsters from disadvantaged urban areas that there are other ways of making a living than by selling drugs, and that they can earn money by setting up their own micro-firms.

Berlin-Kreuzberg: Sensible Urban Regeneration

Kreuzberg had become one of the most socially disturbed and culturally deprived parts of Berlin. When the Wall was built in 1961, this traditionally working-class district, formerly located in the city centre, found itself on the outskirts, which gave rise to a number of social and economic problems. Residents who could afford to do so moved out, leaving behind the elderly, the poor and the unemployed. After a massive influx of (mainly Turkish) immigrant workers in the early 1970s, the district gradually became a multicultural community with often conflicting structures.

In 1978 came a turning point in urban renewal, when steps were taken to try to halt the decay. Kreuzberg residents and city-planners began meeting to discuss the situation and came up with proposals to breathe new life into the area. The main idea was to encourage local inhabitants to take part in a competition on 'Strategies for Kreuzberg'. This produced a blueprint for integrated development called 'Sensible Urban Renewal'. Initiated in 1983, it was based

on new kinds of partnerships between residents, local associations, support groups, local authorities, the Berlin council, firms and the International Building Exhibition (IBE). Their approach consisted of renovating and modernising housing and other buildings, guaranteeing low rents, creating green spaces and conserving homes and small businesses side by side, a feature typical of the old Kreuzberg. Small firms settled there and benefited from the facilities (cultural and educational centres) provided for the district and its residents.

Since the principle involved was 'action on behalf of local residents', local people were contacted, informed and advised, new structures were set up, including a tenants' advice service, independent of landlords, and district committees whose members represented people living and working in the district, the local authorities, the Berlin city council and the IBE. The committees held regular public meetings to discuss decisions and make what were seen as representative recommendations.

A major effort was also made in education, with the opening of Berlin's first 'community school', the 'Kiezschnle for Kreuzberg 5036'. The teachers proved willing to give up their conventional role and become project leaders. With the help of architects, painters, sculptors, lawyers and businessmen, the teachers completed a variety of projects including an educational programme that addressed community requirements, training centres open to the locals, a printing workshop set up with the help of the younger residents, and many other associations offering leisure pursuits to Kreuzberg residents.

The important factor in this project was that voluntary organisations, stemming from tenants'-rights movements and established to meet a variety of environmental, educational, cultural, social and economic requirements, became genuine partners in the process to serve the community. Berlin, now successfully coping with the transformation of its urban framework, should be able to turn this experience to good account.

change has drastically altered the job market in recent years, often leading to short-term reorganisation driven by considerations of financial and productivity gains.

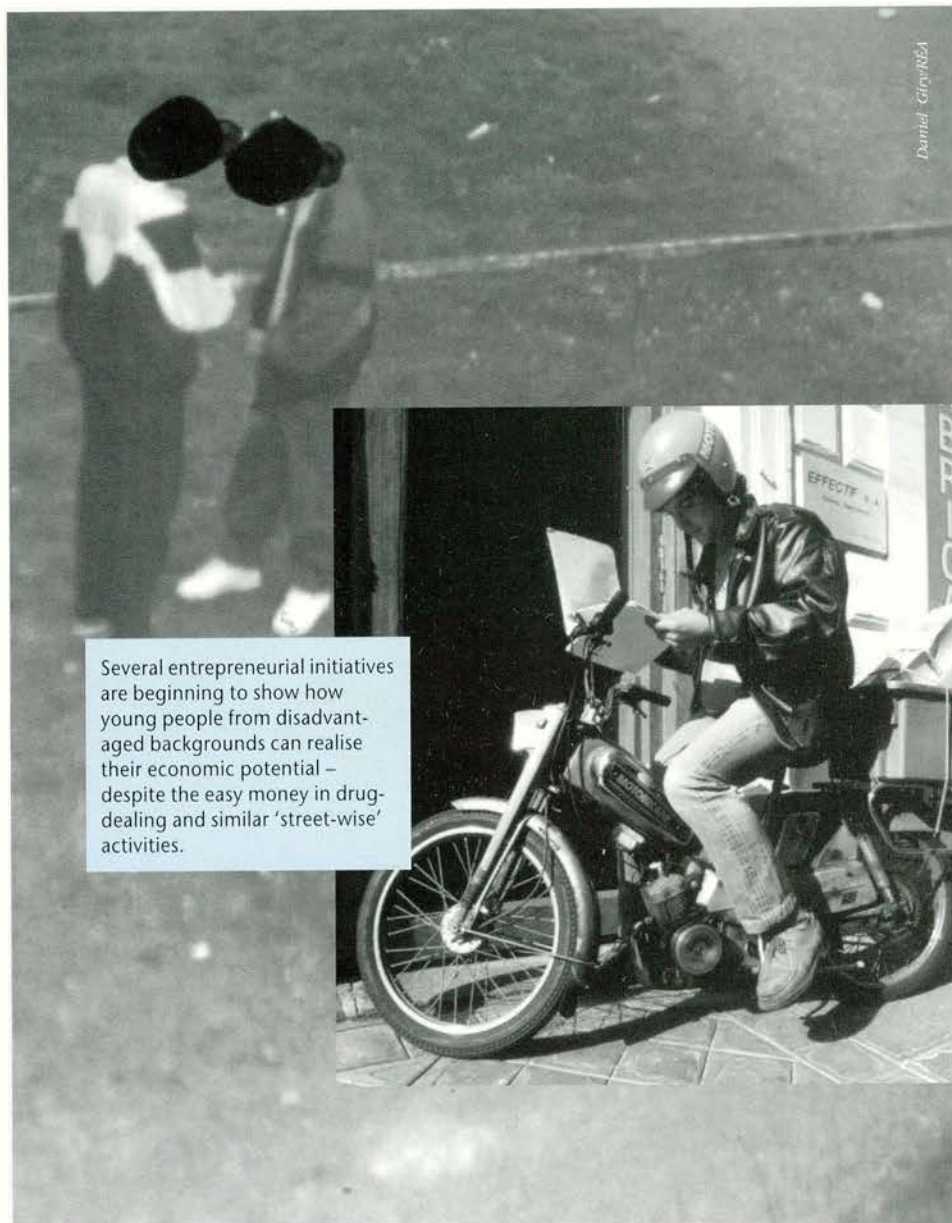
Fourth, the shift from industry to services creates skilled and low-skilled jobs, but not always for the young and other residents of distressed urban areas, perhaps because skill requirements are set too high (sometimes masking racial discrimination). Furthermore, the nature, pay and prospects of promotion in some of the jobs available in industry and elsewhere are not always attractive compared with other 'get-rich-quick' sources of income (such as drug-dealing).

Just as an uncompetitive economy generates unemployment, ever-keener competition may result in the exclusion of specific people and places. That requires reflection on the scope for re-assessing the nature of the city and urban policies as part of a more balanced and sustainable form of development.

Diversifying Development

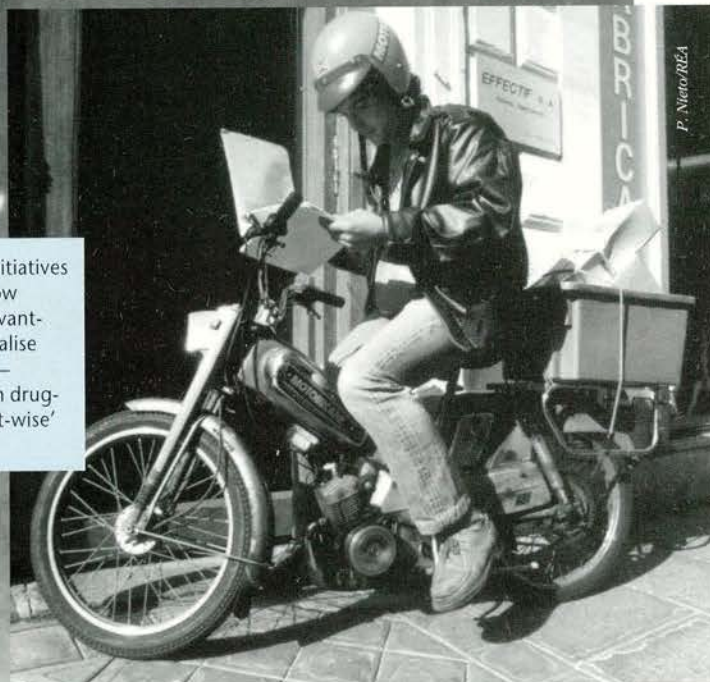
Those who feel rejected by society tend to reject society's rules – crime becomes a kind of response to the inequalities of life. The different stages of this process are rarely obvious, and as a result, apart from a few model experiments (boxes, p. 27, and left, above), little has been done to delegate responsibility to the residents of disadvantaged areas. But discovering why people drift into delinquency is becoming an urgent task, as is the rebuilding of these areas on a long-term basis, and with adequate facilities, infrastructure and above all community and personal projects. If people are to rediscover meaning in their lives, the design and implementation of urban policy have to be viewed from an entirely new angle. New forms of investment are necessary, particularly in human resources.

Many cities have been tackling this issue. In Montreal, for instance, an alternative project was nurtured over a long period, and community-based economic development is now part of an



Daniel Grynberg

Several entrepreneurial initiatives are beginning to show how young people from disadvantaged backgrounds can realise their economic potential – despite the easy money in drug-dealing and similar 'street-wise' activities.



P. Nieto/REA

overall strategy for economic revitalisation, using local resources but bringing in outside expertise and financial support. Yet this experiment is too recent for tangible conclusions to be drawn and applied elsewhere.

There is another example in the United Kingdom, where 'Business in the Community', a powerful movement bringing together large and medium-sized companies, sees an interest in participating in urban renewal. This approach

includes regularly upskilling staff by making them available for release to development and enterprise agencies. Some companies even provide a material contribution to the community-development work undertaken by resident associations, or join forces with government and the voluntary sector in urban-renewal schemes (renovating housing and helping residents to set up new activities, trade and services in particular). Some may object that it is a massive project

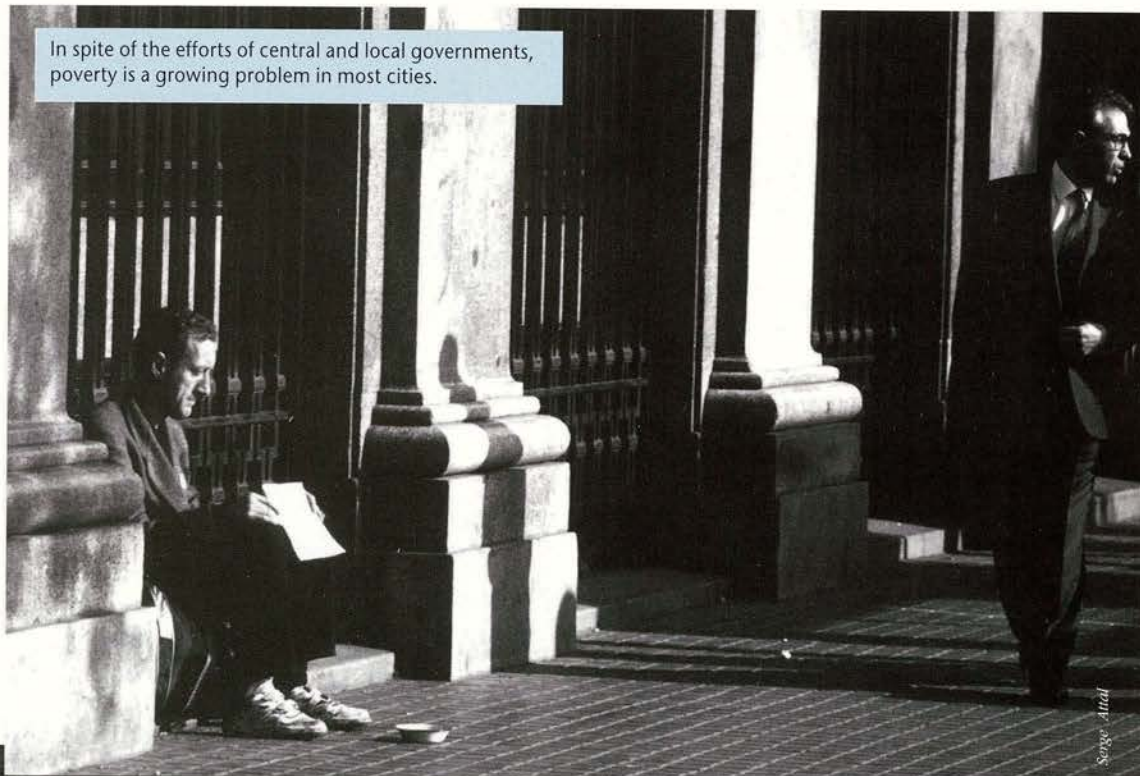
The Hidden Potential of Disadvantaged Districts

with too few spin-offs so far, but the involvement of private enterprise does denote a shift in the way community problems are viewed and introduces a new concept: the performance of the private sector in relation to its surroundings.

■ ■

Central and local government should step up their co-operation to re-create a satisfactory environment for urban life. They should make it easier to set up activities and businesses in disadvantaged areas, and identify new mechanisms of solidarity and new spaces for local management (enterprise centres, telecommuting centres that provide services and facilities; barter and trading schemes and

In spite of the efforts of central and local governments, poverty is a growing problem in most cities.



Serge Attal



It is essential that the people who live in disadvantaged districts participate in the restoration of existing facilities.

the means of exchanging experience and so on). These would offer new hope and rekindle the imagination of people who live in disadvantaged areas and elsewhere in the city.

There are some experiments which point to the way forward with possible solutions for such areas. They place local development initiatives at the heart of government policy and attempt to respond with innovation and flexibility to the changes affecting modern economies and society at large. But a change of perspective seems to be necessary if these new partnerships are to be a success. There is huge potential for creativity and vitality waiting to be tapped in the city's neglected areas. ■

OECD BIBLIOGRAPHY

- Schools for Cities, 1995
- Cities for the 21st Century, 1994
- Partnerships: The Key to Job Creation, 1993.



Integrating Immigrants in Urban Life

Jean-Pierre Garson and Kristen Neymarc

Immigration, and in particular its socio-economic consequences in host countries, is a common concern of many OECD countries. The long-standing issue of integrating immigrants into society – essentially an urban phenomenon – becomes especially prominent during a period of rapid social and economic change. The pattern of urban development and the characteristics of immigrant populations – size, origins, the range of groups represented and their history, length of residence and civic status – often diverge from country to country, and the process of integration may vary considerably between different periods of time and for different immigrant groups. In addition, the orientations and targets of policies designed to facilitate integration in urban areas differ not only between countries but also between cities themselves. The OECD is currently undertaking a project to examine the relationship between immigration and urban development and explore new approaches to the integration of immigrants in cities.¹

Rapid economic and social change in cities – inner cities as well as suburbs – has created new difficulties for the integration of immigrants. In several OECD countries, in Europe in particular, national and local authorities are confronted with problems arising

from the decline of some neighbourhoods and of high concentrations of immigrants in urban areas. Declining economic activity, high unem-

Jean-Pierre Garson is head of the International Migration unit in the OECD Directorate for Education, Employment, Labour and Social Affairs; Kristen Neymarc is a consultant in the same Directorate.

ployment and poor housing conditions create a context which make the process of integration of immigrants less smooth than in periods of strong growth. The emergence of new sending countries and different ethnic groups may accentuate these difficulties.

A second consideration, particularly locally, is how best to meet the special requirements of particular immigrant groups. Because they tend to cluster in urban areas with already established immigrant communities, and because immigration occurs in successive waves over time, measures launched by municipal administrations must take into account the requirements of immigrants who are on the way to becoming integrated as well as those of the new arrivals.

How should the financial burden of housing, education and health care be shared among various authorities? In a climate which places increasing importance on local responsibility for integration, and yet provides only limited budgetary support, some local authorities in OECD countries are demanding that central government either stem the inflow of immigrants or pay a larger share of the expenses.

Moreover, tensions result from the opinion of some parts of the host population that immigrants are 'taking their jobs' and that the call of new immigrants on social services could undermine the capacity of the city authorities to supply goods and services to longer-established residents.

The Transformation of the City

Nevertheless, as some cities are moving away from a concentration of jobs in industry to the service sector, the growth in services may offer immigrants economic opportunities. In some so-called 'global cities' (New York, London and Tokyo, for example), the expansion of corporate headquarters and international finance and related commercial activities, all destined for the

¹ The project, 'The Integration of Immigrants in Cities', is being undertaken by the OECD Directorate for Education, Employment, Labour and Social Affairs in co-operation with the Urban Affairs Division of the OECD Territorial Development Service.

Integrating Immigrants in Urban Life

global market, has led to the creation of not only well-remunerated professional jobs but also low-wage service-jobs such as messengers, cleaners and caterers. In many cases immigrants provide the labour for the jobs which nationals are not always ready to accept. In addition, immigrants are also suppliers of services (repair shops, groceries, taxis and so on) to segments of the population in poorer neighbourhoods. These changes may be a factor in not only attracting immigrants to these global cities but also facilitating the integration of some of them.

Immigration, moreover, has had beneficial effects not only on regional vitality and development but also on patterns of growth in cities. Immigrants, new arrivals in particular, may occupy areas in decline that would otherwise have a high proportion of abandoned housing and closed facilities. Recent US evidence shows a positive correlation between rates of immigration and the growth of job-creation in manufacturing and services in some cities, leading to the conclusion that immigration can indeed stimulate economic development, sustain investment in marginal areas, and contribute to the revitalisation of inner cities.

Tools to Improve Integration

Several policy tools have been identified as playing key roles in the integration of immigrants in cities. Housing policy is particularly important, both in the physical transformation of the city and the settlement patterns of immigrants. It may affect integration by either controlling the distribution of the immigrant population through quotas or by intervening in the housing market through the allocation of public housing (Belgium, Germany and the United Kingdom) and the renovation of more run-down neighbourhoods (France and Sweden). In addition, housing policy can facilitate access to better-quality accommodation, including home-ownership, and thus represent an element in social mobility.

A second central feature of integration policy in cities is the development of partnerships



Immigrants often supply poorer neighbourhoods with services that might not otherwise be available.

between local authorities and the immigrant community, through immigrant associations in particular. The widespread establishment of such associations by ethnic and immigrant communities reflects the dynamic character of the integration process and is a clear sign that immigrants are becoming active in society.

A policy approach which encourages and relies on intermediary institutions such as schools and associations can be useful: it recognises the individuality of immigrant or ethnic groups and at the same time acknowledges them as members of the community. An efficient partnership among the various parties in the community – professional, institutional and immigrant or ethnic groups – allows them to develop a common voice. In addition, working partnerships can have a multiplier effect on successful integration without requiring substantial external resources.

The importance of policy coherence is a third factor, both in terms of national strategies supporting local initiatives and local initiatives that reflect a national strategy. Political will has to be supported by a coherent financial and administrative commitment to ensure that beneficial actions, once initiated, are continued. In addition, immigrant initiatives, including the creation of ethnic businesses and neighbourhood revitalisation (for example, by the Portuguese in Newark's Ironbound district and by the Bangladeshis in Tower Hamlets, a district of London) cannot take place without a political climate at the outset which provides room for independent action. Often the most efficient integration

policies are those which create the social and institutional conditions for action on the part of immigrants themselves.

■ ■

In many countries integration strategies in urban areas are of relatively recent origin, and as a result, comparative evaluations of their effectiveness are not widely available. Indeed, it is difficult to identify the impact of integration policies precisely because it cannot be easily separated from other political, economic, and social processes which influence integration. Attempts at evaluation have nonetheless begun; one of the objectives of the continuing OECD project is to discuss local and national responses to the integration of immigrants in urban areas and draw conclusions about the viability of particular actions for the development of policy in OECD countries. ■

OECD BIBLIOGRAPHY

- *Partnerships for People in Cities*, OECD/European Foundation for the Improvement of Living and Working Conditions, 1995
- *Trends in International Migration*, SOPEMI Annual Report 1994, 1995
- Jean-Pierre Garson and Agnès Puymoyen, 'New Patterns of Migration', *The OECD Observer*, No. 192, February/March 1995
- *Migration and Development: New Partnerships for Co-operation*, 1994
- Nicole Guimezanes, 'What Laws for Naturalisation?', *The OECD Observer*, No. 188, June/July 1994.

Aging Populations and Government Budgets

Willi Leibfritz and Deborah Roseveare

Projections for the evolution of public finances because of increasing expenditure on pensions and health-care necessitated by an aging and shrinking population in OECD countries suggest that radical measures may have to be taken, and soon.

