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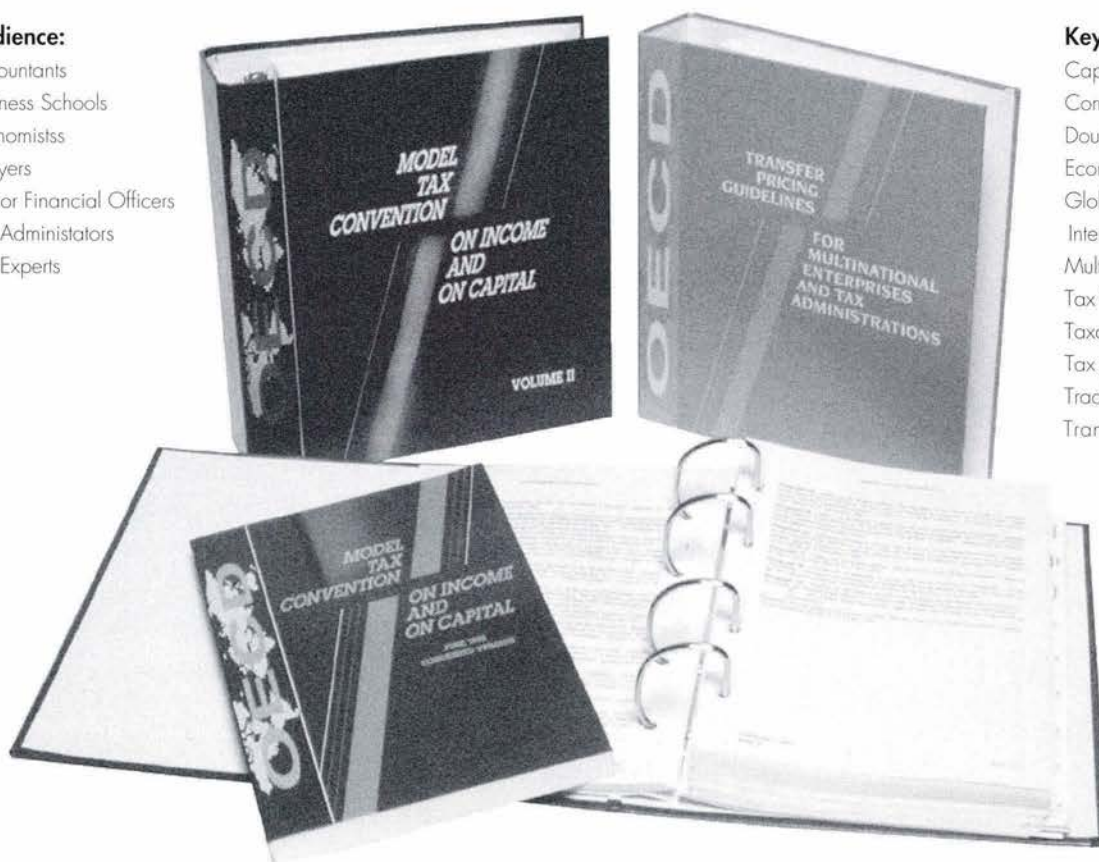
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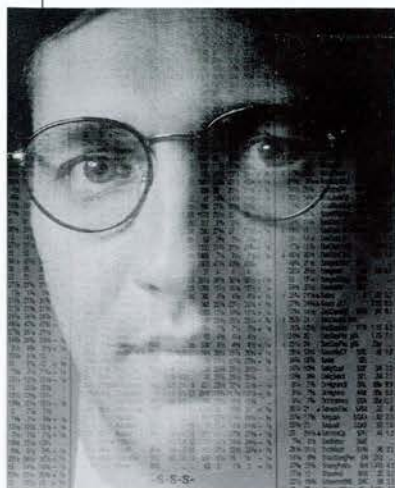
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Globalisation has raised the urgency of developing some 'rules of the game' upon which the whole world tax community can agree and rely.

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Taxation and social progress

DONALD J. JOHNSTON, SECRETARY-GENERAL OF THE OECD

Taxation, the battle cry of the American Revolution, the fall of the Roman Empire, what other major historic events could one ascribe to taxation? Probably many. But today taxation should be seen as a building block of society, provided it has the necessary attributes of transparency and fairness. Let me expand on that thought.