Over the next few decades, most OECD countries will experience a rapid aging of their populations, and in some countries the total population will shrink as well (Figure 1). These developments will put public pensions and health-care systems, and indeed government budgets in general, under increasing pressure. The OECD has constructed long-term fiscal projections up to the year 2030 for its seven biggest countries – the 'G7' – to examine the possible magnitude of the problem and the possible policy responses.¹ Such an exercise, obviously, is highly speculative and relies on fairly heroic assumptions; the main point of the calculations is to provide some idea of the scale and magnitude of potential problems.

In most of the G7 countries, it is public pension schemes that will generate the most

pressure on government budgets. Pension arrangements differ from country to country. Some have schemes covering different parts of the working population; others have component schemes making up the individual pension received (usually where pensions combine a flat-rate and earnings-related amount). Payroll taxes are generally collected as 'contributions', and the pension received is usually based on a formula that takes into account previous earnings and the number of years of contributions made. Once someone reaches retirement, their pension is more or less indexed to inflation, except in Germany where it is linked to net wage growth. Usually, countries also provide a flat-rate pension to those elderly who do not qualify for a pension on the basis of their previous earnings and contributions; these benefits are usually financed from general taxation receipts. Most of the G7 countries run their pension systems on a pay-as-you-go basis, with current benefits financed by current contributions or taxes, although some (Japan and the United Kingdom,

for instance) have partially funded systems with income from the interest on assets held by the pension system providing additional revenue.

The age at which people retire varies from 57 years for women in Italy, to 65 for men and women alike in the United States and Canada. Most of the countries have recognised the importance of legislating gradual increases in retirement ages, and the retirement age will eventually rise to 67 years in the United States and to 65 years in all other countries except France and for women in Italy, where it will be 60 years.

The projected pension flows – contributions and pension payments – are illustrated in Figure 2.² Three important features emerge. First, total pension payments are much smaller in the United States, the United Kingdom and Canada (peaking at 5–8% of GDP) than in Japan, Germany, France and Italy (peaking at 15–20%), where both pensions are relatively generous and the dependency ratios of the elderly are higher. Second, in Japan, Germany, Italy and the United Kingdom, pension payments peak and then start to fall once the baby-boom generation has passed (around 2035–50). In the United States, France and Canada, in contrast, pension expenditures reach a plateau in the second half of the period covered. Third, despite higher contribution rates, the gap between contributions and pension payments is much larger in Japan, Germany, France and Italy than in the other three countries.

The costs of health-care may also put pressure on government budgets as the population grows older. The pattern of health-care costs varies at different stages of a person's life. The effect of increased life-expectancy is difficult to establish because it depends, in part, on the physical dimensions of the aging process. But the effects of demographic change alone on health-care spending have been estimated by

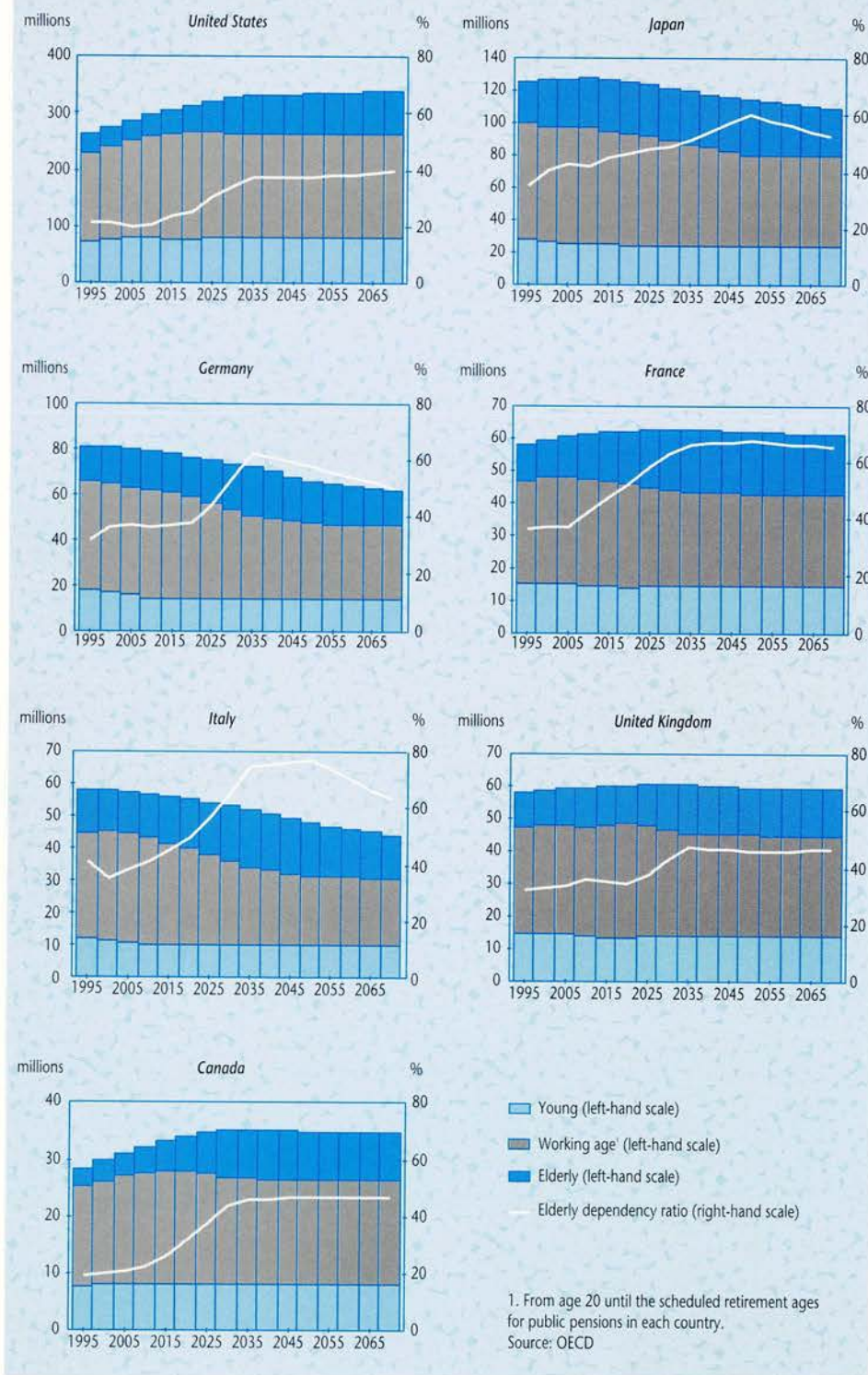
1. A more complete description of demographic trends and of the methodology underpinning this analysis can be found in Willi Leibfritz, Deborah Roseveare, Douglas Fore and Eckhard Wurzel, 'Ageing Populations, Pension Systems and Government Budgets: How Do They Affect Saving?', Working Paper No. 156, available free of charge from the OECD Economics Department.

2. These calculations depend on a number of key assumptions about productivity, developments in the labour force and demographic variables, such as life-expectancy and fertility rates.

Willi Leibfritz is Head of the Public Economics Division in the Policy Studies Branch of the OECD Economics Department; Deborah Roseveare works on budgetary issues in the same Division.

Aging Populations and Government Budgets

Figure 1
Population and Elderly Dependency Ratios, 1995–2070



assuming that per capita real public expenditure on health-care (both on people under 65 and on those 65-years-old and more) grows in line with productivity, and as the numbers of elderly increase, total health-care costs are likely to grow concomitantly.³ But during the 1980s, per capita government expenditures on health-care rose faster than this assumption would suggest, except in Japan and Germany, where such increases seem to have reflected largely supply-side factors, not least growing deployment of high-cost technology and increases in the number of health-care providers.⁴

In the United States and Canada, public spending on health care as a percentage of GDP could rise significantly over the next 35 years as a result of demographic change, since their populations are growing as well as aging. In the United States, the effects of aging are exacerbated by the particularly high share of government spending on health-care for people over 65.

Debts, Deficits and Consolidation

The fiscal impact of aging populations also depends on the initial budget position of a country and the evolution of its payments of interest on government debt. As a rule, if interest rates remain higher than GDP growth (in real or nominal terms), public debt will increase unless the government's primary surplus (revenues minus expenditures, except for payments of debt interest) is large enough to offset the increases in interest-payments, which in turn depend on the existing volume of public debt. The long-term fiscal projections are presented in the Table 1 (p. 36). Primary balances, interest-payments, financial balances and net financial liabilities are shown separately to show the evolution of debt dynamics⁵ and assume no further measures (apart from policy intentions already announced) and that revenues and expenditures on all items in the primary balance other than pensions, health and education remain constant as a percentage of GDP.

The picture that emerges over the period up to 2030 is different for each country. In the United

States, volumes of public debt may remain stable until around 2010 at around 40% of GDP but then they would start rising to around 105–120% of GDP by 2030 (depending on the interest-rate assumptions) despite relatively favourable demographic change and a public pension scheme that is generally well financed. The increase largely reflects substantial increases in government spending on health care.

In Japan the primary balance, while improving over the medium term, remains in deficit and deteriorates rapidly after 2000 through the sharp increase in pension expenditures. Adverse debt dynamics mean that net debt rises from about 25% in 2000 to around 290–315% of GDP by 2030.

Germany is relatively well placed until around 2020, largely because of its comfortable primary surplus in 2000 and the relatively small deficits of the pension scheme until around 2020. Although the age-structure of the population deteriorates earlier, the dependency ratio does not increase significantly as the retirement age increases. But after 2020, the pension deficit deteriorates sharply and by 2030 net debt is around 95–105% of GDP, as compared with around 45% in 2000.

France also has a reasonably good primary balance position in 2000, but the pension expenditures rise significantly, rapidly eroding the primary surplus. Adverse debt dynamics mean that debt rises steeply from 40% in 2000 to around 90–105% of GDP by 2030.

Italy is projected to generate a primary surplus sufficiently large to produce a virtuous circle of debt reduction from 120% in 1995 to

about 80% in 2015, despite its current very high ratio of debt to GDP. But the rapid increase in pension expenditures leads to a turn-around in the primary balance of around 9 percentage points of GDP between 2000 and 2030. Adverse debt dynamics start to come back into play around 2015 and by 2030 net debt is 125–145% of GDP.

In the United Kingdom, with the advantages of a good starting position and a public pension scheme that runs only a minor deficit, net debt as a percentage of GDP falls to very low figures and by 2030 even turns into a small net asset position. In these circumstances, though, the assumptions of unchanged policies for other spending and taxes may well be not realistic; policies might tend to become less restrictive and the evolution of debt thus less favourable.

Canada, under the assumption that medium-term consolidation targets that have been announced are fully met, is projected to run a comfortable primary surplus by 2000. Since the pension policies already announced include substantial increases in social-security contributions, the surplus will remain high until around 2020. Thereafter it will decline because of the continued increase in health-care and pension outlays. Nevertheless, Canada's net debt falls sharply and turns to a small net asset position by 2030. As with the United Kingdom, in these circumstances the assumptions of unchanged policies may not be realistic.

What Policy Choices?

Where major fiscal pressures are likely to occur, some action will be required to redress imbalances. Three main kinds of policy changes could be employed to address the threat of burgeoning public debt from pension payments:

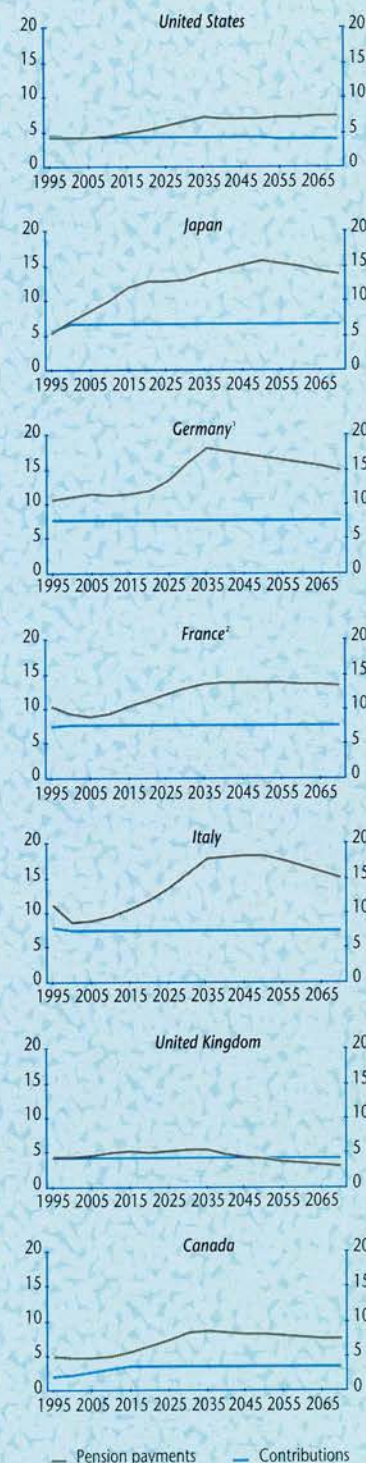
- improving fiscal positions over the next few years (which will, of course, have an impact that will carry through into the much longer term)
- altering pension schemes and health-care systems
- moderating the aging effect by increasing the workforce.

3. With fewer children in coming decades, some savings might be expected in public spending on education. But the difference is likely to be marginal: at most, around 0.3% of GDP between 2000 and 2030, despite substantial falls in the school-age population everywhere except in the United States and Canada.

4. Howard Oxley and Maitland MacFarlan, 'Health Care Reform: Controlling Spending and Increasing Efficiency', Working Paper No. 149, 1994, available free of charge from the OECD Economics Department; Maitland MacFarlan and Howard Oxley, 'Reforming Health Care', *The OECD Observer*, No. 192, February/March 1995.

5. If real interest rates on government debt are higher than rates of economic growth, a decline of the primary surplus below a critical figure would lead to a vicious spiral of higher interest-payments and debt.

Figure 2
Pension Payments and Contributions, 1995–2070
% of GDP



1. Excluding statutory transfers from the federal government amounting to an average of 3.5% of GDP per year.
2. Excluding fictive contributions amounting to 1.7% of GDP per year.
Source: OECD

Aging Populations and Government Budgets

Table
Fiscal Indicators, 1995–2030¹

% of GDP

	Primary balance	Interest rates constant ¹			Interest-rate/growth-rate differentials constant ^{2,3}		
		Net interest payments	Financial balance	Net debt	Net interest payments	Financial balance	Net debt
United States							
1995	0.4	2.1	-1.8	38	2.1	-1.8	38
2000	0.1	2.4	-2.2	39	2.4	-2.2	39
2015	-1.0	3.2	-4.2	50	2.7	-3.7	47
2030	-4.9	8.1	-13.0	120	5.6	-10.5	105
Japan							
1995	-3.5	0.6	-4.1	13	0.6	-4.1	13
2000	-0.8	1.2	-2.0	24	1.2	-2.0	24
2015	-6.5	4.7	-11.2	102	4.0	-10.5	99
2030	-8.0	14.7	-22.8	314	11.7	-19.8	289
Germany							
1995	1.2	3.5	-2.3	46	3.5	-2.3	46
2000	1.2	3.1	-1.9	44	3.1	-1.9	44
2015	1.2	3.4	-2.2	49	3.3	-2.1	49
2030	-4.9	6.6	-11.6	105	4.5	-9.4	93
France							
1995	-1.6	3.3	-5.0	36	3.3	-5.0	36
2000	1.5	3.2	-1.6	41	3.2	-1.6	41
2015	0.3	2.9	-2.5	40	2.4	-2.1	37
2030	-3.8	6.4	-10.2	103	4.8	-8.5	88
Italy							
1995	3.3	11.1	-7.8	121	11.1	-7.8	121
2000	4.5	8.1	-3.5	107	8.1	-3.5	107
2015	2.5	6.5	-4.0	82	6.0	-3.5	80
2030	-4.4	11.3	-15.7	146	8.5	-12.9	127
United Kingdom							
1995	-1.7	2.6	-4.2	47	2.6	-4.2	47
2000	2.2	2.1	0.1	40	2.1	0.1	40
2015	1.6	0.7	0.9	14	0.7	0.9	14
2030	0.2	-0.8	1.1	-9	-0.8	1.0	-9
Canada							
1995	1.3	5.0	-3.7	64	5.0	-3.7	64
2000	3.8	3.9	-0.1	54	3.9	-0.1	54
2015	3.7	0.7	3.0	6	0.6	3.1	5
2030	-1.6	-0.8	-0.8	-13	-0.6	-1.1	-13

1. 1995 and 2000 correspond to the OECD's Medium-Term Reference Scenario (MTRS) until 2000 as described in the OECD Economic Outlook, No. 57.

2. Net interest payments have been projected in two parts. For the net interest payments on the projected stock of debt in 2000 (from the MTRS), the implicit interest rate on government debt (net interest payments as a percentage of net debt) for each country has been used. For new debt, accumulated from 2001 onwards, long-term market interest rates have been applied which were derived (from the MTRS in 2000) from an average real interest rate for the major seven countries and individual inflation rates, except for the scenario 'individual real interest rates on new debt' where an estimate of each country's long-term interest rate (for the MTRS in 2000) has been applied.

3. Differentials derived from the MTRS in 2000 and held constant thereafter.

Source: OECD

Improving budget positions before demographic pressures start to mount would make a substantial difference because the debt dynam-

ics would be much more favourable in the longer term. For example, a permanent cut in spending programmes of one percentage point

of GDP in 2000 would result in net debt in 2030 being between 40–55% of GDP lower than otherwise in all of the countries considered. Reducing budget deficits would have the particular advantage of 'buying more time' during which governments could introduce more fundamental reforms. If, instead, policy-makers wait until the demographic pressures occur and then try to offset them by keeping debt ratios constant (at their 2000 figures), the spending cuts – or tax increases – required would amount to around 5–9% of GDP by 2030, except for the United Kingdom and Canada.

The main policy options for adjusting pension systems to cope with probable developments include raising contribution rates, lowering pension payments and raising the retirement age.⁶ But the combined effects of falling working populations and rising numbers of pensioners mean that even quite major increases in contribution rates or reductions in pension payments would be insufficient to balance those schemes that face the biggest problems. Increasing contribution rates does focus directly on the problem, but is simply one means of raising taxes and would have to be judged against other, poss-

6. The more radical option of moving to a fully funded scheme has been suggested in a number of countries. In those facing rapid aging, the transition to such a scheme is particularly difficult because it requires the current working generation to pay both for people now retired and for their own retirement, which means higher taxes. Whether or not these additional taxes were paid into a separate fund would not change the fiscal arithmetic as a whole, but building up a separate fund – one that was actuarially sound – could help to make the underlying fiscal difficulties and the inter-generational implications more transparent. In any case, such a scheme would either have to incorporate an element of intra-generational redistribution or would have to be supplemented by other provisions for those who would otherwise experience old-age poverty.

7. Mahrez Okba, 'The Pros and Cons of Early Retirement', *The OECD Observer*, No. 185, December 1993/January 1994.

8. The OECD analysis, which is based on World Bank population projections, assumes that migration rates in most countries will fall quite quickly, with only the United States and Canada projected to continue receiving immigrants after 2010. By 2030, migration flows were assumed for the sake of the projections everywhere to be zero. The number of working-age immigrants that would be required in 2050 to offset the fall in working-age population fully between 2000 and 2050 (when the working population stabilises at a lower figure) would be around 13 to 15 million in each case for Japan, Germany and Italy, or between 20–40% of the working-age population.

ibly better, tax options. Increasing retirement ages (beyond the changes already scheduled) provides more scope for rebalancing schemes, with the advantage of a two-fold impact: by increasing the working-age population and therefore both GDP itself and the contributions paid, and by decreasing the number of pensioners. France and Italy, which will still have the lowest retirement ages, even after current reforms are implemented, also face large pension pressures. So raising retirement ages further there would seem to provide a major opportunity to ease the pressure, especially as experience elsewhere indicates that this is a practical and feasible policy option. Those who wanted to retire earlier should be able to do so, but with a correspondingly lower pension.

Whatever reforms are chosen, it would be important to announce them as soon as possible and allow for a phasing-in period, so that people have time to adjust their plans. Those who are on the point of retiring would otherwise have little time to adjust their private savings or change their lifestyle to compensate for receiving lower public pension payments and health-care reimbursements than they expected.

Designing policies to contain the growth of government spending on health-care as populations age is a difficult task that is likely to depend in large part on better design of those systems and country-specific policies to improve efficiency. But holding growth in real public spending per capita on health-care to around $\frac{1}{2}$ –1% less than productivity growth is all that is required in order to offset the impact of aging on that particular budget line.

Long-term care of the frail elderly, by contrast, is likely to face substantial demographic pressure. Better case-management designed to



Without decisive government action the macro-economic effects of aging populations over the next 35 years could well be dramatic.

ensure that they are cared for in the most cost-effective manner may help to reduce that pressure. Finding effective ways of financing long-term care has to be explored further.

Another way of dealing with the pressures of demographics on government budgets is to attempt to moderate the aging effect by increasing the relative size of the workforce. Options that have been suggested include raising the participation rate, increasing immigration or increasing working lifetimes. Policies that increase participation rates *per se* may be difficult to design, but at least policies which discourage participation could be avoided, including those that make part-time working arrangements unattractive. The use of 'early retirement' policies, cur-

rently a response to high unemployment, should also be minimised.⁷ But in any event, raising the overall participation rate would not go far towards offsetting the fall in the working population expected in some countries. Increasing immigration from countries outside the OECD area is another option,⁸ but the interaction between immigration and economic performance may be quite complex and there are likely to be practical limits on the extent to which immigration can be increased.

■ ■

In a number of countries further increases in retirement age could make a major contribution toward balancing their pension systems. Medium-term fiscal consolidation, furthermore, has a double dividend: restoring sound fiscal positions in the medium term also creates a better starting position before demographic pressures mount, so that the adverse effects of longer-term debt dynamics are reduced. Indeed, acting sooner rather than later both reduces the severity of the fiscal pressures and gives people the maximum time to

adjust their plans and provisions to the effects of policy change. ■

OECD BIBLIOGRAPHY

- The Labour Market and Older Workers, forthcoming 1995
- New Directions in Health Care Policy: Improving Cost Control and Effectiveness, 1995
- Maitland MacFarlan and Howard Oxley, 'Reforming Health Care', *The OECD Observer*, No. 192, February/March 1995
- The Transition from Work to Retirement, 1994
- Mahrez Okba, 'The Pros and Cons of Early Retirement', *The OECD Observer*, No. 185, December 1993/January 1994.



Globalisation and Industrial Competitiveness

Hanspeter Gassmann

Industrial policy is evolving rapidly, away from the interventionism that characterised post-War economies towards a concern with the underlying conditions for competitiveness. Paradoxically, a more modest role for the state will involve a wider range of government institutions.

There is a wide variety of approaches to industrial policy in the 25 member countries of the OECD, conditioned by the degrees and trajectories of economic development, tradition, economic philosophies on the role of the state in stimulating or steering industrial activity, and different institutional frameworks, not least the extent to which government is centralised. In some countries, the notion of 'industrial policy' is still accepted; in others, and they are increasingly the majority, the role of government is rather seen as influencing only indirectly the business environment in which industrial enterprises can prosper. Moreover, whereas in the past 'industry' was mainly synonymous with manufacturing, it is more and more widely recognised that this term encompasses also a large part of the service sector (indeed,

many services exist only because of their intimate connections to manufacturing industry). And some new industries, the 'environment industry', for example, consist of a mix of 'classical' manufacturing industries, such as mechanical engineering and chemicals, together with new services, such as the monitoring and recycling of waste.

The very concept of 'industrial policy' is changing in many OECD countries. Some of them, not least the United States or Germany, never had an explicit industrial policy. In others, such as the United Kingdom, and more recently France and Japan, the idea has undergone profound changes in the last decade and a half. The archetypical form of industrial policy was characterised by direct government intervention in various forms: state-ownership of industry, direct subsidies to particular sectors (often in mature or declining sectors, such as steel and shipbuilding, but also newer sectors such as aeroplane production, air transport and telecommunications), and a protection of the

domestic market through custom tariffs or import quotas. Underdeveloped regions within countries also often benefited from direct subsidies, which were intended to spread productive investments and the expected employment to result. Today the sectorial approach is less prominent; more and more horizontal measures affecting all sectors indifferently are used, such as subsidies to promote the growth of small and medium-sized enterprises (box, p. 40).

Various forces have influenced this change of emphasis in policies for industry. First, there was the general conviction, current since the beginning of the 1980s, that government intervention was not always the best and most effective form of promoting industrial development and that as far as possible market forces should be relied on to develop the productive potential of a country. This change in the climate of opinion also affected the nature of corporate management: the profit-orientation of private-sector forms of management makes them generally more efficient than public enterprises. This perception triggered a general movement towards privatisation of state-owned enterprises in those countries which had a sizable part of their industries in state possession – British Steel, Rhône Poulenc, Elf-Aquitaine and Alfa-Romeo, to name but a few examples – although some, like the United States and Japan, never had a large share of state-owned industry.

Another constraint on governments was the growing pressure for the reduction of public debt, which influenced the general movement towards privatisation of state enterprises, especially in European countries – and it is one of the main reasons, indeed, that a general trend toward privatisation of state-owned industrial enterprises can now be observed in countries such as France, Italy and Austria. Other countries, not least the United Kingdom and Germany, had been carrying out such privatisations since the 1970s and '80s.

A third factor in this shift in attitude was the changing role of the manufacturing sector, which has been declining in most OECD countries over the past decade, especially in mature sectors such as textiles, apparel and leather, basic metals and

Hanspeter Gassmann is Head of the Industry Division of the OECD Directorate for Science, Technology and Industry.



Jacques Winderberger/Dollar

A helping hand for small business – many governments are explicitly encouraging SMEs, which are often innovative, create jobs, export new products and improve the skills of the workforce.

fabricated metal products. There has been a continuing shift in employment away from manufacturing towards service-sector activities: in many countries, services now account for about 60–70% of employment, and manufacturing for only 20–25%.

Finally, the past five years have seen the growing globalisation of industry with the continuous expansion of international trade and of multinational enterprises, which increasingly use global strategies by producing in locations which provide the best conditions for the deployment of the factors of production, especially because of lower wages. This globalisation is made possible through the increasing integration of national economies, the liberalisation of international trade and of capital markets, the growth of foreign investment, and the interconnection of countries with rapid (and increasingly inexpensive) world-wide air transport and telecommunications services.¹

One of the results of this general movement was that the 'classic' industrial policies of the 1950s and '60s, which were mostly national in scope, may have become less effective.

Differing Definitions

The concept of competitiveness has been hotly debated for a long time. The American economist Malcolm H. Dunn has recently defined it as 'the flexibility with which a national economy is able to adapt to structural change, or, in the more favourable case, to internally anticipate it'.² The definition offered by the US Competitiveness Policy Council is 'the ability to produce goods and services that meet the test of international markets while our citizens earn a standard of living that is both rising and sustainable over the long run'.³ The OECD has de-

fined competitiveness similarly as being 'the ability of companies, industries, regions and nations or supra-national regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis'.⁴

These are rather large definitions. A somewhat narrower one is that of 'industrial competitiveness', referring to the quality of the business

1. Jeremy Beale, 'The Information Explosion', *The OECD Observer*, No. 196, October/November 1995; Serge Devos, 'Regional Integration', *The OECD Observer*, No. 192, February/March 1995; Rolf Alter, 'Foreign Investment: Engine for Employment?', *The OECD Observer*, No. 190, October/November 1994.

2. 'Do Nations Compete Economically?', *Intereconomics*, November/December 1994.

3. First Annual Report to the President and Congress, Competitiveness Policy Council, Washington DC, March 1992.

4. Definition used in the OECD Industry Committee project on 'Framework Conditions for Industrial Competitiveness' in 1994.

Globalisation and Industrial Competitiveness

FOCUS

A Helping Hand for SMEs

A range of measures has been proposed to help small- and medium-sized enterprises (SMEs). The first involves improving the training of managers. It is generally recognised that managers in SMEs, especially in smaller ones that are starting-up, have to carry an enormous burden, since they have to perform a range of functions simultaneously. In some countries (not least Canada, France, Germany, Italy and the United Kingdom), therefore, measures are being developed to assist managers with expert advice, such as free or subsidised consultancy services. Another form of such assistance facilitates the presence of so-called 'business angels', senior retired executives who have managerial experience from their previous jobs, who know about the pitfalls of a start-up situation, who have knowledge of a particular field or technology, or who can help in the development of business plans.

A second line of attack is through the reduction of administrative burdens for SMEs. Such firms have special difficulties in complying with too many regulations and procedures, especially in the start-up phase. SME managers have little time for excessive paperwork, and cannot afford consultants and lawyers to help them. In Australia, Canada, the United Kingdom and the United States, for instance, measures are being taken to develop so-called 'one-stop-shopping' – physical or 'virtual', with the help of information technology – where all access to administrative information and procedures is concentrated in one place, to save managers' time, and to diminish stress from the time that such procedures waste.

Another approach is facilitating finance for SMEs, which often have continuous, sometimes serious, cash-flow problems, especially when

they are starting up. The measures available in many OECD countries include the provision of incentives for seed money, venture capital, venture loans, and credit guarantees. Often SMEs have to pay up to 4% more interest for their bank credits than larger firms because the risks are perceived to be higher. Many complaints are heard from SMEs that the banking sector does not yet provide financial products and services specially tailored for them. That may be, in part, because many banks are not equipped to assess the risks for their loans to SMEs correctly, especially in high-technology areas or for innovative products. It would help, then, if banks could be persuaded to improve their services to SMEs, either by providing incentives (such as interest-rate subsidies) or by requiring banks to publish their actions in favour of SMEs, or to provide performance indicators of such services (as is proposed in Canada, for example).

A fourth path proposed in several countries is to stimulate industrial R&D in SMEs. Many of them perform little R&D, partly because they are not able to pay for it, and partly because they have no tradition of performing such research. Yet international competition, and the pressure to create and possibly export new and sophisticated products, means that such R&D is increasingly essential. As well as the more traditional incentives, there are others to stimulate networking with partners in the same sector or with customers, if the SME is a supplier to a larger firm. Business links or subsidised consultancy services can help SMEs to identify research facilities in universities or other institutions, and to advise them on licensing arrangements.

environment of a given country – the factors which promote a propitious climate for the development of industry.⁵ As such it contains a series of 'framework conditions for industry': considerations of labour costs and conditions,

corporate governance, the qualification of the workforce and investment in training, the state of the physical infrastructure for transport and telecommunications, the quality of public administration and the importance of streamlining it

(through deregulation and the reduction of administrative burdens), and also competition policies, protection of intellectual property, policies on quality and standards, environmental regulation and so on.⁶

In several countries – Canada, Germany, Japan, the United Kingdom and the United States, for example – measures to deregulate and reduce administrative burdens have been initiated, or government/private-sector task-forces set up to analyse the regulatory situation in the country and prepare recommendations to improve it.⁷ The European Commission has set up a commission on deregulation, and most recently a new Council for Industrial Competitiveness, which produced a first preliminary report for the last European summit in Cannes in June 1995.

Since the beginning of the 1990s, many of the OECD countries have prepared reports the better to assess their industrial competitiveness, nationally and relative to other countries. These documents have taken various forms: academic studies, reports from private consultants, government white papers on competitiveness (the most recently published in the United Kingdom, for example, appeared only in May of this year⁸) reports on factors of location (Standort) in German-speaking countries, and so on.

Whence Competitiveness?

What do these reports recommend? In other words, what are the central elements of the new policies to promote industrial competitiveness perceived to be?

An overriding concern is the promotion of investment. The constant reference to investment occurs not only in the sense of physical investment (especially for small and medium-sized enterprises) but also in that of human capital; indeed, the improvement of the skills and qualifications of the workforce is a recurrent theme. Better training of the workforce, not only in formal education, but also on-the-job, in apprenticeships, and so on, is widely advocated. In some countries, such as the United States, measures to increase the savings rate, which is perceived

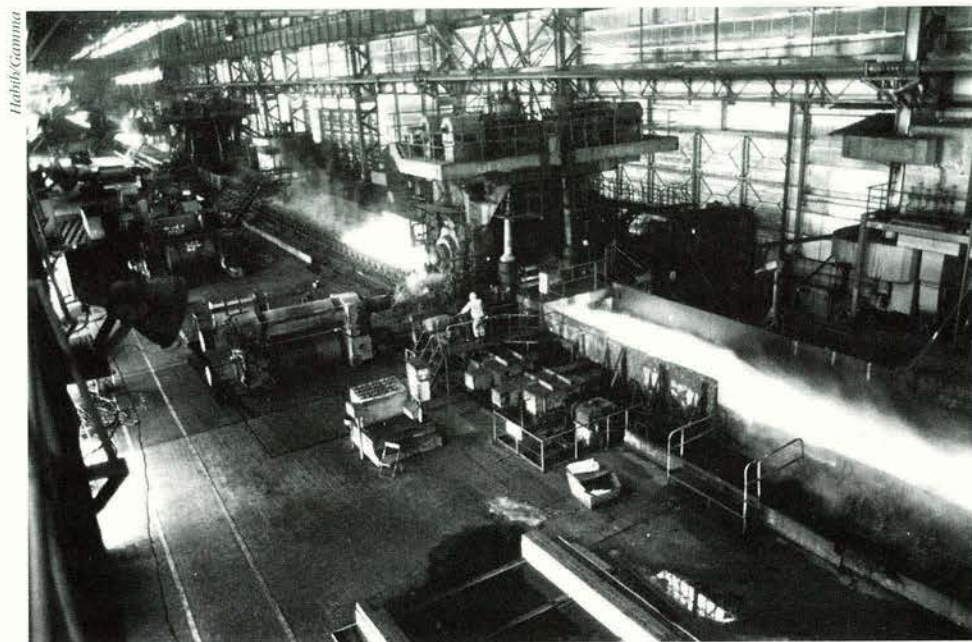
FOCUS

Common Concerns

On 18 October 1995, the OECD Industry Committee held a High-Level Forum on Industrial Competitiveness, during the course of which several recent reports – from Australia, Germany, Japan, the Netherlands, Portugal, Spain, Sweden, the United Kingdom, the United States and the European Commission – were presented. They dealt with two major themes, globalisation and unemployment, linked by a concern for policy development: micro-economic policies (the better to integrate approaches to technology and innovation) and industrial policies, including the fostering of small and medium-sized enterprises, the training and education of the workforce, and the expansion of infrastructures, especially those for 'information highways'.

Particular attention was given to the impact of regulatory reform on competitiveness. How can countries reform their institutional framework, not least their regulatory environment, so as to increase their flexibility in meeting new challenges? For many individual governments, and for the European Commission, this issue has become a major concern, although the responses vary according to the country. There was agreement that an appropriate, coherent regulatory framework was important for the competitiveness of enterprises. A new culture of lighter, less interventionist regulation was also necessary, with a change from the imposition of regulation from above to the negotiation of regulatory frameworks between government, business, trade unions and other interested parties, such as consumers. Representatives of the private sector and the unions also joined in this discussion, and offered examples of problems already encountered and recommendations as to how they might be solved.

The Forum confirmed that a number of countries are rapidly making competitiveness policies part of their policy framework, the major concern being how to adapt the business environment to allow enterprises to flourish, with the objective of improving general living standards. An important point of discussion centred on how such competitiveness policies might be better co-ordinated between various government departments. Not least, it is becoming urgent that the interaction of macro- and micro-economic policies be understood.



State-ownership of heavy industries such as steel – the archetypal form of industrial policy in many OECD countries – has largely been abandoned.

as too low to sustain investment durably, are also recommended.⁹

In continental European countries in particular – where not only are wages high but there are also very high non-wage employment costs, such as social security, unemployment insurance and so on – a reduction of the non-wage costs is recommended, especially for lower salaries, in order to encourage employment or re-employment of the unemployed. This measure has been recently implemented in France, financed by an increase of value-added tax.

The importance of promoting innovation and increasing industrial research and development is another high priority in many of the reports. In the course of the last recession the intensity of industrial R&D diminished in many OECD countries. There is concern that in the future such expenditures may behave like other investments and vary with the business cycle. Since industrial R&D is a long-term investment, and thus should not vary too much as a function of short-term considerations, that may pose a problem in the future. Measures to promote industrial R&D include partial grants, tax incentives,

and incentives to partnering with universities and research institutions.

Another constant theme is the promotion of small and medium-sized enterprises (SMEs). It is generally recognised that SMEs are becoming more important, for four main reasons: they are often innovative; they contribute to the net creation of employment; they often are good exporters of new products; and they increasingly contribute to improving the skills of the work-

5. Of course, macro-economic factors also play a very important role in industrial competitiveness, not least monetary stability in the form of low rates of inflation, the exchange rate of the national currency (which can affect imports and exports dramatically), real interest rates and capital costs (which can make all the difference in investment decisions).

6. Rauf Gönenç, 'A New Approach to Industrial Policy', and Hanspeter Gassmann, 'From Industrial Policy to Competitiveness Policies', *The OECD Observer*, No. 187, April/May 1994.

7. Scott Jacobs, 'Controlling Government Regulation: A New Self-discipline', *The OECD Observer*, No. 175, April/May 1992; Scott Jacobs, 'Opening-up Regulation', *The OECD Observer*, No. 195, August/September 1995.

8. Competitiveness: Forging Ahead, HMSO, London, 1995.

9. Barrie Stevens, 'A Looming World Capital Shortage?', *The OECD Observer*, No. 196, October/November 1995.

Globalisation and Industrial Competitiveness



Alfa-Romeo was one of many companies privatised in the first wave of 'denationalisation' during the 1980s.

force, especially in high-tech activities and in apprenticeship training.

Other approaches mentioned in some of the reports on industrial competitiveness involve the development of infrastructures. The most widely quoted development today is the construction of information superhighways, which are widely assumed to be improving productivity, developing new products and services, providing instant world-wide information. Navigating in cyberspace on the Internet can provide multiple access to new information at relatively low cost, and is therefore especially suited for SMEs, since it can increase networking capability even for one- or two-person firms.¹⁰

But physical transport is also important for increasing productivity. So measures to build rapid rail transport, to improve multi-mode transport (combining trucks, railway and air), or to improve the connections between airports and road and rail networks in a country are discussed in some reports as useful ways of increasing industrial competitiveness.

The protection of the environment is also sometimes mentioned as important for longer-term sustainable development and therefore for

industrial competitiveness. But this issue cuts both ways: environmental protection means new regulatory burdens and extra costs for industrial enterprises; and yet it also provides new business opportunities by creating new products and services and therefore can help to re-vigorate and stimulate markets and the industrial tissue. Measures to help industry, and especially SMEs, to adapt to this new situation include incentives for recycling materials, and simplification of compliance reports.

Finally, the protection of intellectual property appears to be of increasing importance for improving industrial competitiveness.

There are four types of intellectual property: patents, copyright, trade secrets and trade marks. The first two are important for licensing, patents mostly for products and processes, copyright for music products and computer software including games.¹¹ Trademarks are important for protection against copying of branded products. Although the Uruguay Round negotiations have resulted in an agreement on trade-related aspects of intellectual property, which will in the next years provide for a general convergence of laws and regulations in intellectual property, the enforcement of such laws and regulations still widely varies among countries, and requires improvement.

■ ■

Policies for industrial competitiveness cover a rather large spectrum. A major issue for governments in the next years is the effective co-ordination of such diverse policies. That will be no easy task, since a number of government departments are responsible – for economics, research and technology, finance, labour, education and more. It may be that new ways of horizontal co-operation and co-ordination can be found, whereby the concept of networking, so often advocated for advanced enterprises, can be applied also to government departments, in order to improve inter-agency co-operation.

These developments may also bring new institutional challenges, especially for the ministry, department or agency with the task of co-ordinating this co-operation. Innovation in organisational forms, and even the creation of new institutions to cope with industrial competitiveness policy co-ordination, may well be an important theme for the future.

International co-operation of a new type may also be necessary. Countries will compete in improving the quality of their business environment and thus increasingly will have to compare where they stand relative to other nations. They will therefore have to develop common measurements and benchmarks. With the year 2000 only four years away, it is time to start now with such innovations in order to be ready for the 21st century. ■

OECD BIBLIOGRAPHY



- **Future Global Capital Shortages: Real Threat or Pure Fiction?**, 1995
- Barrie Stevens, 'A Looming World Capital Shortage?', *The OECD Observer*, No. 196, October/November 1995
- **IT Outlook 1995**, 1995
- Jeremy Beale, 'The Information Explosion', *The OECD Observer*, No. 196, October/November 1995
- Deborah Hurley, 'Property and Privacy in Cyberspace', *The OECD Observer*, No. 196, October/November 1995
- **Regional Integration Agreements and the Multilateral Trading System: Synergy or Divergence**, 1995
- Serge Devos, 'Regional Integration', *The OECD Observer*, No. 192, February/March 1995
- **Foreign Direct Investment and Employment**, 1994
- Rolf Alter, 'Foreign Investment: Engine for Employment?', *The OECD Observer*, No. 190, October/November 1994
- **Industrial Policy in OECD Countries, Annual Review**, 1994
- Rauf Gönenç, 'A New Approach to Industrial Policy', *The OECD Observer*, No. 187, April/May 1994
- Hanspeter Gassmann, 'From Industrial Policy to Competitiveness Policies', *The OECD Observer*, No. 187, April/May 1994
- Scott Jacobs, 'Controlling Government Regulation: A New Self-discipline', *The OECD Observer*, No. 175, April/May 1992.