Since my arrival at the OECD I have sought to emphasise the importance of the triangular paradigm of social progress. That means keeping economic growth, social cohesion and good governance in balance with each other. Without any one of these elements social progress risks being arrested, or at least retarded.

The broadly supported agenda of free trade and investment is an extremely effective engine of economic growth. Its ability to create wealth is virtually irrefutable. Yet there are many increasingly articulate constituencies who resist globalisation. Why? In part because they have not yet seen benefits flowing to them. They see riches on Wall Street, but not necessarily on Main Street. Gains will come from liberalisation, but if we are to maintain the momentum in liberalisation of markets worldwide, those gains must be felt by all. How? There is no simple answer, but education, training, and social programmes that facilitate adjustment will all contribute. And most of them will be financed through taxation. However, taxation is not an easy area to get right. It never has been and it probably never will. But when collected judiciously and deployed effectively, tax acts as a tool of good governance, allowing economies to grow while helping to improve society as a whole.

One key point is that taxation is no longer simply the territory of individual governments. The removal of capital controls and the continuing liberalisation of the financial markets together with the emergence of global communication technologies have accelerated the pace of integration of national economies. They have increased the cross-border mobility of capital and investment and also encouraged large corporations and financial institutions to develop global strategies.

Not surprisingly, globalisation has had a major impact on the international tax environment. As other obstacles to the free flow of capital have been dismantled, business decisions have become more sensitive to tax differentials. This has led both developed and developing countries to use

taxation more aggressively – perhaps sometimes too aggressively – to attract foreign capital and investment.

The mobility of national tax bases has meant that international considerations have to be taken on board when shaping national tax policies. Inevitably therefore, governments of both developed and developing countries have begun seeking greater international co-operation to ensure that their domestic tax systems work as they are intended to work. Globalisation has raised the urgency of developing some 'rules of the game' upon which the whole world tax community can agree and rely. After all, to apply global solutions global action is needed.

It is not possible to implement sound economic policy without having appropriate tax rules and the capacity to apply those rules in practice. Otherwise our triangular paradigm will lose its balance. The role of the OECD, through its Committee on Fiscal Affairs, has been to develop these international tax principles and to provide a forum for exchange of opinions and experiences between member countries. One of the most important achievements so far has been the OECD Model Tax Convention on Income and Capital. There has also been pioneering work on transfer pricing which resulted in revised OECD Guidelines in 1996. More recently the OECD issued a set of recommendations to counter harmful tax practices. This is one of the important questions we examine in the Spotlight of this edition of the *Observer*. Other key areas considered by our fiscal affairs experts include globalisation, electronic commerce, the euro, VAT in financial services and the OECD's thinking on Russian tax reform.

But the collection of taxes is only one vitally important part of the fiscal conundrum. The other is how to spend the tax income among the competing needs of modern democracies in a way that assures and enhances the conditions of wealth creation without intervening in the process of wealth creation itself. That is probably the most daunting challenge for governments as we enter the 21st century. Only by meeting it will we be able to keep the triangular paradigm in balance.



Should economic policies be co-ordinated for EMU?

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The countries participating in Economic and Monetary Union (EMU) must continue to concentrate their action on two essential fronts: the consolidation of public finances and, above all, the reduction of the high rate of unemployment. There may be a case for some co-ordination of policies on these matters, provided price stability is maintained.

In the years ahead, macro-economic policy in the euro area will be subject to several constraints. For a start, any exchange rate flexibility within the area is obviously ruled out and countries will no longer be able to conduct an independent monetary policy. Furthermore, even though all the participating countries have made substantial progress in cutting their public deficits, they cannot afford to let up on their efforts if they are to meet the requirements of the Stability and Growth Pact as defined in the Maastricht Treaty (see box, p. 5). To judge by previous recessions, it is estimated that in order to be sure of keeping the budget deficit below 3% of GDP, an average deficit of the order of 0.5-1% of GDP will have to be aimed for over the cycle. Such a low level would also make it possible to achieve a substantial reduction in GDP/debt ratios.

Quite apart from these considerations, it will be important to maintain, and even strengthen, fiscal discipline in the euro area, since fairly soon – probably towards 2005 – demographic pressures will begin to weigh very heavily on the budgets of member states, particularly on funding for pensions, health care and long-term assistance.

But the biggest challenge facing policymakers in the EMU area in the coming years will be unemployment: about 12% of the area's labour force is currently jobless. Most of this unemploy-

ment is structural; according to OECD estimates, the structural component of unemployment in EMU's three main countries – Germany, France and Italy – is on average about 10%. The average actual unemployment rate for the three is also close to 12%, which makes the cyclical component of unemployment very small. In other words, even with a recovery, getting the unemployment rate below 10% by deliberately expanding aggregate demand would, at present output potential, lead to higher inflation.

Structural reforms first

Attacking structural unemployment via supply-side reforms is probably the best way forward if inflation is to be avoided. A significant reduction in the structural unemployment rate would substantially improve general government financial balances. And the re-

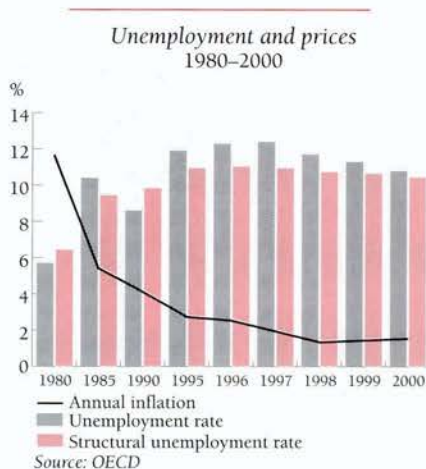
sulting improvement in fiscal positions as well as in supply conditions would in turn allow more leeway in fiscal policy without the risk of inflation. The upshot would be large gains in employment.

While there is scope on the supply side for improving the employment situation, room on the demand side is still fairly limited. One reason is that product markets have to be improved anyway to raise the level of potential output and labour market rigidities have to be reduced, otherwise demand-side policies might not succeed. Moreover, euro area countries do not at present have the choice of simply adopting active counter-cyclical measures.

Given the scale of the unemployment problem, it may be legitimate to ask whether governments could not envisage a fiscal expansion, even at the price of a rise in inflation. But such a course of action would be problematic, for two reasons. First, it would run counter to the core aim of EMU which is to achieve price stability; second, without price stability, it is highly unlikely that any job gains could be sustained in the medium term. The widespread stagflation (high inflation coupled with low growth) that followed the two oil shocks bears this out.

Market expectations will undoubtedly be influenced by the policies of the new European Central Bank (ECB), the European System of Central Banks in general and the signals the monetary authorities send out. These expectations will have a positive effect on economic developments if monetary policy is seen to be credible. It would thus be very ill-advised on the part of the new central bank to set leading interest rates at a level so low as to be incompatible with price stability.

This does not rule out the possibility of a reduction in interest rates if



demand conditions worsen at current low inflation levels. However, even assuming that an expansionary macro-economic policy resulted in only a limited rise in inflation – thanks to tight wage agreements, for example – a sharp reduction in unemployment below its structural level would be possible only if the three main economies in the euro zone grew at a rate well above their current potential rate over several years. And even this somewhat inflationary approach would not cut unemployment to below 8% in the medium term. Furthermore, it would result in a sharp deterioration in government finances and external balances.

In short, to embark upon expansionary policies without first having carried out the structural reforms needed to improve supply conditions, would be to risk re-igniting inflation and increasing public deficits before there were any positive effects on the level of unemployment. Of course, it may be asked whether European economies would not benefit from increased investment in infrastructure, since that would encourage growth in ailing regions in which high, long-term unemployment is concentrated. But it would still be important to ensure that such investment triggered a genuinely endogenous development process, and unfortunately past experience contains few successful examples of this.

The case for co-ordination

The question of whether policy co-ordination between EMU participants should be increased to achieve fiscal targets and reduce unemployment is an interesting one. The theory of fiscal federalism clearly shows that decisions regarding expenditure and regulation should preferably be taken by each country, except for secondary effects of economies of scale and where there are shared policy priorities and

responsibilities. It is only when tax bases are very mobile that decisions need to be taken at a higher level. However, when, as in the case of EMU, transitional, regional and asymmetrical shocks have to be dealt with, there are a number of arguments in favour of co-ordinating fiscal policies. For example, the mechanism for transmitting monetary policy may vary from country to country, leading to short-term divergences; a co-ordinated fiscal policy may then be the only economic policy instrument available for ensuring that growth remains close to its potential rate throughout the euro area. In line with the basic principle of insurance, a large number of countries can better absorb asymmetrical risks together than individually.