10. See pp. 12–14.

11. Deborah Hurley, 'Property and Privacy in Cyberspace', *The OECD Observer*, No. 196, October/November 1995.

The Agro-food Sector in Transition

Ferdinand Kuba

The move to a market economy in the agro-food sector of the former communist countries has been more successful in central and eastern Europe than in the states which used to constitute the Soviet Union, where radical reform has yet to be embraced.¹

Most of the central and eastern European countries (CEECs) have travelled further down the road to market-oriented agriculture centred on private ownership than have the New Independent States (NIS) of the former Soviet Union, and in 1994 experienced some recovery in production. In the NIS, by contrast, where many farms remain unreformed and are effectively bankrupt, production in 1994 fell further from the previous all-time lows; for livestock, indeed, it was the fourth consecutive year of shrinking production.

Demand for food declined generally in both regions in 1994, particularly for goods highly sensitive to changes in incomes, as people switched to less expensive foodstuffs. Consumption of meat and dairy products, for example, has fallen by around 20–30% since the start of the transition. That is hardly surprising: huge consumer subsidies under the centrally planned system kept demand high relative to per capita GDP.

There were no major problems of food supply in the CEECs, and in the NIS subsistence production delivered stable – if hardly copious – food supplies to the rural populations, although

the absence of functioning markets and transport infrastructure meant that some industrial centres faced occasional shortages. In spite of a substantial decline in production, agricultural imports into the NIS decreased substantially. Reduced demand for feed grain reflected the decline in livestock herd numbers.

Contrasting Developments

The CEECs continued their market-based reforms in 1994. Progress in macro-economic stabilisation was made in most countries. GDP expanded by almost 4% on average and inflation decelerated considerably, although remaining high by OECD standards. Unemployment, too, stayed high in most countries.

Agriculture seems to be recovering throughout most of the region. Without the considerable impact of drought in Poland in the late summer of 1994, which affected also the Czech Republic and the Baltic states, agricultural output for the whole region would have expanded for the first time since the transition began in 1990. Provisional figures for 1994 indicate an

increase in grain production. In the Czech Republic, Bulgaria and Hungary, production of wheat and coarse grains (maize, barley and rye) in 1994 exceeded that of 1993. Wheat production likewise increased in Slovakia and Romania.

The fall in demand for food led to a decline in output from the livestock sector in most of the CEECs. But there are signs of a reversal in this trend, as the fall in demand has begun to level-off. There has been, for example, some rebuilding of herds and increased milk production in Poland and Albania.

The economic situation in the 12 NIS contrasts starkly with that of the CEECs. Russian GDP fell by 15% in 1994, and there were even steeper declines in some of the other NIS – with further falls expected this year. In tandem, the poor agricultural performance of most of the NIS continued. In the four principal food-producing countries – Belarus, Kazakhstan, the Russian Federation and the Ukraine – gross agricultural output has fallen by a third to a half over the past five years, and there are doubts as to whether it will recover this year. The livestock sector has been particularly hard hit: herd size and total production have decreased by 40% since 1991 and are still falling.

Unfavourable weather caused much difficulty in 1994. Drought likewise lowered yields in southern Ukraine, in some major Russian grain-producing areas and in northern Kazakhstan, and Belarus reported a harvest failure. But the weather is not to blame for everything: some of the production problems come from the cumulative effects of disruptions in the supply of inputs, inefficient marketing and the poor allocation of agricultural credits.

Reform of the Agro-food Sector

The restructuring of large state and collective farms set up under communism will not encourage efficient production without two things: market-determined price-signals that will generate an economically coherent structure of incentives and a security of property titles that will allow long-term planning for investment. Viable

Ferdinand Kuba is Head of the Relations with the Economies in Transition Division in the OECD Directorate for Food, Agriculture and Fisheries.

1. *Agricultural Policies, Markets and Trade in the Central and Eastern European Countries, Selected New Independent States, Mongolia and China: Monitoring and Outlook 1995*. OECD Publications, Paris, 1995.

The Agro-food Sector in Transition



ECTacis Programme

With the drop in consumer subsidies demand for dairy and meat products has fallen by some 20–30% since the beginning of the transition in both the CEECs and the NIS, although some dairy herds are now beginning to build up again.

market-oriented farms – whether individually owned, corporate or co-operative in the western sense – can succeed only if property rights are clear and the lease or sale mechanisms for land reliable.

Like patterns in production, the extent of farm reform shows a degree of contrast between the CEECs and the NIS. Before reform started, large state and collective farms worked almost all farm land in both groups of countries except Poland.²

Several strategies have been pursued to place land in private ownership and/or operation. In the CEECs the most important has been the restitution or compensation of former land-owners. In Bulgaria, for example, the authorities have sought as far as possible to return to people the specific parcels of land they used to own. Hungary has taken the alternative route of compensating legitimate claims by various means, including vouchers which entitle the holder to bid for land, rather than physical restitution.

Restitution has not been without its problems. Attempts to restore property rights have been hampered by the poor state of pre-communist land-registration records, and a lack of legal and administrative institutions able to solve disputes

and settle claims. Moreover, many claimants lack the agricultural and management skills to go into farming.

The second strategy has been mass (or 'spontaneous') privatisation, allocating land rights without reference to former ownership, essentially dividing the land of former state and collective farms among their workers. Albania, Romania and the Baltic states have adopted this approach. In Albania and Romania, indeed, the old farms have been totally replaced by this small-scale private farming. But this method, too, has had its difficulties, not least because of claims from former owners or their heirs.

Third, privatisation through the allocation of shares has been used widely in the NIS to divide the land and other assets of existing farms among farm workers, distributing it according to the number of years a worker has been with the farm.

Lastly, the creation of new, private family farms is proceeding alongside re-organisation of state and collective farms, in both the CEECs and the NIS. The procedure in the NIS is generally that local authorities allocate to individuals land that was formerly unused or was an under-exploited part of a larger farm, while in the CEECs

private farms began to operate on restituted land or with a share from a former collective farm.

A variety of types of new farms has grown from these four strategies. In all of the countries involved, new individual enterprises have been established. In Hungary and the Czech Republic, for example, most collective and state farms have been restructured into co-operatives. In Estonia and Romania, as well as in the NIS, corporate, or joint-stock, farms have been more common. In such farms, shares of land and other assets have been recommitted to the new enterprise in return for stock certificates, with little internal restructuring.

Opponents of reform have expressed concern that the fragmentation of larger farms will raise costs and lower efficiency. But, with the exceptions of Albania and Romania, excessive fragmentation has not happened. In Hungary and the Czech Republic, for example, fragmented ownership has not led to fragmented operation, since the land has largely been leased to transformed co-operatives.

In spite of some success in the privatisation and re-allocation of agricultural land, a market that permits the use of land as collateral required for an efficient system for agricultural credit is still largely non-existent. Some modest success has been achieved in the central and eastern European countries, but reform of the financial sector has barely begun in the NIS. A reliable banking sector also has to be established,³ and the doors have to be opened to foreign capital.

But it is not only land that has to be privatised. The sale of retail outlets into private hands has been quite successful, particularly in the CEECs. It is proving more difficult to privatise large supply and food-processing operations, since many of them are heavily indebted and rely on outdated technology, although there has been some progress on this front in the CEECs, chiefly in the Czech Republic, Hungary and Poland. Marketing and distribution systems in the NIS likewise have still to be privatised.

2. Luis Portugal, 'Restructuring Polish Agriculture', *The OECD Observer*, No. 192, February/March 1995.

3. Hans J. Blommestein, 'Sound Banking for a Strong Market', *The OECD Observer*, No. 177, August/September 1992.

Trade Relations

Most of the CEECs have sought to re-orientate their agricultural trade towards western Europe, and have negotiated preferential trade agreements, known as 'Europe Agreements', with the EU. Yet these Agreements provide only for a gradual step-by-step improvement in market access for agricultural products from the CEECs. Such Agreements, which will eventually lead to free trade in most goods and services, have been signed by the EU and Bulgaria, Romania and the four Višegrad states (Hungary, Poland and the Czech and Slovak Republics) and the Baltic states.

Exports by the CEECs to the west are still limited by a number of factors: difficulty in meeting western standards on quality, and competition with heavily subsidised western products. Instead, imports from the west, particularly of value-added goods (those ready for consumption, rather than commodities), increased, exacerbating the trade imbalance of the CEECs with western Europe. Indeed, the slight improvement in export performance in 1994 was primarily because of higher exports from central and eastern Europe to the NIS.

A number of the CEECs are looking forward to taking their place in an enlarged EU, thus setting a seal on their democratic and economic reforms. In the agro-food sector there is no doubt that the adoption of policies similar to those of the Common Agricultural Policy (CAP) of the EU would impose high costs on taxpayers and consumers in the CEECs, distort their economies and weaken their competitiveness. In spite of such adverse effects, the CEECs that have association agreements with the EU have begun, in anticipation of membership, to put into place structures such as support funds, market-regulation agencies and so on, and to apply such instruments as price guarantees and export subsidies which resemble to some extent those applied under the CAP. So far price and other support payments have been kept under control and are substantially below those practised under the CAP, but once the institutions are in



Grain production in the CEECs has generally increased of late, though drought has combined with disruptions to inputs and lack of credit to reduce output in the NIS.

place, the situation could change very quickly, with a considerable increase in output – as experience in the Länder of the ex-DDR has demonstrated. In view of the tightness of the commitments undertaken by most of the CEECs in the Uruguay Round, such an expansion would soon become a problem; it would also be very costly.

Hungary, Poland, the Czech and Slovak Republics and Romania are already members of the World Trade Organisation, the body which has taken over from the GATT, and many of the other CEECs and NIS are in various stages of negotiations for membership.

■ ■

Although the CEECs are making substantial progress towards more market-oriented production, much remains to be done. Indeed, the extent of reform varies considerably, with most progress in the four Višegrad countries, Estonia and Slovenia. The economic and social upheaval which has resulted, and which will continue for the foreseeable future, will keep up the pressure for structural adjustment in the agro-food sector.

The NIS, by contrast, having embraced reform more recently and more hesitantly, have yet to see the impact of transition bottom out. But though they emerged from a common insti-

tutional matrix of some seventy years' duration, their individual characteristics have re-emerged even in the brief period since the collapse of the Soviet Union, and over time they will certainly become more diverse. Policy prescriptions will have to bear this diversity in mind. In the meantime, the example of the steady recovery of agricultural production in the CEECs should facilitate further movement along the path towards the market. ■

OECD BIBLIOGRAPHY

- Agricultural Policies, Markets and Trade in the Central and Eastern European Countries, Selected New Independent States, Mongolia and China: Monitoring and Outlook 1995, 1995
- Review of Agricultural Policies: Poland, 1995
- Luis Portugal, 'Restructuring Polish Agriculture', *The OECD Observer*, No. 192, February/March 1995
- Review of Agricultural Policies: Hungary, 1995
- Matthew Harley, 'Hungarian Agriculture at the Crossroads', *The OECD Observer*, No. 186, February/March 1994
- Bank Restructuring in Central and Eastern Europe, 1992
- Hans J. Blommestein, 'Sound Banking for a Strong Market', *The OECD Observer*, No. 177, August/September 1992.



Sweden

Tackling Unemployment

Hans Christiansen

The Swedish economy, long considered a showcase in maintaining full employment, emerged from the latest recession in 1993 with its highest rate of joblessness since the 1930s. Since the flexibility in real wages and active labour-market policies that were traditionally used seem unable to cope with the current volume of unemployment, the government is turning its attention to policies for increasing the demand for labour. These include measures to improve the flexibility of the labour-market, lower unrealistic expectations about wages, encourage the growth of enterprises and job-creation, and upgrade the quality of the labour force through educational policies.¹

The unprecedented slump in the Swedish economy from 1991 to 1993 caused the demand for labour to drop throughout the private sector, and the public sector, struggling with severe budget deficits, could not compensate for the job losses by absorbing the jobless. As a result, unemployment rose to a post-War high for Sweden of almost 10% of the labour force in mid-1993, with another 5% participating in active labour-market schemes such as job-training and work-fare. The moderate growth in output in 1994 and 1995, led by exports, was mainly met through increases in productivity, although it did trigger some growth in the demand for labour in industry and thus contributed to a modest reduction of unemployment.

Hans Christiansen works in the Country Studies and Economic Prospects Branch of the OECD Economics Department.

In spite of the depressed labour market, collective wage-agreements concluded in the first half of 1995 will boost wages by more than 4% per year over the next two years, even in domestically oriented sectors particularly hard hit by the recession, not least construction and retail trade. This behaviour may be seen as a major break with the past, when real wages fell sharply whenever unemployment rose modestly.² But flexibility in real wages in the 1970s and '80s coincided with internationally high inflation; and on two occasions it was linked with sharp devaluations of the krona, allowing even modest nominal wage restraint to reduce real wages considerably. With inflation currently below 3% and the government determined to maintain price stability, such an option is clearly no longer available. Bringing down unemployment therefore calls for more labour-market flexibility than in the past, particularly geographical and occupational mobility, and allowing relative wages to reflect supply and demand in the labour market.

Labour-market Instruments

Generous benefits to unemployed people, both in terms of high 'replacement rates' – unemployment benefits relative to previous wages – and the length of the period for which benefits are permitted, risk underpinning unrealistic expectations about wages and retarding the occupational and geographic mobility that is required. Under the Swedish system of income-

support, members of unemployment-insurance funds (88% of the labour force) are entitled to unemployment benefits. The maximum rates of these benefits have recently been lowered to 75% but, since many OECD countries have replacement rates around 60%, they remain high by international standards. In addition, means-tested assistance in cash from local authorities – which in some cases can be more generous than the unemployment benefits – are available to all the unemployed, although a certain social stigma seems attached to accepting them. A recent study³ shows that they are granted to only a small fraction of the households which would in principle be eligible for them. But for people who do receive benefits they are available virtually indefinitely, which must affect the intensity of job-search.

The aim of Sweden's long-standing emphasis on active labour-market policies has been to ensure that the unemployed maintain contact with the labour market by preventing the erosion of human capital, and by selectively training the unemployed for occupations where there are labour shortages. But the effectiveness of active measures in providing a platform for re-entry into regular employment has, arguably at least, been weakened in recent years with increased emphasis on participation in such measures as a means of prolonging rights to unemployment-insurance benefits. This re-orientation has meant that the unemployed have been referred to programmes only when they have come close to the maximum limit of their benefit duration, and that participation in the programmes has been followed by re-entry into unemployment.

Employment-protection legislation (EPL) can affect the volume of employment to the extent that it tends to increase the costs of firing employees and hence acts as a net deterrent to new hiring. In certain respects, EPL for permanent employees remains tight in Sweden compared

1. *OECD Economic Surveys: Sweden*, OECD Publications, Paris, 1995.

2. For an overview, see Långtidsutredningen 1995, Ministry of Finance, Stockholm, 1995.

3. En Social Försäkring – Rapport till expertgruppen för studier i offentlig ekonomi, DS 1994:81, Ministry of Finance, Stockholm, 1994.

Indicators



to other North European countries, by, for example, imposing a strict last-in-first-out principle and some of the longest notice periods in the OECD area. Periods of notice after four years of employment are four months – twice the OECD average. In other respects, nevertheless, Swedish legislation is rather permissive. There are no restrictions on the right of employers to dismiss workers for economic reasons and no legislation about severance payment in this event.

The tax system can distort market mechanisms to the extent that real after-tax wages paid to employees differ from the real labour costs of the employer (this is the 'tax wedge'). In particular, any successful attempt by employees to protect their real take-home pay against tax increases leads to higher total labour costs and thus lowers demand for labour. Sweden has one of the highest tax wedges in the OECD area and – although empirical studies disagree about

the precise extent of 'tax-push' in wage formation – it would be difficult to reject the proposition that higher taxes have depressed demand for labour to some extent.

Most Swedish studies of job-creation and -destruction conclude that a dominant share of the net job-creation is derived from the creation of new enterprises and the expansion of small businesses. In this case, policies aimed at allowing small enterprises to grow would seem attractive. Sweden has established venture-capital companies and aimed at diverting financial resources from publicly controlled funds toward small and new enterprises. The major obstacle to the increased creation of enterprises would nonetheless seem to be the tax system, which imposes a high burden that limits demand. The service sector, which in most countries is seen as the major creator of future jobs, is especially hard hit. The purchase of services is highly re-

sponsive to net household income; furthermore, the provision of services is by nature labour-intensive and thus particularly sensitive to tax wedges.

Upgrading Skills

Better education – which raises personal productivity – boosts the demand for labour. As a corollary to improving labour-market flexibility, the Swedish authorities have therefore introduced a policy of raising the educational attainment of the population. From 1991 to 1995 the number of places in the regular education system was stepped up by more than 90,000 (2% of the labour force), the main focus being on higher education, which increased its intake by 30%.

This policy change may at first glance seem surprising, given the fact that Sweden has a long tradition of promoting educational policies. Past policies mainly focused on primary and secondary education, on which Sweden spent a larger share of GDP than any other OECD country. The difference lies in the fact that the share of the labour force which has completed higher education is not particularly high by OECD standards. Furthermore, an unusually large part of the better-educated Swedes are over 40 years old and are specialised in areas aimed at public-sector employment, such as teaching and human sciences. Indeed, empirical studies indicate that in recent decades Swedish industries have increasingly specialised in the export of traditional resource-based products with a low educational content. The government has aimed at redressing this problem by selectively boosting the intake to technical and business-administration education, which is perceived as particularly relevant to the business sector. ■

OECD BIBLIOGRAPHY

OECD Economic Surveys: Sweden, 1995.



The United States

Developing the Workforce

Kathryn Gordon

For several years now commentators have been suggesting that the United States – with its flexible wage-formation, relatively unregulated labour-markets and strong work incentives – might be caught in a ‘low skills, bad jobs’ trap. But it can also be argued the creation of so many jobs – not only in high technology and in well-paid services, but also for the United States’ large population of poorly educated workers with low skills – could be considered a tribute to the flexibility of US markets and to the entrepreneurial skills of its business class. Responding to trends in relative wages that lowered the cost of employing low-skilled workers, US enterprises have identified promising activities, implemented suitable technologies and garnered the financial resources required to employ the existing stock of workers and skills. According to this view, recent trends in wages and jobs creation reflect a market system that, in the course of equating the supply of and demand for labour, has merely placed a price tag on the economic dimension of some deeply rooted problems.¹

Chief among these is an initial education system that, for many communities, functions very poorly. Although its performance is variable (both by region and by ethnic group), statistics show that substantial portions of it are highly ineffective. Large regional variations in scores for mathematics, for example, place some US states at the very top of international comparisons (on a par with Taiwan and South Korea), while others are comparable to low-income countries with high illiteracy rates (Jordan, say). Black students, by the time they graduate from high school, trail their white counterparts by about two years, with

much of this difference attributable to the fact that two-thirds of blacks live in central cities where schools are poorly financed, where the surrounding community contains few members who are themselves well educated and where the local economy often functions very poorly. Thus, when the system works badly, it works very badly. Indeed, that so many people leave the initial system with substandard education constitutes a failure of US policy on human capital with few, if any, parallels in the OECD area.

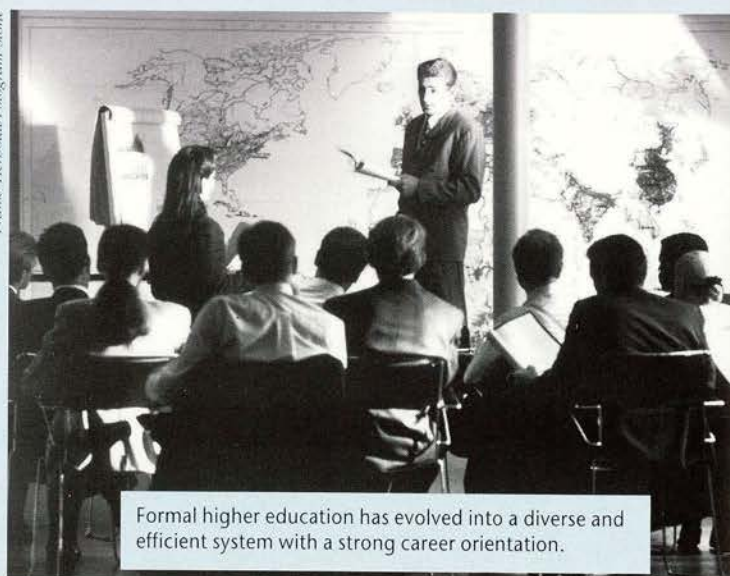
The typical high-school graduate who does not move on to higher education has experienced steady erosion of wages over the past two decades. Unfortunately, the prospects for a turnaround are not good. Forecasts of how the demand for skills might evolve – though notoriously difficult to make – point to continuing increases in the demand for better-educated, more highly skilled workers, as sectorial trends move towards activities based on the sophisticated use of information.² That the primary and secondary system fails to ensure even minimally adequate schooling for a large segment of the population is not a new problem, but it would appear that the economic forces now marshalling – technological and organisational change, demographic evolution, immigration, globalisation of trade and investment flows, and continuing change in the structure of demand for goods and services – are making it more costly.