It is also probable that fiscal co-ordination or transfers will need to be envisaged to deal with asymmetrical shocks affecting only certain regions of the sovereign nations participating in EMU. That said, in practice EMU will not alter the nature of the problem. More specifically, it is quite improbable that a shock affecting one country would not affect the others; conversely, if the shock is really asymmetrical, it will only affect certain industries or regions, though across several countries. In the latter case, exchange rate policy being ruled out as a remedy, the best response would be, as always, to make labour, capital and product markets more flexible. The second option would be to use fiscal policy either to pool risks or for redistribution. If there were any secondary effects or externalities, there

might then be a case for co-ordinating intervention.

However, even in existing federations like Canada or the United States, the empirical evidence of the stabilising effects at regional level is hardly conclusive, and it has to be borne in mind that the national budgets in the euro area are often much larger than those of sub-national levels of government in these federations. Furthermore, automatic stabilisers have large effects, even in small countries, and the power to tax remains considerable. Moreover, Austria and the Netherlands have been pegging their currencies to the Deutschmark for several years without any formal policy co-ordination or fiscal transfers, and these countries have even performed better than many other countries. In fact, it could be argued that these currency pegs had a disciplining effect on economic behaviour, thereby reducing the need for co-ordination. The euro countries were subject to similar discipline in the run-up to EMU and we may yet see new important changes being encouraged through the existence of the euro, particularly in labour and product market flexibility.

Two important remarks are called for regarding the possibility of macro-economic co-ordination in the euro



Early confidence justified?

D.R.

area. First, the euro area will be the only region in the world combining a common monetary policy with fiscal policies operated by individual countries. The policy mix in EMU will therefore have a crucial impact on exchange rate fluctuations between the

The Stability and Growth Pact

The European Union's Stability and Growth Pact, finalised at the Amsterdam Summit in June 1997, clarifies the Maastricht Treaty's provision for dealing with 'excessive deficits' and provides an institutional framework for its enforcement with, in particular, strengthened surveillance and co-ordination of economic policies via the annual review of national programmes.

For countries participating in EMU, the Pact considers a general government deficit of more than 3% as excessive unless the European Community judges it to be temporary or there are exceptional circumstances. If the deficit is considered to be temporary and corrective measures have not been implemented within ten months, sanctions will be imposed.

When a country is deemed to be in recession, which is defined as an annual fall in real output (GDP) of at least 0.75%, the Pact will be enforced in a differentiated manner. If a member country's GDP declines by 2% or more – and provided that the deficit is temporary – an exemption from the procedure is granted automatically. If the decline in GDP is between 0.75% and 2%, exemption can be granted in exceptional circumstances by the Council of Ministers if the economic slowdown is judged to be 'exceptional' in its abruptness or in relation to past experience.

euro and the other main currencies. These fluctuations will act as a stabiliser when the policy mix is unbalanced, but large swings in currency values can lead to unhelpful financial turbulence in currency markets, as well as having adverse cyclical effects and perhaps giving rise to renewed protectionist pressures. To avoid these risks, co-ordination may be needed not only within the euro area, but also between it and the other major economies.

The second remark is that a co-ordinating body would be useful to ensure that the ECB is not subjected to unwarranted and dangerous pressures. Given the independence of this institution and the absence of political union, it is liable to become a scapegoat for most of the economic problems that arise in the EMU countries. If the bank was ever seen to give into such pressure, its credibility would be damaged. Moreover, policy reforms that were costly in the short term or just politically difficult, but which addressed the true causes of the problem, could be put off. A rapid and transparent discussion between the monetary authorities and the euro area's governments on policy mix, while preserving the independence of the ECB, would be a very valuable step in the co-ordination process.

The most important task, however, remains that of removing the structural obstacles to employment growth and the reduction of joblessness in the euro area. It is above all with this in mind that economic policy should be co-ordinated. Closer integration of product markets and more labour mobility will enable wage and price formation to adjust more quickly to changing circumstances in the euro area. Participating countries should therefore assure an open policy towards employing workers coming from other EMU countries. To achieve

a lasting reduction in unemployment, real wages should be allowed to adjust to the productivity level in each region. Wage agreements and overall industrial relations will thus play a crucial role. And as part of the job of cutting structural (and in particular long-term) unemployment, lay-offs in declining sectors should be accompanied by measures to facilitate re-employment in expanding sectors and enterprises.

Policies to reduce structural unemployment should be set within an overall strategy, as proposed by the OECD in its Employment Strategy, which comprised a detailed set of recommendations for each country. It is worth pointing out that changes in structural policy can themselves lead to asymmetrical shocks, which some countries may have difficulty coping with. If a country embarks on reforms to reduce its structural unemployment, it is essential that the resources made available thanks to those reforms be mobilised quickly to raise potential output. In other words, structural reforms should be given every chance of working. That too is a good argument for co-ordinating structural policy in the euro area. Only then would there be a strong case for co-ordinating fiscal policy, on condition that price stability is maintained. ■



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Reinvigorating business dynamism in Japan

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After two years of contraction, the Japanese economy is projected to start growing slowly again. The recovery is expected to be weak, in part because of low private-sector confidence and a notable lack of business dynamism. What has become of that dynamism and what is being done to restore it?

There have been worrying signs that Japanese business has lost some of the dynamism it was noted for in earlier decades. The rate of new company formation is now as low as 4%, well below that in other OECD countries and trailing behind the rate of company closure. Meanwhile, the trend in corporate profitability continues to point downwards across a broad range of sectors. There are three main causes behind this weaker dynamism. The first is the lag in fully adjusting to the end of the catch-up process in the manufacturing sector, the second is over-regulation in the non-manufacturing sector and the third cause is the slowness of the corporate system in responding to new business opportunities.

The lag in adjustment

As one of the world's largest economies with a level of productivity similar to that of other high-income countries, Japan can no longer look to its traditional industries to generate new growth. Japanese companies have relocated production heavily abroad, resulting in a 'hollowing out' of the domestic manufacturing base. There has been a lag in dealing with this, and it is now clear that new activities and innovations will be needed on a larger scale than hitherto to compensate. The 'hollowing out' process not only has led to the closure of large factories in Japan, but has also sparked a massive restructuring of clusters of related suppliers and sub-contractors. Some

manufacturing clusters have got through the process successfully, by reorganising their networks and making them more flexible. The most conspicuous example of these dynamic clusters can be found in the so-called high-tech corridor of Tama, which encompasses parts of Tokyo and the two adjacent prefectures of Saitama and Kanagawa. Rather in the vein of Silicon Valley or Italy's Emilia-Romagna, the Tama corridor is a hot-bed of development and growth. Unlike in the rather clubby, traditional system, Tama thrives on open networks of large electrical machinery makers and their research laboratories, some 20-odd universities with science and engineering departments, middle-



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sized companies with strong product innovation capability – many of them with a dominant position in niche markets – and smaller companies with specialised metalwork capabilities based on the most advanced technologies. However, this new type of industrial development has not been of sufficient magnitude to fill the gap left by the large, relocated industries.

Regulations in the non-manufacturing sector

Another important reason for the lack of dynamism in business is over-regulation in non-manufacturing industries. True, there has been some deregulation, but its speed and extent vary from one industry to another. In telecommunications, for example, a substantial easing of restrictions has led to large price cuts and stimulated expansion in both the range and amount of services provided. The easing of the Large-Scale Retail Store Law in 1990, 1992 and 1994 has given rise to larger, more efficient retail outlets and is estimated by the Economic Planning Agency to have increased annual demand by about 0.8% of GDP in the first half of the 1990s. However, in most other sectors deregulation has been slow and partial. The result has been the persistence of inefficiencies and bottlenecks.