The performance of higher education, by contrast, is impressive. The proportion of

Americans completing university at 27%,³ is twice the OECD average. The United States spends a larger percentage of its GDP – 2.5%, compared with an OECD average of 1.7% – on higher education than any other country for which the data are available. Likewise, the proportion of adults who reported having participated in job-related education in 1991 – at 38% – is high relative to most other countries that supply such data (Figure).

Adult Education to the Rescue?

Some analysts hold forth the hope that, by increasing the skills and knowledge of the adult workforce, the deficiencies of the initial education system might be repaired. In many respects, the US system of adult education and training is already highly successful. There is vigorous com-



Formal higher education has evolved into a diverse and efficient system with a strong career orientation.

Kathryn Gordon works in the Country Studies and Economic Prospects Branch of the OECD Economics Department.

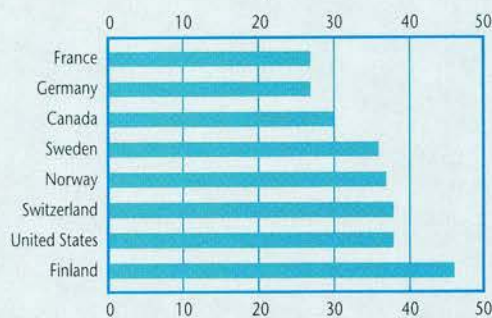
petition between various training channels – formal education, in-firm training, self-teaching and on-the-job experience – in different market settings. The US system of workforce development allows relatively free play to these competitive processes.

Public involvement is nevertheless extensive. Such involvement attempts to redress the major market failures in education and training, not least the difficulty of using credit markets to finance the accumulation of human capital, problems in transmitting information, and social and economic externalities. Local, state and federal governments spent about \$60 billion in 1991 for formal, adult education (although relatively little for formal enterprise training).

Other, broader features of American society – high geographical mobility, the absence of social or regulatory controls on poaching staff or job changes – have also had an influence on workforce development and on the pattern of adult education and training. First, many workers (recognising that their relationship with a given firm might not last very long) develop portable human capital, favouring skills readily signalled to prospective employers, including activities that give rise to course credits, credentials and diplomas, the value of which is readily understood. By contrast, the development of skills that are more easily deployed in a particular firm – for example, understanding the idiosyncracies of the production processes, products or clientele of an individual firm – is somewhat weaker and tends to be concentrated within a limited set of employees. This reluctance to rely heavily on long-term economic relationships is a prominent feature of the US economy, one that is apparent also in capital markets and industrial organisation.

Second, the formal higher-education sector – itself responding to labour-market signals and to intense competitive pressures within the

Figure
Continuing Education and Training¹
25–64 years



1. Participation in job-related continuing education and training as a percentage of the employed population aged 25 to 64.

Source: OECD

sector itself – has evolved over many decades into a diverse and, on the whole, efficient system with a strong occupational or career-development orientation. In effect, most adults who have the inclination and the resources to hand to take time-off from work or from other activities can avail themselves of a wealth of relatively high-quality training and general-education services that are provided by numerous public and private institutions. Numerous forms of assistance (scholarships, guaranteed loans and state-subsidised institutions) are available to many of them if they so desire. Indeed, large portions of the US workforce use the adult-education system for life-long learning.

Increasingly, institutions of higher education are contracting with businesses to provide tailor-made training packages. Another, more recent innovation involves the creation by firms of business units specialising in contracting-out for (or sometimes even providing directly) the full range of their employees' educational requirements.

In spite of its many successes, though, the adult-education and training system is beset by shortcomings that will require the sustained attention of policy-makers. The most serious and least tractable of these problems is that it fails to work for the large fraction of people who end their studies with a high school diploma or less. This appears to be less a problem with the higher-education system itself than a symptom of a

broader failure of the American social 'model'. This model embodies the inter-related characteristics of heavy reliance on local or state finance for basic social services (especially education) and pronounced geographical separation of social groups with divergent incomes and requirements. The flexibility permitted by these arrangements has encouraged Americans with the necessary wealth and political sophistication to organise themselves spatially into distinct 'clubs', so that their local taxes are not 'diluted' by having to meet the educational demands of less advantaged communities.

It is clear, though, that any long-term, efficient solution will necessarily involve significant improvements in the performance of primary and secondary schools. Unlike compulsory education for younger age-groups, the mission of adult education is not to ensure that the entire student population adheres to some socially determined minimum standard of performance. If the primary and secondary system fails to ensure adherence to such a standard, the adult system can be at best only a partial remedy.

More investment in educational standards would allow schools to communicate more effectively with parents and students in order to explain what is expected of them. Schemes to widen choice in schooling – especially with variants, such as vouchers, designed to assist the poor so that parents with low educational backgrounds will be able to use them successfully – have been experimented with only on a local scale. Finally, improving the quality of vocational education may help schools attract students who are not motivated by a purely academic approach. ■

1. *OECD Economic Surveys: The United States*, OECD Publications, Paris, 1995.

2. Jeremy Beale, 'The Information Explosion', *The OECD Observer*, No. 196, October/November 1995.


3. This is the ratio of all university graduates in 1992 to the population of graduation age.

OECD BIBLIOGRAPHY

OECD Economic Surveys: The United States, 1995
Communications Outlook 1995, 1995
Jeremy Beale, 'The Information Explosion', *The OECD Observer*, No. 196, October/November 1995
OECD Economic Surveys: The United States, 1994.



Indicators



AUSTRALIA				
	period	% change from previous		
		period	year	
Gross Domestic Product	Q2 95	0.7	3.4	
Leading Indicator	Sep. 95	0.6	-4.0	
Consumer Price Index	Q2 95	1.3	4.5	
		current period	same period last year	
Current Balance	Jul. 95	-1.88	-1.54	
Unemployment Rate	Aug. 95	8.3	9.4	
Interest Rate	Aug. 95	7.55	5.70	

Definitions and Notes

Gross Domestic Product Seasonally adjusted volume series except for Germany

Leading Indicator A composite indicator, based on other indicators of economic activity (employment, sales, income, etc.), which signals cyclical movements in industrial production from six to nine months in advance


Consumer Price Index Measures changes in average retail prices of a fixed basket of goods and services

Current Balance \$ billion; not seasonally adjusted except for the United States


Unemployment Rate % of total labour force – ILO standardised unemployment rate; national definitions for Austria, Denmark, Iceland, Mexico, Switzerland and Turkey; seasonally adjusted apart from Turkey

Interest Rate Three months, except for Greece (twelve months)


Source: Main Economic Indicators, OECD Publications, Paris, October 1995.




AUSTRIA				
	period	% change from previous		
		period	year	
Gross Domestic Product	Q2 95	0.3	2.5	
Leading Indicator	Jul. 95	-0.4	0.9	
Consumer Price Index	Aug. 95	0.5	2.1	
		current period	same period last year	
Current Balance	Jul. 95	-0.60	-0.40	
Unemployment Rate	Aug. 95	6.7	6.6	
Interest Rate	Jul. 95	4.55	4.84	



BELGIUM				
	period	% change from previous		
		period	year	
Gross Domestic Product	1994		2.2	
Leading Indicator	Aug. 95	-1.5	-5.2	
Consumer Price Index	Aug. 95	0.2	1.3	
		current period	same period last year	
Current Balance	Q4 94	3.87	4.07	
Unemployment Rate	Aug. 95	9.9	9.8	
Interest Rate	Aug. 95	4.46	5.50	



CANADA				
	period	% change from previous		
		period	year	
Gross Domestic Product	Q2 95	-0.3	2.5	
Leading Indicator	Jul. 95	-0.5	-4.3	
Consumer Price Index	Aug. 95	-0.1	2.3	
		current period	same period last year	
Current Balance	Q2 95	-4.15	-5.07	
Unemployment Rate	Aug. 95	9.5	10.3	
Interest Rate	Sep. 95	6.60	5.51	




DENMARK				
	period	% change from previous		
		period	year	
Gross Domestic Product	Q1 95	0.8	3.6	
Leading Indicator	Jun. 95	1.2	1.6	
Consumer Price Index	Aug. 95	0.2	1.6	
		current period	same period last year	
Current Balance	Q2 95	0.65	0.41	
Unemployment Rate	Jun. 95	10.2	12.3	
Interest Rate	Sep. 95	5.70	6.40	




FINLAND				
	period	% change from previous		
		period	year	
Gross Domestic Product	Q2 95	0.0	4.2	
Leading Indicator	Apr. 95	-0.6	2.3	
Consumer Price Index	Aug. 95	-0.2	0.5	
		current period	same period last year	
Current Balance	Jul. 95	0.26	0.60	
Unemployment Rate	Aug. 95	16.5	17.4	
Interest Rate	Sep. 95	5.95	5.57	




FRANCE				
	period	% change from previous		
		period	year	
Gross Domestic Product	Q2 95	0.4	2.8	
Leading Indicator	Aug. 95	-0.7	-2.9	
Consumer Price Index	Aug. 95	0.4	1.9	
		current period	same period last year	
Current Balance	Q1 95	7.00	1.95	
Unemployment Rate	Aug. 95	11.4	12.2	
Interest Rate	Sep. 95	5.96	5.63	



GERMANY				
	period	% change from previous		
		period	year	
Gross Domestic Product	Q2 95	2.5	2.2	
Leading Indicator*	Aug. 95	-0.3	-1.3	
Consumer Price Index*	Aug. 95	-0.2	1.5	
		current period	same period last year	
Current Balance	Dec. 94	-2.74	-1.07	
Unemployment Rate*	Jul. 95	6.8	6.9	
Interest Rate	Aug. 95	4.46	5.00	




GREECE				
	period	% change from previous		
		period	year	
Gross Domestic Product	1993		0.6	
Leading Indicator	Jun. 95	0.0	1.0	
Consumer Price Index	Aug. 95	0.1	8.7	
		current period	same period last year	
Current Balance	May 95	-0.74	-0.67	
Unemployment Rate		..	..
Interest Rate	Aug. 95	14.80	20.00	




ICELAND				
	period	% change from previous		
		period	year	
Gross Domestic Product	1993		1.0	
Leading Indicator		..	..
Consumer Price Index	Aug. 95	0.4	1.8	
		current period	same period last year	
Current Balance	Q2 95	0.01	0.01	
Unemployment Rate	Aug. 95	5.7	4.6	
Interest Rate	Aug. 95	7.10	4.90	

* Ex-FRG



IRELAND

	period	% change from previous	
		period	year
Gross Domestic Product	1993		4.0
Leading Indicator	Jul. 95	-1.0	7.7
Consumer Price Index	Q2 95	1.1	2.8
		current period	same period last year
Current Balance	Q1 95	0.62	0.26
Unemployment Rate	Aug. 95	14.5	14.6
Interest Rate	Jun. 95	6.75	5.56




LUXEMBOURG

	period	% change from previous	
		period	year
Gross Domestic Product	1993		0.3
Leading Indicator	Aug. 95	-0.5	-5.1
Consumer Price Index	Aug. 95	-0.1	1.8
		current period	same period last year
Current Balance		..	..
Unemployment Rate		..	..
Interest Rate		..	..



NEW ZEALAND

	period	% change from previous	
		period	year
Gross Domestic Product	Q2 95	0.0	2.3
Leading Indicator		..	..
Consumer Price Index	Q2 95	1.0	4.6
		current period	same period last year
Current Balance	Q1 95	0.08	0.40
Unemployment Rate	Q2 95	6.3	8.3
Interest Rate	Aug. 95	9.03	7.06



SPAIN

	period	% change from previous	
		period	year
Gross Domestic Product	Q1 95	1.0	3.1
Leading Indicator	Jun. 95	-0.8	2.4
Consumer Price Index	Aug. 95	0.3	4.3
		current period	same period last year
Current Balance	Jul. 95	0.63	-0.41
Unemployment Rate	Q2 95	22.5	24.1
Interest Rate	Aug. 95	9.60	7.81



TURKEY

	period	% change from previous	
		period	year
Gross Domestic Product	Q1 95	4.7	-1.4
Leading Indicator		..	..
Consumer Price Index	Aug. 95	3.9	89.9
		current period	same period last year
Current Balance	Q2 95	-0.49	1.41
Unemployment Rate	Q4 94	7.9	7.9
Interest Rate	Jul. 95	69.99	98.76




ITALY

	period	% change from previous	
		period	year
Gross Domestic Product	Q1 95	1.5	4.0
Leading Indicator	Aug. 95	0.7	-0.7
Consumer Price Index	Aug. 95	0.3	5.7
		current period	same period last year
Current Balance	Jul. 95	1.82	2.14
Unemployment Rate	Q1 95	11.8	10.8
Interest Rate	Aug. 95	10.47	8.92



MEXICO

	period	% change from previous	
		period	year
Gross Domestic Product	Q2 95	-7.6	-10.5
Leading Indicator		..	..
Consumer Price Index	Aug. 95	1.7	41.6
		current period	same period last year
Current Balance	Q2 95	0.45	-7.12
Unemployment Rate	Jul. 95	6.7	3.6
Interest Rate	Sep. 95	34.81	14.15




NORWAY

	period	% change from previous	
		period	year
Gross Domestic Product	Q4 94	1.9	4.4
Leading Indicator	Apr. 95	0.3	0.6
Consumer Price Index	Aug. 95	-0.2	2.2
		current period	same period last year
Current Balance	May 95	-0.08	0.33
Unemployment Rate	Q2 95	5.2	5.8
Interest Rate	Aug. 95	5.34	5.86




SWEDEN

	period	% change from previous	
		period	year
Gross Domestic Product	Q2 95	1.2	4.6
Leading Indicator	Aug. 95	1.4	0.0
Consumer Price Index	Aug. 95	-0.1	2.4
		current period	same period last year
Current Balance	Jul. 95	0.16	0.36
Unemployment Rate	Aug. 95	9.3	9.6
Interest Rate	Sep. 95	8.92	7.71




UNITED KINGDOM

	period	% change from previous	
		period	year
Gross Domestic Product	Q2 95	0.6	2.7
Leading Indicator	Sep. 95	0.0	-0.1
Consumer Price Index	Aug. 95	0.5	3.6
		current period	same period last year
Current Balance	Q2 95	-7.13	-3.37
Unemployment Rate	Aug. 95	8.7	9.5
Interest Rate	Sep. 95	6.72	5.67




JAPAN

	period	% change from previous	
		period	year
Gross Domestic Product	Q2 95	0.8	0.6
Leading Indicator	Aug. 95	1.0	4.4
Consumer Price Index	Aug. 95	0.2	-0.2
		current period	same period last year
Current Balance	Jul. 95	9.22	11.60
Unemployment Rate	Aug. 95	3.2	3.0
Interest Rate	Aug. 95	0.82	2.27




NETHERLANDS

	period	% change from previous	
		period	year
Gross Domestic Product	Q1 95	1.1	3.0
Leading Indicator	Aug. 95	0.0	0.0
Consumer Price Index	Aug. 95	0.2	1.5
		current period	same period last year
Current Balance	Q1 95	3.84	2.24
Unemployment Rate	Jul. 95	6.7	7.0
Interest Rate	Sep. 95	3.92	5.07



PORTUGAL

	period	% change from previous	
		period	year
Gross Domestic Product	Q4 93	1.6	-0.7
Leading Indicator	Jun. 95	-0.2	-2.1
Consumer Price Index	Aug. 95	0.5	4.0
		current period	same period last year
Current Balance	Q4 94	-0.94	0.02
Unemployment Rate	Q2 95	7.1	6.9
Interest Rate	Aug. 95	9.22	11.66



SWITZERLAND

	period	% change from previous	
		period	year
Gross Domestic Product	Q2 95	0.3	1.4
Leading Indicator	Aug. 95	0.2	2.2
Consumer Price Index	Aug. 95	0.4	2.0
		current period	same period last year
Current Balance	Q1 95	5.83	6.13
Unemployment Rate	Aug. 95	4.2	4.7
Interest Rate	Aug. 95	2.81	4.22



UNITED STATES

	period	% change from previous	
		period	year
Gross Domestic Product	Q2 95	0.3	3.3
Leading Indicator	Aug. 95	1.0	1.7
Consumer Price Index	Aug. 95	0.3	2.6
		current period	same period last year
Current Balance	Q2 95	-43.62	-37.99
Unemployment Rate	Aug. 95	5.6	6.0
Interest Rate	Sep. 95	5.73	5.03

Index of articles published in
THE OECD OBSERVER
Nos. 185 to 196

185 December 1993/January 1994	189 August/September 1994	193 April/May 1995
186 February/March 1994	190 October/November 1994	194 June/July 1995
187 April/May 1994	191 December 1994/January 1995	195 August/September 1995
188 June/July 1994	192 February/March 1995	196 October/November 1995

Economy

<i>Japan: Public Finance</i> Robert Price	185
<i>The United States: Restoring Productivity Growth</i> Mark French and Peter Jarrett	185
<i>OECD Economic Outlook, No. 54 Highlights</i>	186
<i>Productivity in Perspective</i> A. Steven Englander and Andrew Gurney	188
<i>Spotlight on Korea</i> Richard Herd and Randall S. Jones	188
<i>Spotlight on Mexico</i> Bénédicte Larre and Bernard Wacquez	188
<i>Spotlight on Turkey</i> Helmut Ziegelschmidt	188
<i>Supplement: OECD in Figures – 1994 Edition</i>	188
<i>Spain: The Structural Imperative</i> Panayotis Thomopoulos	189
<i>Ministerial Communiqué, 1994</i>	189
<i>OECD Economic Outlook, No. 55 Highlights</i>	189
<i>Germany: Overcoming Structural Hurdles</i> Alexandra Iwanchuk Bibbee	190
<i>Denmark: The Economy Takes Off</i> Sveinbjörn Blöndal and Hans Christiansen	190
<i>The United Kingdom: The National Health System</i> Yutaka Imai	190
<i>Italy: Corporate Governance</i> Andrea Goldstein and Giuseppe Nicoletti	192
<i>Canada: Recasting Social Assistance</i> Hannes Suppanz	192
<i>New Zealand: The Results of Openness</i> Adrian Orr	192
<i>OECD Economic Outlook, No. 56 Highlights</i>	192
<i>Greece: Reforming Financial Markets</i> George Soumelis	193
<i>Austria: Challenges for the Business Sector</i> Alexandra Iwanchuk Bibbee	194
<i>Ministerial Communiqué, 1995</i>	194
<i>Implementing the Jobs Strategy</i>	194
<i>Supplement: OECD in Figures – 1995 Edition</i>	194
<i>Portugal: Developing Human Capital</i> Marco Mira d'Ercole	195
<i>OECD Economic Outlook, No. 57 Highlights</i>	195

<i>Germany: The Structures of Corporate Governance</i> Jørgen Elmeskov	196
---	-----

Agriculture and Fisheries

<i>Direct Payments for Farmers?</i> Wilfrid Legg	185
<i>Hungarian Agriculture at the Crossroads</i> Matthew Harley	186
<i>New Paths for Turkish Agriculture</i> Morvarid Bagherzadeh and Ronald Steenblik	189
<i>Radical Reform in Mexican Agriculture</i> Javier Bonilla and Gérard Viatte	191
<i>Restructuring Polish Agriculture</i> Luis Portugal	192
<i>Agricultural Reform in Sweden</i> Sture Åström	193
<i>Farm Household Incomes</i> Catherine Moreddu	194
<i>Early Retirement for Farmers</i> Michael Ryan	194
<i>Hitting the High Seas</i> William Emerson	195
<i>OECD Agriculture after Uruguay</i> Carmel Cahill	196
<i>Towards Sustainable Agriculture</i> Leo Maier and Ronald Steenblik	196
<i>Farmers, Forestry and the Environment</i> Gérard Bonnis	196

Development

<i>A Turning-point for Southern Africa</i> Stéphanie Baile and Horst Breier	187
<i>Energy Demand in Developing Countries</i> Karen Scheiner	190
<i>Trade, Environment and Aid</i> Dirk von Felbert	195