The burden of tradition

While the legal features of Japan's corporate system are similar to those in other OECD countries, direct incentives for managers to enhance shareholder value are fewer, and this has not helped business dynamism. In many large companies, board members are promoted from inside, having made a career in the company, and disciplining sanctions through the market for corporate control are therefore limited. Management therefore feels insulated from the pressure to achieve

short-term profit, instead favouring decision-making based on long-term perspectives. However, in times of difficulty and uncertainty, what it appears to lack is innovation and the drive to find dynamic solutions. The system of appointments also means that the board of directors cannot function as an impartial monitor of the performance of senior corporate executives, who themselves are board members and appoint other directors. And as board directorships are considered as a reward for company loyalty, the average size of boards is around 25 members for large companies and often as many as 40 directors for the very large ones. Either way, they are far larger than company boards in the United States or Europe. Under these conditions it is extremely hard for a board to be an effective body for making strategic decisions.

Another complication is the key institutional shareholder which exerts primary control over managers in large Japanese companies. This is the so-called main bank, which is also a principal lender. The main bank is commonly believed to monitor managerial performance, thereby reducing the burden on other shareholders, and, if necessary, to act on behalf of the market as a disciplining force on managers. Another often-cited advantage of having main banks is that it involves lower costs in the event of financial distress compared with going through formal, and often protracted, bankruptcy procedures. However, these corporate governance arrangements are likely to have fuelled managerial aversion to large risks, in particular since directors promoted from within tend to favour continuity over change.

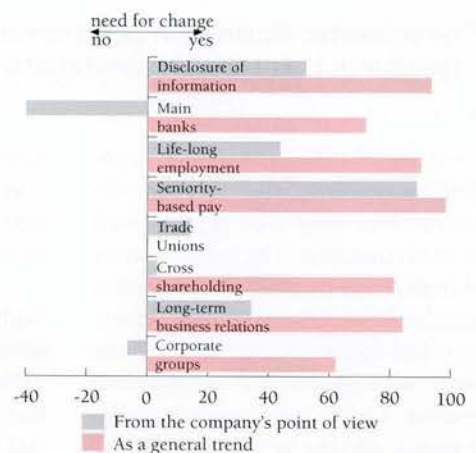
Policy initiatives

To reinvigorate business dynamism, further deregulation and the enhancement of the capacity to innovate and

take calculated risks are needed. The government has taken several initiatives to enhance Japan's innovative capacity. First, the hitherto compartmentalised R&D system is to be improved by increasing the flows of information and researchers between the government research laboratories, universities and businesses. Second, the efficiency of public funding is to be raised by introducing competitive considerations in budgetary allocation and making third-party evaluation of publicly-funded projects obligatory. And third, the protection of intellectual property rights has been strengthened, and universities are to be encouraged to have their innovative work patented and sold. To underpin these improvements to the R&D system in the long term and to help develop more flexible and adaptable human capital, the government plans to carry out some difficult educational reforms. The broad objective of the changes to R&D is mainly to provide greater autonomy to all the players in research in financing and managing their affairs and to encourage interaction and creativity. The changes are therefore to be welcomed and should be pursued further, as long as adequate governance mechanisms are put in place that are commensurate with the degree of autonomy granted.

But for innovation to be of any use in the market, a climate for taking up business ventures is needed. The government has prepared the legal and institutional infrastructure for a potentially huge increase in the supply of risk capital, including the easing of restrictions on investment in unlisted shares by pension funds and the creation of a special over-the-counter (OTC) market for innovative companies. There are a couple of problems

The need to change the current corporate system¹



1. While respondents to the survey tend to expect changes to take place in the corporate system generally, they do not necessarily believe their own company needs to change as rapidly. The closest match is in connection with seniority-based pay. In contrast, where their relationships to the main banks are concerned, companies see absolutely no need for change, although they expect changes to take place as an overall trend.

Source: Long-term Credit Bank Research Institute Consulting Inc., Survey of opinions concerning the corporate system of the 21st century, 1998.

though. For a start, the price formation function in the OTC market may have to be strengthened. Moreover, given that the financial market is dominated by inherently risk-averse banks the government will need both perseverance and patience, as well as further measures, before venture capital plays a significant role in financing innovative ventures in Japan.

Measures have also been taken to help traditional business arrangements and corporate governance practices to move forward. But change has been generally slow. In fact, surveys indicate that, while company executives accept that shifts are likely to occur, they do not see much need for change as far as their own companies are concerned (chart). An exception is the seniority wage system and there now seems to be a consensus among firms that this system will have to give way to merit-based pay.

(continued on p. 9)

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Japan's outlook

The economic situation in Japan remains grave. A limited rebound is possible in 1999, though expectations are being revised downwards.¹

Several significant forces have combined to prolong and worsen the Japanese recession that is now well into its second year. The balance sheet problems of the banking sector remain unresolved, and the resulting uncertainty has led to diminished confidence and declines in private spending. Credit conditions have deteriorated, and the crises in emerging markets have exerted adverse effects on Japanese firms' export growth, profitability and risk premia. Corporate restructuring has led to a fall in employment and incomes. Households have raised their saving rates, and businesses have reduced both their production and investment. And with industrial inventories still at very high levels in relation to shipments and profits falling sharply, pressures for production cutbacks and restructuring are likely to continue unabated. Conditions in the labour market have deteriorated, with the unemployment rate at over 4% and job offers at less than half the number of job seekers. In addition, the number of corporate bankruptcies and the associated liabilities increased by 25% and 28%, respectively, in the first nine months of 1998.

With a cumulative decline in real GDP of 4.5% since the cyclical peak, a sizeable output gap has opened up. This has generated deflationary pressures, with domestic prices falling slightly, despite higher unit labour costs. The core consumer price index (excluding perishables) is falling at a rate of around a half per cent per year. Domestic wholesale prices – goods alone – have been falling at an annual rate of 2%. Import prices too have been falling. Sharp declines in import vol-

umes contributed to a current account surplus of around 3% of GDP in the first half of 1998, the highest surplus in over four years.

Budgetary policy, which was initially slated to be tight in the fiscal year (FY) 1998, was loosened substantially by last April's fiscal package. A substantial further easing of policy was contained in the November package for FY 1999. Permanent tax cuts of over 6 trillion yen per year will be implemented in 1999, and public investment should continue to increase moderately thanks to an additional 8 trillion yen. 'Shopping coupons' are also to be distributed to 35 million households, and additional lending of nearly 6 trillion yen is to be made available. Further measures to promote housing and job creation will be taken. Gross debt is projected to reach 118% of GDP in 2000, nearly double its share in 1992.

The monetary authorities have had to confront risks of a deflationary spiral. Their response has been to accommodate the market's needs for liquidity, to promise stability and, in September, to edge down the target overnight

rate for the first time in nearly three years. As a result, there are signs of some acceleration in money supply. Longer-term bond yields have continued to trend lower, with 10-year government rates recently setting record lows of around 0.8%.

Banks remain in dire straits

The decline in bank lending has continued undiminished, even though firms perceive a stabilisation in lending attitudes, and many borrowers are facing higher rates despite the policy easing. Shorter-term market rates on anything other than government paper generally edged up over the summer. Bank balance sheets remain as encumbered as ever by their bad loans. Official figures for their problem loans as of March 1998 based on broadened criteria were 35.2 trillion yen (5.1% of all loans and 7% of GDP), but self-assessment showed loans worth 87.5 trillion yen (11% of total credit exposure and 17.5% of GDP) to be doubtful or at least in need of careful collection. Private-sector analysts believe that the amount of such loans is higher still, as much as 30% of GDP.

Policy support on a number of fronts has so far been unable to prevent Japan's recession from deepening, and the need for bolder action has been recognised. Now that the financial legislation has been enacted, the authorities should move expeditiously to recapitalise the banking sector, conditional on its wholesale restructuring. The monetary authorities should continue to ensure that ample liquidity is available and fiscal policy will have to remain at least as expansionary as before. Assuming that these conditions are met and that export markets manage a turnaround, activity may begin to stabilise. ■

1. This article is based on the Japan section of the OECD Economic Outlook, No. 64, December 1998.

Outlook summary			
% changes, volume (1990 prices)			
	1998	1999	2000
GDP growth	-2.6	0.2	0.7
Total domestic demand	-3.3	-0.1	0.6
Net exports ^a	0.7	0.2	0.1
Unemployment rate ^b	4.2	4.6	4.9
Household disposable income	0.9	-0.4	0.3
General government			
financial balance	-6.1	-7.8	-8.3
Current account balance ^c	3.2	3.3	3.6
Short-term interest rate	0.7	0.5	0.5

a) Contributions to changes in real GDP (% of real GDP in the previous year).

b) % of labour force.

c) % of GDP.