Economies in Transition

<i>Banks in the East: Paths to Privatisation</i> Hans J. Blommestein	185
<i>A Framework for the Environment in Eastern Europe</i> Brendan Gillespie and Anthony Zamparutti	185
<i>Reforming Romanian Energy Policy</i> Stephen Perkins	185
<i>Investing in Eastern Europe: Catalyst for Transition</i> Rolf Alter	186
<i>Hungarian Agriculture at the Crossroads</i> Matthew Harley	186

<i>Science in Russia: Implosion and Rebirth?</i>	186
Jean-Eric Aubert	
<i>Electricity: East Meets West?</i>	187
Philip Swanson	
<i>Foreign Investment in Hungary</i>	189
Marie-France Houde	
<i>Changing Czech Energy Policy</i>	191
Jeffrey D. Pierson	
<i>Energy in Russia</i>	192
Randolf Gränzer	
<i>Restructuring Polish Agriculture</i>	192
Luis Portugal	
<i>Privatisation through Liquidation</i>	192
Stilpon Nestor and Scott Thomas	
<i>Defence Conversion in Russia's Regions</i>	192
Ethan B. Kapstein and C. Marshall Mills	
<i>Education and Training in Hungary</i>	193
John Lowe	
<i>Tax, Transition and Investment</i>	193
David Holland and Jeffrey Owens	
<i>Foreign Investment in Russia</i>	193
Barbara Peitsch	
<i>Industrial Evolution in Hungary</i>	193
Helgard Wienert	

Education

<i>Expanding Choice in Austrian Education</i>	186
John Pratt	
<i>Tackling Educational Disadvantage</i>	186
Peter Evans	
<i>Integrating Handicapped Children</i>	187
Peter Evans	
<i>Schools: A Matter of Choice</i>	187
Donald Hirsch	
<i>Using Schools after Class Hours?</i>	189
Michael Hacker	
<i>Three Sources of Good Teaching</i>	191
David Hopkins and David Stern	
<i>Making Life-long Learning a Reality for All</i>	193
Jean-Claude Paye	
<i>Comparing Educational Output</i>	193
Norberto Bottani	
<i>Recognising Skills and Qualifications</i>	193
Danielle Colardyn and Marianne Durand-Drouhin	
<i>Investing in Human Capital</i>	193
Riel Miller and Gregory Wurzburg	
<i>Education and Training in Hungary</i>	193
John Lowe	
<i>Education: Face-to-face or Distance?</i>	194
Pierre Duguet	
<i>Portugal: Developing Human Capital</i>	195
Marco Mira d'Ercole	

Employment

<i>The Pros and Cons of Early Retirement</i>	185
Mahrez Okba	
<i>The Hidden Sources of Employment</i>	185
Jean-Pierre Pellegrin	
<i>Women and the Restructuring of Employment</i>	186
Françoise Coré	
<i>Accommodating Women in the City</i>	186
Lindsay McFarlane	
<i>Equal-employment Opportunities in the Public Sector</i>	186
Sally Washington	
<i>Foreign Investment: Engine for Employment?</i>	190
Rolf Alter	
<i>Employment Outlook</i>	190
<i>Creating Viable and Productive Jobs</i>	
<i>Technology, Employment and Structural Change</i>	194
Jean-Claude Paye	
<i>Technology and Jobs</i>	194
George Papaconstantinou	
<i>Implementing the Jobs Strategy</i>	194
<i>How Trade Affects Jobs</i>	195
Nicholas Vanston	
<i>Employment Outlook</i>	196
<i>Highlights</i>	

Energy

<i>Reforming Romanian Energy Policy</i>	185
Stephen Perkins	
<i>The Energy-efficient City</i>	187
Ariel Alexandre and Nicola De Michelis	
<i>Electricity: East Meets West?</i>	187
Philip Swanson	
<i>Transporting Natural Gas</i>	188
Jonathan Angel	
<i>The Real Costs of Liquid Biofuels</i>	190
Laurie Michaelis	
<i>Energy Demand in Developing Countries</i>	190
Karen Schneider	
<i>Changing Czech Energy Policy</i>	191
Jeffrey D. Pierson	
<i>Energy in Russia</i>	192
Randolf Gränzer	
<i>Cars, Congestion, CO₂ and Choice</i>	195
Laurie Michaelis	
<i>Voluntary Approaches for Energy-related CO₂ Abatement</i>	196
Lee Solsbery and Peter Wiederkehr	

Enterprise

<i>Italy: Corporate Governance</i>	192
Andrea Goldstein and Giuseppe Nicoletti	
<i>Austria: Challenges for the Business Sector</i>	194
Alexandra Iwanchuk Bibbee	

<i>Germany: The Structures of Corporate Governance</i>	196
Jørgen Elmeskov	

Environment

<i>A Framework for the Environment in Eastern Europe</i>	185
Brendan Gillespie and Anthony Zamparutti	
<i>From Stick to Carrot in the Environment</i>	186
Jean-Philippe Barde and Johannes Baptist Opschoor	
<i>The Greening of Trade</i>	187
Candice Stevens	
<i>The Environmental Life-cycle and Trade</i>	188
Candice Stevens	
<i>The Green Face of Biotechnology</i>	189
Salomon Wald	
<i>Agreement on the Environment</i>	189
Michel Potier	
<i>Evaluating Chemical Risks</i>	189
Dian Turnheim	
<i>China Charges for Pollution</i>	192
Michel Potier	
<i>Trade, Environment and Aid</i>	195
Dirk von Felbert	
<i>Cars, Congestion, CO₂ and Choice</i>	195
Laurie Michaelis	

Financial and Fiscal Affairs

<i>Banks in the East: Paths to Privatisation</i>	185
Hans J. Blommestein	
<i>Investing in Eastern Europe: Catalyst for Transition</i>	186
Rolf Alter	
<i>Reconciling Trade and Competition Policies</i>	187
Phedon Nicolaides	
<i>Foreign Investment in Hungary</i>	189
Marie-France Houde	
<i>Mexico and the OECD Codes of Liberalisation</i>	189
Pierre Poret	
<i>Foreign Investment: Engine for Employment?</i>	190
Rolf Alter	
<i>Mexico and Foreign Investment</i>	190
Marie-France Houde	
<i>Taxation and Household Saving</i>	191
Jeffrey Owens and Mark Robson	
<i>Tax, Transition and Investment</i>	193
David Holland and Jeffrey Owens	
<i>Foreign Investment in Russia</i>	193
Barbara Peitsch	
<i>Greece: Reforming Financial Markets</i>	193
George Soumelis	
<i>Financial Deregulation</i>	194
Ketil Hviding	
<i>Trade and Investment: The New Liberalisation</i>	195
Jean-Claude Paye	

<i>The Move to VAT</i>	195
Erik Jørgensen and Jeffrey Owens	

<i>A Looming World Capital Shortage?</i>	196
Barrie Stevens	

Globalisation

<i>Globalisation and Pharmaceuticals</i>	185
Claudio Casadio Tarabusi and Graham Vickery	
<i>Regional Integration</i>	192
Serge Devos	
<i>The Consumer in the Global Market</i>	192
Timothy H. Baker	
<i>Battling International Bribery</i>	192
Catherine Yannaca-Small	
<i>A Looming World Capital Shortage?</i>	196
Barrie Stevens	

Industry

<i>Globalisation and Pharmaceuticals</i>	185
Claudio Casadio Tarabusi and Graham Vickery	
<i>A New Approach to Industrial Policy</i>	187
Rauf Gönenç	
<i>From Industrial Policy to Competitiveness Policies</i>	187
Hanspeter Gassmann	
<i>Mapping Industrial Activity</i>	188
Dianne Dobbeck and Wendy Woods	
<i>The Patterns of Industrial Policy</i>	191
Graham Vickery	
<i>A Profile of Industrial Trends</i>	191
George Papaconstantinou	
<i>The Agreement on Shipbuilding</i>	192
Wilhelm Kurth	
<i>Industrial Evolution in Hungary</i>	193
Helgard Wienert	

International Relations

<i>Mexico, 25th Member of the OECD</i>	188
Christian Schricke	
<i>Regional Integration</i>	192
Serge Devos	

Migration

<i>What Laws for Naturalisation?</i>	188
Nicole Guimezanes	
<i>New Patterns of Migration</i>	192
Jean-Pierre Garson and Agnès Puymoyen	

Public Management

<i>Equal-employment Opportunities in the Public Sector</i>	186
Sally Washington	

Regional Policy

<i>New Goals for Regional Policy</i>	193
Rémy Prud'homme	

Regulation

<i>Why Governments Must Work Together</i>	186
Scott H. Jacobs	

<i>Opening-up Regulation</i>	195
Scott H. Jacobs and Juhani Korhonen	

Rural Development

<i>Niche Markets for the Rural World</i>	190
Bernard Lane and Kenji Yoshinaga	

<i>Capturing the Value of Rural Assets</i>	190
Philippe Muheim and Priscilla Salant	

Science and Technology

<i>The Coalescence of Technology</i>	185
Patrick Dubarle	

<i>Plant Biotechnology Comes of Age</i>	185
Seizo Sumida	

<i>Science in Russia: Implosion and Rebirth?</i>	186
Jean-Eric Aubert	

<i>The Dawn of Global Scientific Co-operation</i>	187
an interview with Françoise Praderie	

<i>The Green Face of Biotechnology</i>	189
Salomon Wald	

<i>IT Standardisation and the Disparate User</i>	189
Georges Ferné	

<i>Technology, Employment and Structural Change</i>	194
Jean-Claude Paye	

<i>Technology and Jobs</i>	194
George Papaconstantinou	

<i>Financing Innovation</i>	194
Jean Guinet	

<i>The Science System Evolves</i>	196
Gabriel Drilhon	

Social Affairs

<i>The Pros and Cons of Early Retirement</i>	185
Mahrez Okba	

<i>Who Looks After the Elderly?</i>	188
Patrick Hennessy	

<i>Using Schools after Class Hours?</i>	189
Michael Hacker	

<i>The Social Fabric Under Pressure</i>	189
Barrie Stevens	

<i>The United Kingdom: The National Health System</i>	190
Yukata Imai	

<i>Reforming Health Care</i>	192
Maitland MacFarlan and Howard Oxley	

<i>Canada: Recasting Social Assistance</i>	192
Hannes Suppanz	

<i>Early Retirement for Farmers</i>	194
Michael Ryan	

<i>Parental Leave: What and Where?</i>	195
Françoise Coré and Vassiliki Koutsogeorgopoulou	

Telecommunications

<i>Telecom Tariffs and the Move to Markets</i>	191
Yuji Kato and Sam Paltridge	

<i>Competition Comes to Mexican Telecoms</i>	194
Luis Rey	

<i>The Global Information Infrastructure</i>	196
Jean-Claude Paye	

<i>The Information Explosion</i>	196
Jeremy Beale	

<i>A New Electronic Tool for Business</i>	196
Georges Ferné and Richard Hawkins	

<i>Upwardly Mobile Telephony</i>	196
Sam Paltridge	

<i>Property and Privacy in Cyberspace</i>	196
Deborah Hurley	

Trade

<i>Hong Kong, Singapore, Malaysia and the Fruits of Free Trade</i>	185
Anne Richards	

<i>The Greening of Trade</i>	187
Candice Stevens	

<i>Reconciling Trade and Competition Policies</i>	187
Phedon Nicolaides	

<i>The Environmental Life-cycle and Trade</i>	188
Candice Stevens	

<i>China's Growing Presence</i>	189
Kiichiro Fukasaku	

<i>How Open is World Trade?</i>	191
Anthony Kleitz and Americo Beviglia Zampetti	

<i>Trade and Investment: the New Liberalisation</i>	195
Jean-Claude Paye	

<i>Trade, Environment and Aid</i>	195
Dirk von Felbert	

<i>How Trade Affects Jobs</i>	195
Nicholas Vanston	

Transport

<i>The Economics of Transport Costs</i>	188
Tom Jones and Jack Short	

<i>Cars, Congestion, CO₂ and Choice</i>	195
Laurie Michaelis	

Urban Affairs

<i>Accommodating Women in the City</i>	186
Lindsay McFarlane	

<i>The Energy-efficient City</i>	187
Ariel Alexandre and Nicola De Michelis	

<i>Global Cities and Economic Growth</i>	190
Josef W. Konvitz	

<i>Women and Urban Planning</i>	195
Lindsay McFarlane	

Publications

July–October 1995

Order Form at the end of the issue

Economy

OECD Economic Surveys*
1994–1995 Series

Belgium/Luxembourg

September 1995
(10 95 29 1) ISBN 92-64-14550-8, 160pp.

France

September 1995
(10 95 14 1) ISBN 92-64-14588-5, 135pp.

Germany

August 1995
See Jørgen Elmeskov, 'Germany: The Structures of Corporate Governance', *The OECD Observer*, No. 196, October/November 1995.
(10 95 15 1) ISBN 92-64-14562-1, 180pp.

Hungary

September 1995
(09 95 01 1) ISBN 92-64-14552-4, 194pp.

Mexico

September 1995
(10 95 40 1) ISBN 92-64-14629-6, 145pp.

Norway

August 1995
(10 95 22 1) ISBN 92-64-14451-6, 128pp.

The Russian Federation

September 1995
(09 95 04 1) ISBN 92-64-14587-7, 113pp.

Sweden

August 1995
See pp. 46–47 of this *OECD Observer*.
(10 95 25 1) ISBN 92-64-14536-2, 142pp.

Switzerland

September 1995
(10 95 26 1) ISBN 92-64-14584-2, 74pp.
Each survey:
France: FF100; elsewhere: FF130 US\$24 DM39
Subscription:
France: FF1,200; elsewhere: FF1,300 US\$125 DM710
*Also available as an electronic book.

Series C*

Foreign Trade by Commodities Volume 5/1993

July 1995
(34 94 05 3), bilingual, 394pp.
ISSN 0474-540X
Subscription:
France: FF2,000; elsewhere: FF2,200 US\$125 DM710
*Also available on magnetic tape and CD-ROM.

Historical Statistics 1960–1993* 1995 Edition

August 1995
This publication provides an overview of the economic development of the member countries of the OECD since 1960. The tables mainly show derived statistics such as growth rates and percentage shares. They include national accounts, population and labour force, prices, domestic finance and foreign trade.
(30 95 07 3) ISBN 92-64-04496-5, bilingual, 180pp.
France: FF150; elsewhere: FF195 US\$39 DM55
*Also available on diskette.

Short-Term Economic Indicators, Transition Economies 3/1995

August 1995
Indicators on industrial production, business surveys, construction, employment, earnings, prices, domestic and foreign finance, interest rates and domestic and foreign trade for the following 21 transition countries: Armenia, Azerbaijan, Bulgaria, Czech Republic, Estonia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Republic of Moldova, Romania, Russian Federation, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.
Available on diskette
(07 95 03 3) ISBN 92-64-04500-7, bilingual, 200pp.
France: FF45; elsewhere: FF60 US\$10 DM17
ISSN 1019-9829
Subscription:
France: FF140; elsewhere: FF160 US\$18 DM57

Household Production in OECD Countries: Data Sources and Measurement Methods

September 1995
(81 95 09 1) ISBN 92-64-14564-8, 58pp.
France: FF45; elsewhere: FF60 US\$12 DM17

Agriculture, Fisheries, Food

OECD Documents

Forestry, Agriculture and the Environment

September 1995
See Gérard Bonnis, 'Farmers, Forestry and the Environment', *The OECD Observer*, No. 196, October/November

10 Bestsellers

1. Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations

(23 95 02 1) ISBN 92-64-14533-8, July 1995, 150 pp.
France: FF240; elsewhere: FF310 US\$63 DM88

2. International Direct Investment Statistics Yearbook 1995

(21 95 09 3) ISBN 92-64-04499-X, August 1995, 318 pp., Bilingual
France: FF260; elsewhere: FF325 US\$66 DM93

3. Monitoring the World Economy 1820–1992

(41 95 09 1) ISBN 92-64-14549-4, September 1995, 256 pp.
France: FF120; elsewhere: FF155 US\$30 DM44

4. OECD Environmental Performance Reviews Austria

(97 95 09 1) ISBN 92-64-14528-1, August 1995, 182 pp.
France: FF130; elsewhere: FF170 US\$35 DM48

5. OECD Economic Surveys Germany

(10 95 15 1) ISBN 92-64-14562-1, August 1995, 186 pp.
France: FF100; elsewhere: FF130 US\$22 DM38

6. OECD Economic Surveys Sweden

(10 95 25 1) ISBN 92-64-14536-2, August 1995, 142 pp.
France: FF100; elsewhere: FF130 US\$22 DM38

7. OECD Economic Surveys Hungary

(09 95 01 1) ISBN 92-64-14552-4, September 1995, 194 pp.
France: FF100; elsewhere: FF130 US\$22 DM38

8. OECD Economic Surveys Belgium/Luxembourg

(10 95 29 1) ISBN 92-64-14550-8, September 1995, 160 pp.
France: FF100; elsewhere: FF130 US\$22 DM38

9. OECD Economic Surveys Norway

(10 95 22 1) ISBN 92-64-14451-6, August 1995, 128 pp.
France: FF100; elsewhere: FF130 US\$22 DM38

10. Women in the City Housing, Services, and the Urban Environment

(04 95 05 1) ISBN 92-64-14570-2, August 1995, 170 pp.
France: FF140; elsewhere: FF180 US\$37 DM50

1995.
(51 95 12 1) ISBN 92-64-14580-X, 196pp.
France: FF125; elsewhere: FF165 US\$33 DM45

The Uruguay Round: A Preliminary Evaluation of the Impacts of the Agreement on Agriculture in the OECD Countries

September 1995
See Carmel Cahill, 'OECD Agriculture
after Uruguay', *The OECD Observer*,
No. 196, October/November 1995.
(51 95 13 1) ISBN 92-64-14582-6, 93pp.
France: FF95; elsewhere: FF125 US\$25 DM35

Development and Aid

Development Centre Studies

Monitoring the World Economy 1820-1992

September 1995
The most comprehensive database avail-
able for comparative, quantitative analy-
sis of the economic performance of
nations.
(41 95 09 1) ISBN 92-64-14549-4, 256pp.
France: FF120; elsewhere: FF155 US\$30 DM44

Development Centre Seminars

Participatory Development: From Advocacy to Action

August 1995
Participatory development is a process
by which people, communities and
countries gain voice and move towards
enhanced autonomy, going from
passiveness or submission to negoti-
ated action. This is an integral part of
the process of sustainable develop-
ment.
(41 95 08 1) ISBN 92-64-14539-7, 250pp.
France: FF190; elsewhere: FF245 US\$50 DM70

*Development Co-operation Review Series
No. 9*

Germany

August 1995
(43 95 09 1) ISBN 92-64-14540-0, 54pp.
France: FF50; elsewhere: FF65 US\$13 DM18

Education

*Centre for Educational Research
and Innovation*

Educational Research and Development: Trends, Issues and Challenges

September 1995

(96 95 08 1) ISBN 92-64-14553-2, 180pp.
France: FF150; elsewhere: FF195 US\$40 DM56

*OECD Documents
Centre for Educational Research
and Innovation*

Educational Research and Development: Austria, Germany, Switzerland

September 1995
What does educational research and
development mean in Austria, Germany
and Switzerland? Given their political,
social, and cultural contexts, what are
the common features in the policies
and practices of these three countries?
How do they diverge? How do they
compare with educational R&D in other
OECD countries?

(96 95 07 1) ISBN 92-64-14554-0, 81pp.
France: FF50; elsewhere: FF65 US\$13 DM19

*Centre for Educational Research
and Innovation*

Higher Education Management Vol. 7, No. 2

July 1995
• The changing role of the state: View-
points of system leaders.
• The university of the future: Building
on strengths.
• The university and the state: Chang-
ing relationships in Austria and the
Czech Republic.
• The modern university: The impact
of the European Union.
• University government partnerships:
Information systems.
• Mission statements: How they ex-
press institutional responses to the
changing environment in the UK.
• Universities outside the mainstream:
Internal colleges and outlying universi-
ties.
• Outlying universities: Combining re-
gional, national, and international func-
tions.
• Czech higher education: Staffing poli-
cies and internationalisation.
(89 95 02 1) ISBN 92-64-14471-4, 96pp.
France: FF100; elsewhere: FF130 US\$23 DM40
ISSN 1013-851X
Subscription:
France: FF260; elsewhere: FF285 US\$54 DM95

*Centre for Educational Research
and Innovation*

Schools under Scrutiny

September 1995
How effective is your neighbourhood
school? The performance of national
education systems is a growing con-
cern in many OECD countries, and
schools themselves are coming into the
limelight. As standards rise, and cur-
riculum, assessment and administra-

tions are reformed, schools are subject
to unprecedented public scrutiny and
face the daunting challenge of taking
more responsibility for their own per-
formance.

This report focuses on the evalua-
tion of school performance in seven
countries: England, France, Germany,
New Zealand, Spain, Sweden and the
United States.

(96 95 10 1) ISBN 92-64-14567-2, 156pp.
France: FF150; elsewhere: FF195 US\$40 DM55

Indicators of Education Systems

Decision-Making in 14 OECD Education Systems

October 1995
How do decision processes concerning
education compare in different coun-
tries? This publication compares levels,
modes and domains of decision-mak-
ing processes in 14 OECD education
systems during 1990/91.

(96 95 03 1) ISBN 92-64-14421-8, 160pp.
France: FF120; elsewhere: FF155 US\$30 DM45

PEB Papers

Secondary Education in France:

A Decade of Change

September 1995
How can public sector educational re-
sources be better managed? The ques-
tion has led to decentralised decision-
making in many OECD countries in
recent years. In France, responsibility
for building and running more than
7,000 secondary schools was transferred
from national to local government in
the mid-1980s.

This report analyses the new divi-
sion of power and describes how local
government has responded to the chal-
lenge it faced. The French experience
provides a valuable contribution to the
debate about how to manage educa-
tion effectively, and will be of parti-
cular interest to educators, administra-
tors, architects and planners.
(95 95 02 1) ISBN 92-64-14548-6, 66pp.
France: FF70; elsewhere: FF90 US\$18 DM26

Continuing Professional Education of Highly- Qualified Personnel

September 1995
Institutions of higher education are in-
creasingly involved in ongoing pro-
fessional education. Businesses, pro-
fessional associations and the commer-
cial sector are also quite present in this
market. Together, and each with its
specific contribution, these players help
structure a training market and im-
proved worker qualifications.

This report analyses how these
changes, in 17 OECD countries, are
reshaping higher education and raising
challenges for policy-makers.

(91 95 09 1) ISBN 92-64-14477-3, 102pp.
France: FF120; elsewhere: FF155 US\$32 DM44

Environmental Learning for the 21st Century

September 1995
Schools, teachers, and students can co-
operate creatively in local initiatives
with their communities to resolve en-
vironmental problems through active
teaching and learning. This publication
analyses policy approaches, describes
school initiatives, and explores innova-
tive pedagogical methods in a number
of OECD countries. These provide
potential answers to this urgent ques-
tion.

(96 95 06 1) ISBN 92-64-14478-1, 112pp.
France: FF115; elsewhere: FF150 US\$31 DM43

PEB Exchange No. 25

August 1995
(88 95 25 1) ISSN 1018-9327, 20pp.
Subscription:
France: FF130; elsewhere: FF140 US\$30 DM48

Redefining the Place to Learn

August 1995
See Pierre Duguet, 'Education: Face-to-
face or Distance?', *The OECD Observer*,
No. 194, June/July 1995.
(95 95 03 1) ISBN 92-64-14563-X, 172pp.
France: FF140; elsewhere: FF180 US\$37 DM50

Employment and Social Affairs

Social Policy Studies No. 16

The Transition from Work to Retirement

August 1995
The population in most OECD coun-
tries is aging. Will there be enough
working-age people to support the
growing proportion of the population
which is above the standard retirement
age? This question is all the more
troubling given the increasing number
of workers below the standard retire-
ment age who have been leaving the
labour force. This volume compares
policy choices open to governments.
(81 95 08 1) ISBN 92-64-14555-9, 178pp.
France: FF165; elsewhere: FF215 US\$43 DM60

Labour Force Statistics 1973-1993*

August 1995

(30 95 06 3) ISBN 92-64-04497-3, bilingual, 500pp.
France: FF440; elsewhere: FF550 US\$110 DM155
*Also available on magnetic tape.

*CCET (Centre for Co-operation
with the Economies in Transition)*

Social and Labour Market Policies in Hungary

September 1995
(14 95 08 1) ISBN 92-64-14525-7, 192pp.
France: FF180; elsewhere: FF235 US\$48 DM67

Energy

IEA (International Energy Agency)

Energy Policies of IEA Countries 1994 Review

July 1995
(14 95 18 1) ISBN 92-64-14472-2, 610pp.
France: FF580; elsewhere: FF695 US\$144 DM198

Energy Statistics and Balances of Non-OECD Countries 1992-1993*

September 1995
(61 95 22 3) ISBN 92-64-04605-4, bilingual, 542pp.
France: FF450; elsewhere: FF565 US\$116 DM162
*Also available on magnetic tape.

NEA (Nuclear Energy Agency)

Nuclear Energy Programmes in OECD/NEA Member Countries

September 1995
(66 95 13 1) ISBN 92-64-14466-8, 90pp.
France: FF90; elsewhere: FF115 US\$24 DM33

OECD Documents

Physics of Plutonium Recycling, Volume I Issues and Perspectives A report by the Working Party on Physics of Plutonium Recycling of the NEA Nuclear Science Committee

August 1995
(66 95 19 1) ISBN 92-64-14538-9, 190pp.
France: FF150; elsewhere: FF195 US\$39 DM55

Physics of Plutonium Recycling – Volume II Plutonium Recycling in Pressurized-Water Reactors

October 1995
(66 95 19 1) ISBN 92-64-14590-7, 131pp.
France: FF100; elsewhere: FF110 US\$27 DM37

Physics of Plutonium Recycling – Volume III Void Reactivity Effect

in Pressurized-Water Reactors

October 1995
(66 95 20 1) ISBN 92-64-14591-5, 131pp.
France: FF100; elsewhere: FF130 US\$27 DM37

Environment

Environmental Performance Reviews

Canada
September 1995
(97 95 10 1) ISBN 92-64-14546-X, 242pp.
France: FF130; elsewhere: FF170 US\$34 DM48

OECD Documents

Hazardous Air Pollutants: The London Workshop

August 1995
Of the more than 3,000 ambient air pollutants clouding urban environments, only a handful of the hazardous air pollutants have received regulatory attention in most countries. Many hazardous air pollutants now raise concern, given the health risks they pose locally, regionally and globally, and the international policy co-operation they require.

(97 95 06 1) ISBN 92-64-14535-4, 342pp.
France: FF190; elsewhere: FF245 US\$47 DM72

OECD Documents

Promoting Cleaner and Safer Industrial Production in Central and Eastern Europe

September 1995
This volume brings together the papers given at a seminar on 'Auditing to Improve Safety, Environmental Performance and Economic Efficiency', where the chemical industry in the Ukraine was a particular focus of discussion. The practical experiences described in these papers demonstrate how environmental and economic performance can be enhanced at little or no cost.

(97 95 12 1) ISBN 92-64-14589-3, 144pp.
France: FF80; elsewhere: FF105 US\$22 DM30

Financial, Fiscal and Enterprise Affairs

*OECD Financial Statistics (Part 2)
Financial Accounts of OECD Countries*

Canada 1978-1993*
August 1995
(20 94 33 3) ISBN 92-64-04606-2, bilingual, 50pp.

France 1979-1994*

September 1995
(20 95 25 3) ISBN 92-64-04608-9, bilingual, 66pp.
Each Survey:
France: FF50; elsewhere: FF65 US\$12 DM20
Subscription:
France: FF1,700; elsewhere: FF1,870 US\$340 DM600
*Also available on diskette.

OECD Financial Statistics (Part 3)

Non-Financial Enterprises Financial Statements 1994

October 1995
(20 94 44 3) ISBN 92-64-04607-0, bilingual, 125pp.
France: FF120; elsewhere: FF155 US\$32 DM44
Subscription:
France: FF1,200; elsewhere: FF1,300 US\$240 DM398

*OECD Reviews of Foreign Direct
Investment*

United States

August 1995
The United States has become the largest recipient of foreign direct investment (FDI) in the world (\$60 billion in 1994). What are the policy implications? Has the openness of foreign markets to US firms affected FDI in the United States? What implications do US national security provisions have for foreign investors?

(21 95 52 1) ISBN 92-64-14526-5, 136pp.
France: FF90; elsewhere: FF115 US\$20 DM37
ISSN 1021-5794
Subscription:
France: FF300; elsewhere: FF330 US\$62 DM110

Consumer Policy in OECD Countries 1991-1992 1995 Edition

September 1995
(24 95 04 1) ISBN 92-64-14556-7, 274pp.
France: FF190; elsewhere: FF245 US\$50 DM70

International Direct Investment Statistics Yearbook 1995*

August 1995
This volume contains a complete series of international direct investment statistics in a standardised format combining sectoral and geographical breakdowns for flow and stock data for all OECD countries. Technical notes explain the methodology of data collection used in each country.

137 tables and 24 charts.
(21 95 03 3) ISBN 92-64-04499-X, bilingual, 318pp.
France: FF260; elsewhere: FF325 US\$66 DM93
*Also available on diskette.

Revenue Statistics of OECD Member Countries 1965-1994*

August 1995
(23 95 03 3) ISBN 92-64-04498-1, bilingual, 256pp.
France: FF240; elsewhere: FF310 US\$64 DM90
*Also available on diskette and magnetic tape.

OECD Documents

Securities Markets in OECD Countries: Organisation and Regulation

October 1995
This publication provides an overview of recent organisational and regulatory changes affecting securities markets, bringing together detailed information from OECD countries. It includes a general discussion of main regulatory objectives and how internationalisation has affected the ability of regulators to pursue these goals. It also points out developments – such as the international expansion of markets and trading systems, the convergence of regulatory regimes, and the direct restrictions to market access – that are likely to acquire particular importance in the near future.

(21 95 11 1) ISBN 92-64-14632-6, 110pp.
France: FF80; elsewhere: FF105 US\$22 DM30

Industry, Science and Technology

*Information, Computer
and Communications Policy Series, 37*

Price Caps for Telecommunications: Policies and Experiences

September 1995
Governments often regulate prices for public utilities. As telecommunication service markets have been opened to competition, new ways had to be found to regulate prices of the former monopoly carriers. In recent years, telecommunication regulators have become increasingly interested in using price caps as a regulatory tool.

(95 95 04 1) ISBN 92-64-14544-3, 82pp.
France: FF100; elsewhere: FF130 US\$26 DM37

Megascience: The OECD Forum

Megascience Policy Issues

September 1995
This volume, composed of five studies, examines some aspects of megascience policy discussed in OECD Megascience Forum meetings since 1992:

- How do scientists prepare a major science project?
- How do governments decide whether to take on big science projects?
- How do governments engage in consultations when a project involves several participating countries?
- What are the problems facing the

host country of an international megascience facility?

- How are the costs and funding of the projects administered (using the example of the United States)?

(92 95 08 1) ISBN 92-64-14557-5, 250pp.
France: FF230; elsewhere: FF300 US\$60 DM84

The Global Human Genome Programme

September 1995

Much research is being done on human genetic material. At stake are the ultimate knowledge of individual heredity, the understanding of the links between the human genome and those of other organisms, and the possibility of intervening to correct certain inherited traits which provoke as yet incurable diseases.

(92 95 09 1) ISBN 92-64-14575-3, 75pp.
France: FF80; elsewhere: FF105 US\$21 DM30

OECD Documents

Bioremediation: The Tokyo '94 Workshop

October 1995

Waste and pollution have become global concerns. Bioremediation and bioprevention – the use of micro-organisms to treat or avoid pollution – are increasingly recognised as treatments of choice in an impressive range of areas. These techniques are employed more and more often in both traditional and novel applications to treat air, water and soil, to monitor and prevent pollution, to manage life cycles and renew materials, to carry energy. They are flexible, avoid some of the problems associated with other techniques, can be cheaper than traditional methods and respond to a widespread preference for biological over chemical or physical waste removal methods.

(93 95 06 1) ISBN 92-64-14634-2, 692pp.
France: FF450; elsewhere: FF565 US\$116 DM162

The Steel Market in 1994 and the Outlook for 1995 and 1996

July 1995

(58 95 03 1) ISBN 92-64-14531-1, 46pp.
France: FF120; elsewhere: FF155 US\$31 DM44

Public Management

Governance in Transition Public Management Reforms in OECD Countries

October 1995

See Scott Jacobs and Juhani Korhonen, 'Opening-up Regulation', *The OECD Observer*, No. 195, August/September 1995.

(42 95 02 1) ISBN 92-64-14486-2, 247pp.
France: FF260; elsewhere: FF325 US\$67 DM93

Budgeting for Results: Perspectives on Public Expenditure Management

August 1995

Effective systems for allocating, managing and controlling public sector resources are fundamental elements of good governance. The necessity of continuing fiscal restraint and demands for more and better public services are changing budgetary practices in OECD countries. Budgets are being used increasingly as instruments for promoting managerial improvement and programme effectiveness, in addition to their control and allocation functions. This report analyses budget practices and innovations in 22 OECD countries.

(42 95 01 1) ISBN 92-64-14476-5, 232pp.
France: FF290; elsewhere: FF365 US\$73 DM102

Territorial Development

Women in the City Housing, Services, and the Urban Environment

August 1995

See Lindsay McFarlane, 'Accommodating Women in the City', *The OECD Observer*, No. 186, February/March 1994.

(04 95 05 1) ISBN 92-64-14570-2, 170pp.
France: FF140; elsewhere: FF180 US\$37 DM50

Trade

Export Credit Financing Systems in OECD Member and Non-member Countries

September 1995

(22 95 50 1) ISBN 92-64-14559-1, 330pp.
France: FF380; elsewhere: FF475 US\$97 DM135

Transport

Road Transport Research

Road Infrastructure Rehabilitation and Safety Strategies in Central and Eastern Europe:

Summary Report of Thirteen Joint Workshops

October 1995

This report summarises the conclusions of a series of joint technology transfer activities held in CEECs in 1994/95. It provides policy advice and technical guidelines on key infrastructure issues, road safety measures and up-to-date environmental strategies.

(77 95 04 1) ISBN 92-64-14579-6, 187pp.
France: FF140; elsewhere: FF180 US\$37 DM52

ECMT (European Conference of Ministers of Transport)
Round Table 99

Transforming the Structure of the Freight Transport Sector

September 1995

In recent years, the challenges of environmental protection, railway privatisation, the impact of logistical requirements, and falling prices, among other things, have revolutionised freight transport markets. The forces of change have spurred new patterns of market organisation which may undergo even more radical upheavals if transport prices come to reflect the true economic and social costs of the sector.

(75 95 09 1) ISBN 92-821-1206-3, 172pp.
France: FF170; elsewhere: FF220 US\$45 DM63

ECMT (European Conference of Ministers of Transport)

Guide for Government Officials and Carriers on the use of the ECMT Multilateral Quota

August 1995

(75 95 08 3) ISBN 92-821-1205-X, bilingual, 56pp.
France: FF60; elsewhere: FF80 US\$16 DM22

ECMT (European Conference of Ministers of Transport)

Road Transport Informatics: Institutional and Legal Issues

October 1995

(75 95 07 1) ISBN 92-821-1205-5, 193pp.
France: FF230; elsewhere: FF300 US\$60 DM84

ECMT (European Conference of Ministers of Transport)

Statistical Trends in Transport 1965-1990

(75 95 06 3) ISBN 92-821-0204-1, bilingual, 118pp.
France: FF170; elsewhere: FF220 US\$42 DM64

Road Transport Research

Repairing Bridge Substructures

September 1995

(77 95 03 1) ISBN 92-64-14542-7, 123pp.
France: FF130; elsewhere: FF170 US\$34 DM48

Employment Opportunities

OECD Headquarters, Paris

Vacancies occur in the OECD Secretariat in the following activities:

Public Administration
Balance of Payments
National Accounts
Agricultural Economics
Development Economics
Energy Economics
Industrial Economics
Labour Economics
Monetary Economics
Econometrics
Environment
Urban Studies
Fiscal Policy
Nuclear Engineering
Macro-Economics
Nuclear Physics
Education Policies
Social Affairs
Statistics
Computing and Communications

Qualifications:

relevant university degree; at least two or three years' professional experience; very good knowledge of one of the two official languages of the Organisation (English and French) and ability to draft well in that language; good knowledge of the other.

Initial appointment:

two or three years.

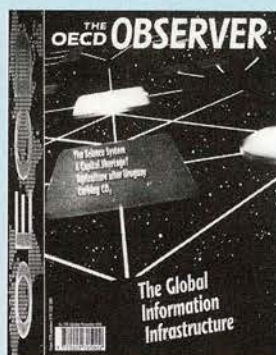
Basic annual salary:

from FF 300,000 (Administrator) and from FF 430,000 (Principal Administrator), supplemented by allowances depending on residence and family situation. Vacancies are open to both male and female candidates from OECD member countries. Applications, in English or French (specifying area of specialisation and enclosing detailed curriculum vitae), should be marked 'OBS' and sent to:

Human Resource Management
OECD
2, rue André-Pascal
755775 Paris Cedex 16
France

SUBSCRIBE TO...

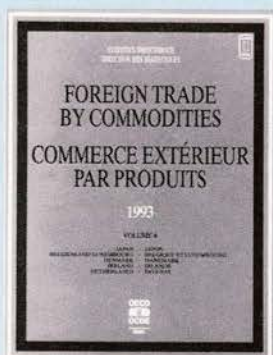
The OECD OBSERVER



For concise, up-to-date and authoritative information on world economic and social problems, subscribe to *The OECD OBSERVER*.

Recent articles include: *Parental Leave: What and Where?* • *The Information Explosion* • *Education: Face-to-face or Distance?* • *Cars, Congestion, CO₂ and Choice* • *A Looming World Capital Shortage?* • *OECD Agriculture after Uruguay* • *Battling International Bribery* • *Reforming Health Care* • *The Move to VAT* • *China Charges for Pollution* • *How Open is World Trade?* • *The Real Costs of Liquid Biofuels* • *Global Cities and Economic Growth* • *Telecom Tariffs and the Move to Markets* • *Energy in Russia* • *The Green Face of Biotechnology*

Foreign Trade by Commodities Series C



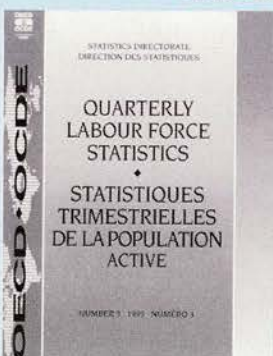
The main foreign-trade data base of the OECD, also referred to as 'Series C', gives the dollar values and quantities of the imports and exports of its member countries broken down by type of commodity and by partner country; data are available from 1961 for most countries. The printed publication, **Foreign Trade by Commodities**, is in five volumes and gives values of trade by broad commodity groups and by partner countries for the last six years. The CD version – **IMPEX** – gives full commodity and partner-country detail from 1980.

Return this order form in a stamped envelope

- to the OECD Publications Service in Paris
- to the OECD Publications Distributor in your country, or
- to the OECD Publications and Information Centre in Washington, Tokyo or Bonn

Addresses on inside back cover

Quarterly Labour Force Statistics



Total and civilian labour force, unemployment by age and sex, broad industry breakdown of employment, unemployment rates and youth unemployment; standardised unemployment rates to permit comparisons for 17 OECD countries. The printed publication gives data for the last 23 quarters; the diskette version gives quarterly data from 1961.

Return this order form in a stamped envelope

- to the OECD Publications Service in Paris
- to the OECD Publications Distributor in your country, or
- to the OECD Publications and Information Centre in Washington, Tokyo or Bonn

Addresses on inside back cover

Quarterly National Accounts



GDP by final expenditure and by kind of activity at current and constant prices, composition of consumption expenditure and capital formation, financing of capital formation; data for 20 OECD countries and for total OECD, OECD Europe, EU and the G7. The printed publication gives quarterly data for the last 15 years; the diskette and tape versions give quarterly data from 1970 and 1950 respectively.

Return this order form in a stamped envelope

- to the OECD Publications Service in Paris
- to the OECD Publications Distributor in your country, or
- to the OECD Publications and Information Centre in Washington, Tokyo or Bonn

Addresses on inside back cover

Subscription
France: FF120
Elsewhere: FF130 US\$25 DM46

Supplement for rapid airmail:
consult the OECD

For Visa credit-card payment, please indicate:
Card No.

Expiry Date

Date

Signature

1996 Subscription
France: FF2,200
Elsewhere: FF2,600 US\$490 DM755

Supplement for rapid airmail:
consult the OECD

For Visa credit-card payment, please indicate:
Card No.

Expiry Date

Date

Signature

1996 Subscription
France: FF250
Elsewhere: FF270 US\$60 DM90

Supplement for rapid airmail:
consult the OECD

For Visa credit-card payment, please indicate:
Card No.

Expiry Date

Date

Signature

1996 Subscription
France: FF380
Elsewhere: FF450 US\$90 DM135

Supplement for rapid airmail:
consult the OECD

For Visa credit-card payment, please indicate:
Card No.

Expiry Date

Date

Signature

THE OECD OBSERVER

☐ ENGLISH

☐ FRENCH

6 issues per year

SURNAME (in capitals)/FIRST NAME

PROFESSION

ADDRESS ☐ HOME ☐ BUSINESS

POSTCODE-TOWN/CITY

COUNTRY

FOREIGN TRADE BY COMMODITIES SERIES C

BILINGUAL

SURNAME (in capitals)/FIRST NAME

PROFESSION

ADDRESS ☐ HOME ☐ BUSINESS

POSTCODE-TOWN/CITY

COUNTRY

QUARTERLY LABOUR FORCE STATISTICS

BILINGUAL

quarterly

SURNAME (in capitals)/FIRST NAME

PROFESSION

ADDRESS ☐ HOME ☐ BUSINESS

POSTCODE-TOWN/CITY

COUNTRY

QUARTERLY NATIONAL ACCOUNTS

BILINGUAL

quarterly

SURNAME (in capitals)/FIRST NAME

PROFESSION

ADDRESS ☐ HOME ☐ BUSINESS

POSTCODE-TOWN/CITY

COUNTRY

OTHER OECD PUBLICATIONS

☐ ENGLISH

☐ FRENCH

Title	OECD Code*

*if available

For publications mentioned in articles
in THE OECD OBSERVER, please
contact the OECD Publications Service
for prices.

OTHER OECD PUBLICATIONS

☐ ENGLISH

☐ FRENCH

Title	OECD Code*

*if available

OTHER OECD PUBLICATIONS

☐ ENGLISH

☐ FRENCH

Title	OECD Code*

*if available

OTHER OECD PUBLICATIONS

☐ ENGLISH

☐ FRENCH

Title	OECD Code*

*if available

Where to obtain OECD Publications

FRANCE

OECD
Mail Orders:
2 rue André-Pascal
75775 Paris Cedex 16
Tel: (33-1) 45 24 82 00
Fax: (33-1) 49 10 42 76
Telex: 640048 OCIDE
Internet: Compte.PUBSINQ@oecd.org

Orders via Minitel, France only:
36 15 OCIDE

Librairie de l'OCDE
33 rue Octave-Feuillet
75016 Paris
Tel: (33-1) 45 24 81 81
(33-1) 45 24 81 67

GERMANY

OECD Publications and Information Centre
August-Bebel-Allee 6
D-53175 Bonn
Tel: (0228) 959 120
Fax: (0228) 959 12 17

JAPAN

OECD Publications and Information Centre
Lamdic Akasaka Building
2-3-4 Akasaka, Minato-ku
Tokyo 107
Tel: (81 3) 3586 2016
Fax: (81 3) 3584 7929

MEXICO

Revistas y Periodicos
Internacionales S.A. de C.V.
Floresca 57 - 1004
Mexico D.F. 06600
Tel: (525) 207 81 00
Fax: (525) 208 39 79

UNITED STATES

OECD Publications and Information Center
2001 L Street N.W., Suite 650
Washington, D.C. 20036-4910
Tel: (202) 785 6323
Fax: (202) 785 0350

ARGENTINA

Carlos Hirsch S.R.L.
Galeria Gilemes, Florida 165, 4º Piso
1333 Buenos Aires
Tel: (1) 331 1787 y 331 2391
Fax: (1) 331 1787

AUSTRALIA

D. A. Information Services
648 Whitehorse Road, P.O. Box 163
Mitcham, Victoria 3132
Tel: (03) 9873 4411
Fax: (03) 9873 5679

AUSTRIA

Gerold & Co.
Graben 31
Wien I
Tel: (0222) 533 50 14
Fax: (0222) 512 47 31 29

BELGIUM

Jean De Lamoy
Avenue du Roi 202 Koningslaan
B-1060 Bruxelles
Tel: (02) 538 51 69/538 08 41
Fax: (02) 538 08 41

CANADA

Renouf Publishing Company Ltd.
1294 Algoma Road
Ottawa, ON K1B 3W8
Tel: (613) 741 4333
Fax: (613) 741 5439

Stores:
61 Sparks Street
Ottawa, ON K1P 5R1
Tel: (613) 238 8985

211 Yonge Street
Toronto, ON M5B 1M4
Tel: (416) 363 3171
Fax: (416) 363 59 63

Les Éditions La Liberté Inc.
3020 Chemin Sainte-Foy
Sainte-Foy, PQ G1X 3V6
Tel: (418) 658 3763
Fax: (418) 658 3763

Federal Publications Inc.
165 University Avenue, Suite 701
Toronto, ON M5H 3B8
Tel: (416) 860 1611
Fax: (416) 860 1608

Les Publications Fédérales
1185 Université
Montréal, QC H3B 3A7
Tel: (514) 954 1633
Fax: (514) 954 1635

CHINA

China National Publications Import
Export Corporation (CNPIEC)
16 Gongti E. Road, Chaoyang District
P.O. Box 88 or 50
Beijing 100704 PR
Tel: (01) 506 6688
Fax: (01) 506 3101

CHINESE TAIPEI

Good Faith Worldwide Int'l. Co. Ltd.
9th Floor, No. 118, Sec. 2
Chung Hsiao E. Road
Taipei
Tel: (02) 391 7396/391 7397
Fax: (02) 394 9176

CZECH REPUBLIC

Artia Pegas Press Ltd.
Narodni Trida 25
POB 825
111 21 Praha 1
Tel: (2) 2 46 04
Fax: (2) 2 78 72

DENMARK

Munksgaard Book and Subscription Service
35, Nørre Søgade, P.O. Box 2148
DK-1016 København K
Tel: (33) 12 85 70
Fax: (33) 12 93 87

EGYPT

Middle East Observer
41 Sherif Street
Cairo
Tel: 392 6919
Fax: 360 6804

FINLAND

Akateeminen Kirjakauppa
Kesuskatu 1, P.O. Box 128
00100 Helsinki
Subscription Services:
P.O. Box 23
00371 Helsinki
Tel: (358 0) 121 4416
Fax: (358 0) 121 4450

FRANCE

See box:
Dauson
B.P. 40
92121 Palaiseau Cedex
Documentation Française
29, quai Voltaire
75007 Paris
Tel: 69 10 47 00
Fax: 64 54 83 26

Economica
49, rue Héricart
75015 Paris
Tel: 45 78 12 92
Fax: 40 58 15 70

Gilbert Jeune (Droit-Economie)
6, place Saint-Michel
75006 Paris
Tel: 43 25 91 19

Librairie du Commerce International
10, avenue d'Iéna
75016 Paris
Tel: 40 73 34 60

Librairie Dunod
Université Paris-Dauphine
Place du Maréchal de Lattre de Tassigny
75016 Paris
Tel: 44 05 40 13

Librairie Larivière
11, rue Lavastier
75008 Paris
Tel: 42 65 39 95

Librairie des Sciences Politiques
30, rue Saint-Guillaume
75007 Paris
Tel: 45 48 36 02

P.U.F.
49, boulevard Saint-Michel
75005 Paris
Tel: 43 25 83 40

Librairie de l'Université
12a, rue Nazareth
13100 Aix-en-Provence
Documentation Française
165, rue Garibaldi
69003 Lyon
Tel: (16) 42 26 18 08
Tel: (16) 78 63 32 23

Librairie Decitre
29, place Bellecour
69002 Lyon
Tel: (16) 72 40 54 54

Librairie Sauramps
Le Triangle
34967 Montpellier Cedex 2
A la Sorbonne Actual
23, rue de l'Hôtel des Postes
06000 Nice
Tel: (16) 67 58 85 15
Tel: (16) 93 13 77 75
Fax: (16) 93 80 75 69

GREECE

Librairie Kauffmann
Mavrokordatou 9
106 78 Athens
Tel: (01) 32 55 321
Fax: (01) 32 30 320

HONG KONG

Sirindon Book Co. Ltd.
Astoria Bldg. 3F
34 Ashley Road, Tsimsatsui
Kowloon, Hong Kong
Tel: 366 80 31
Fax: 739 49 75

HUNGARY

Euro Info Service
Margitsziget, Európa Ház
1138 Budapest
Tel: 2376 2062
Fax: 2376 0685

ICELAND

Mál Mog Menning
Laugavegi 18, Pósthólf 392
121 Reykjavík
Tel: (1) 552 4240
Fax: (1) 562 3523

INDIA

Oxford Book and Stationery Co.
Scindia House
New Delhi 110001
Tel: (11) 331 5896/5308
Fax: (11) 332 5993

17 Park Street
Calcutta 700016
Tel: 240832

INDONESIA

Pati-Lipi
P.O. Box 4298
Jakarta 12042
Tel: (21) 573 34 67
Fax: (21) 573 34 67

IRELAND

Government Supplies Agency
Publications Section
4-5 Harcourt Road
Dublin 2
Tel: 661 31 11
Fax: 478 06 45

ISRAEL

Prædicia
5 Shattner Street
P.O. Box 34030
Jerusalem 91430
Tel: (2) 52 84 90/1/2
Fax: (2) 52 84 93

R.O.Y. International
P.O. Box 13056
Tel Aviv 61130
Tel: (3) 546 1423
Fax: (3) 546 1442

Palestinian Authority/Middle East:
Index Information Services
P.O. Box 19502
Jerusalem
Tel: (2) 27 12 19
Fax: (2) 27 16 34

ITALY

Libreria Commissionaria Sansoni
Via Duca di Calabria 1/1
50125 Firenze
Tel: (055) 64 54 15
Fax: (055) 64 12 57

Via Bartolini 29
20155 Milano
Tel: (02) 36 50 83

Editrice e Libreria Herder
Piazza Montecitorio 120
00186 Roma
Tel: 679 46 28
Fax: 678 47 51

Libreria Hoeppli
Via Hoeppli 5
20121 Milano
Tel: (02) 86 54 46
Fax: (02) 805 28 86

Libreria Scientifica
Dott. Lucio de Biasio "Aeiou"
Via Coronelli 6
20146 Milano
Tel: (02) 48 95 45 52
Fax: (02) 48 95 45 48

KOREA

Kyobo Book Centre Co. Ltd.
P.O. Box 1658, Kwang Hwa Moon
Seoul
Tel: 730 78 91
Fax: 735 00 30

MALAYSIA

Co-operative Bookshop Ltd.
University of Malaya Bookshop
University of Malaya
P.O. Box 1127, Jalan Pantai Baru
59700 Kuala Lumpur
Malaysia
Tel: 756 5000/756 5425
Fax: 756 3246

MEXICO

Revistas y Periodicos Internacionales S.A. de C.V.
Floresca 57 - 1004
Mexico, D.F. 06600
Tel: 207 81 00
Fax: 208 39 79

NETHERLANDS

SDU Uitgeverij Plantijnstraat
Externe Fondsen
Postbus 20014
2500 EA's-Gravenhage
Tel: (070) 37 89 880
Voor bestellingen: Fax: (070) 34 75 778

NEW ZEALAND

GP Legislation Services
P.O. Box 12418
Thorndon, Wellington
Tel: (04) 496 5655
Fax: (04) 496 5698

NORWAY

Narvesen Info Center - NIC
Bertrand Narvesens vei 2
P.O. Box 6125 Etterstad
0602 Oslo 6
Tel: (022) 57 33 00
Fax: (022) 68 19 01

PAKISTAN

Mirza Book Agency
65 Shahrah Quaid-E-Azam
Lahore 54000
Tel: (42) 353 601
Fax: (42) 231 730

PHILIPPINES

International Booksource Center Inc
Rm 179/920 Cityland 10 Condo Tower 2
HV dela Costa ext cor Valero St
Makati Metro Manila
Tel: 81 96 76
Telex 23312 RHP PH

POLAND

ARS Polona
00-950 Warszawa
Krakowskie Przedmiescie 7
Tel: (22) 264 760
Fax: (22) 2686 73

PORTUGAL

Libreria Portugal
Rua do Carmo 70-74
Apart. 2681
1200 Lisboa
Tel: (01) 347 49 82/5
Fax: (01) 347 02 64

SINGAPORE

Gover Asia Pacific Pte Ltd.
Golden Wheel Building
41, Kallang Pudding Road, No. 04-03
Singapore 1334
Tel: 741 5166
Fax: 742 9356

SPAIN

Mundi-Pressa Libros S.A.
Castelló 37, Apartado 1223
Madrid 28001
Tel: (91) 431 33 99
Fax: (91) 575 39 98

Libreria Internacional AEDOS
Consejo de Ciento 391
08009 - Barcelona
Tel: (93) 488 30 09
Fax: (93) 487 76 59

Libreria de la Generalitat
Palau Moja
Rambla dels Estudis, 118
08002 - Barcelona
(Subscriptions) Tel: (93) 318 80 12
(Publications) Tel: (93) 302 67 23
Fax: (93) 412 18 54

SRI LANKA

Centre for Policy Research
c/o Colombo Agencies Ltd.
No. 300-304, Galle Road
Colombo 3
Tel: (1) 574 240/573 551-2
Fax: (1) 575 394, 510711

SWEDEN

CE Fritzes AB
S-106 47 Stockholm
Tel: (08) 690 90 90
Fax: (08) 20 50 21

Subscription Agency
Wernergren-Williams Info AB
P.O. Box 1305
171 25 Solna
Tel: (08) 705 97 50
Fax: (08) 27 00 71

SWITZERLAND

Maditec S.A. (Books and Periodicals)
Chemin des Palettes 4
Case postale 266
1020 Renens VD 1
Tel: (021) 635 08 65
Fax: (021) 635 07 80

Librairie Payot S.A.
4, place Papinot
CP 3212
1002 Lausanne
Tel: (021) 320 25 11
Fax: (021) 320 25 14

Librairie Unilires
6, rue de Candolle
1205 Genève
Tel: (022) 320 26 23
Fax: (022) 329 73 18

Subscription Agency
Dynamapre Marketing S.A.
38 avenue Vibert
1227 Carouge
Tel: (022) 308 07 89
Fax: (022) 308 07 99

OECD Publications and Information Centre
August-Bebel-Allee 6
D-53175 Bonn (Germany)
Tel: (0228) 959 120
Fax: (0228) 959 12 17

THAILAND

Suksit Siam Co. Ltd.
113, 115 Fuang Naknon Rd.
Opp. Wat Rajbopit
Bangkok 10200
Tel: (662) 225 9531/2
Fax: (662) 222 5188

TURKEY

Kültür Yayınları Is-Türk Ltd. Sti.
Atatürk Bulvarı No. 191/Kat 13
Karaköy/Ankara
Tel: 428 11 40 Ext. 2458

Dolmabahce Cad. No. 29
Besiktas/Istanbul
Tel: (312) 260 71 88
Telex: (312) 418 29 46

UNITED KINGDOM

HMSO
Postal orders only:
P.O. Box 276, London SW8 5DT
General enquiries
Tel: (171) 873 8496
Fax: (171) 873 8416

HMSO Bookshop
49 High Holborn, London WC1V 6HB
Branches in: Belfast, Birmingham, Bristol, Edinburgh,
Manchester

VENEZUELA

Libreria del Este
Arda F. Miranda 52, Aptdo. 60337
Edificio Galpán
Caracas 106
Tel: 951 1705/951 2307/951 1297
Telegram: Librestre Caracas

Table 2. Sectoral Classification

No.	ISIC Rev.2 codes	Description	
1	1	Agriculture, forestry & fishery	Agricult., sylvicult. et pêche
2	2	Mining and quarrying	Industries extractives
3	31	Food, beverages & tobacco	Aliment., boissons et tabac
4	32	Textiles, apparel & leather	Textiles, habillement et cuir
5	33	Wood products & furniture	Bois et meubles
6	34	Paper, paper products & printing	Papier, imprimerie et édition
7	351+352-3522	Industrial chemicals	
8	3522	Drugs & medicine	
9	353+354	Petroleum & petroleum products	
10	355+356	Rubber & plastic products	
11	36	Non-metallic mineral products	
12	371	Iron & steel	
13	372	Non-ferrous metals	
14	381	Machinery	
15	382-3825	Electrical machinery	
16	3825	Office & computing machinery	
17	383-3832	Electric apparatus, nec	
18	3832	Radio, TV & communication equipment	
19	3841	Shipbuilding & repairing	
20	3842-3849	Other transport	
21	3843	Motor vehicles	
22	3843	Aircraft	
23	3843	Professional goods	
24	3843	Other manufacturing	
25	39	Electricity, gas & water	
26	40	Construction	
27	50+62	Wholesale & retail trade	
28	55	Restaurants & hotels	
29	60	Transport	
30	70	Communication	
31	80	Community, social & personal services	
		Government services	
		Unproduced	
		Statistical discrepancy	

In spite of the importance of input-output statistics for the study of growth, structural change, productivity, competitiveness and employment, input-output tables that allow the comparison of OECD countries have not been available until now. A new OECD publication, available both on four 3½" diskettes and as a 400-page book, seeks to fill this gap, providing a new tool for economic analyses of both individual sectors and the economy as a whole. The book presents in tabular form the 456 files in the diskettes (in Lotus WK1 format). The data are provided in both current and constant prices and cover ten OECD countries – Australia, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, the United Kingdom and the United States – from 1970 to 1990. The book, which can be purchased separately, is supplied free of charge to anyone buying the diskettes, which are suitable for IBM-compatible PCs. This invaluable empirical tool for economic research and structural analysis is unique in several respects:

- a common industrial classification (ISIC Revision 2, 36 sectors) allows the distinction of high-technology, trade-oriented industries such as the pharmaceutical sector, computers, communication equipment, automobiles and aircraft
- transaction flows of goods and services are distinguished between those domestically produced and those imported
- consistent flow matrices for capital investment are included.

It also highlights inter-industrial relationships among sectors, covering not only manufacturing but also services, and can be used in conjunction with other OECD databases on industrial structures such as the STAN, Bilateral Trade (BTD) and Industrial R&D (ANBERD) databases.

Price

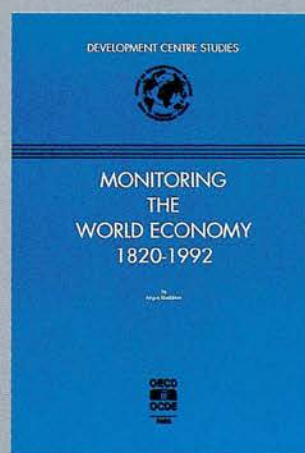
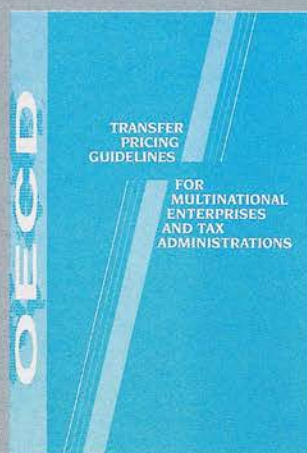
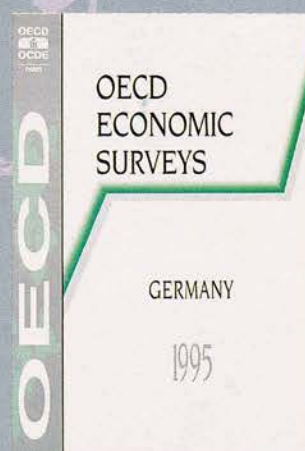
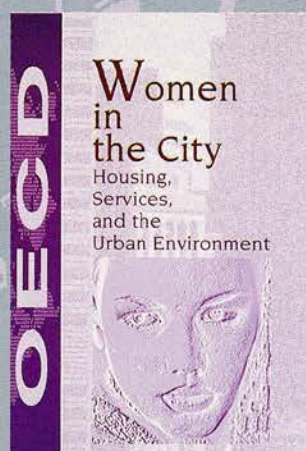
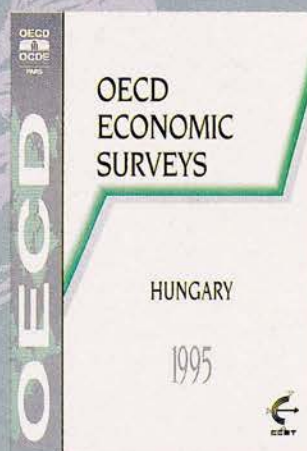
Diskettes:

FF5,000 £555
US\$910 DM1,515

Book:

FF250 £42
US\$67 DM93
(Supplied free of charge
to anyone purchasing
the diskettes)

**The
10
best
sellers
of the
past
2
months**



**OECD
Publications**

Order form inside