Source: OECD

(continued from p. 7)

Other reforms are required for businesses to rediscover their old dynamism. One example is in the labour market and the measures the government has adopted or plans to take in this area, such as deregulating labour placement and dispatch services, are commendable. But they should be reinforced by action to do away with obstacles to job switching, notably by improving the transferability of corporate pensions.

Still, the priority should be to restore balance between different corporate stakeholders. The traditional Japanese corporate governance approach gives too much power to insiders. It is high time to redress that balance. The recent initiatives of some leading companies to reduce the size of their boards and to increase the participation of outside directors should therefore be encouraged by the stock exchange. More frequent shareholders' derivative suits against corporate directors are a welcome move, but it would, nevertheless, be useful to introduce the so-called 'business judgement rule' so as to prevent excessive risk aversion by corporate directors. The revised tax treatment of stock options should help to bring managers' interests more closely into line with those of their shareholders. ■

Business and industry policies for knowledge-based economies

GRAHAM VICKERY, DIRECTORATE FOR SCIENCE, TECHNOLOGY AND INDUSTRY, DSTI.CONTACT@OECD.ORG

Businesses today operate in a globalised, competitive environment, where they have to deal with constant change and endless pressures to adapt. Government policies have to respond to these new business realities. How?

New scientific discoveries, constant restructuring of whole industries, volatility in financial markets, the emergence of the stakeholder society with its demands for more transparent corporate governance, and the advent of electronic commerce are just some of the varied challenges facing business and governments.

Globalisation is one of the main drivers of change and, at the same time, one of its principal results. Declining costs for computing, communications and transport undoubtedly underlie globalisation's development, and market liberalisation and public sector reform have also been crucial. Central to globalisation is firm-level innovation and the search for productivity improvements and international competitiveness. It is reflected in more cross-border operations, higher volumes of trade and foreign investment, increased collaboration and joint ventures, and ever more sophisticated patterns of production and marketing.

To survive and prosper in this new environment, many firms have had to re-organise and become more responsive to change. They have had to build trust and responsibility. This has been achieved internally on the one hand, by flattening hierarchical structures and delegating responsibility in order to mobilise skills more effectively, and externally on the other, by building durable networks as a fundamental part of maximising value-added in output. The benefits of these networks are

evident in the automotive industry, particularly in component manufacturing and sub-assembly. Flexibility has become the key word. Smaller units have always predominated in services, and in manufacturing the average number of employees in work places has been declining in the majority of

The patterns of government support

According to the most detailed OECD data currently available, government support to industry began to decline in real terms in the early 1990s, a trend which has continued. Indeed, support to industry has undergone structural changes in the OECD area as a whole. It has been most sharply curtailed in sectors such as shipbuilding, textiles and steel, although aircraft and space industries have received major funding through R&D support, special agencies and other channels. Regional development, export promotion and R&D and technological innovation all benefited from public support. In the early 1990s nearly 70% of industrial support programmes in OECD countries was channelled into investment. The principal objective continued to be the promotion of physical investment, even if the share of total support going to investment in intangibles increased.¹

1. Spotlight on Public Support to Industry, OECD Publications, Paris, 1998.

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OECD countries. In fact, the average establishment size in terms of employment in manufacturing is estimated to have fallen by about 10–12% in Canada, the United Kingdom and the United States since the early 1980s.

One reason for the success of smaller businesses is their ability to adapt rapidly to new circumstances. Though individually they may experience more turbulence in their life cycles than larger firms, collectively they are important generators of new jobs. They are also an important conduit of ideas and innovations in the knowledge economy.

The growth of small businesses has led to the emergence of a new market in knowledge-intensive services for manufacturing, as firms seek new ways of managing and extending their strategic resources. These services – including consulting, IT and R&D – have an estimated turnover of around \$1trn in OECD countries today. Their increasing importance has underlined the fact that intellectual capital – whether in R&D, technological innovation, managerial and worker training, work-place organisation and market knowledge – can make the difference between success and failure.

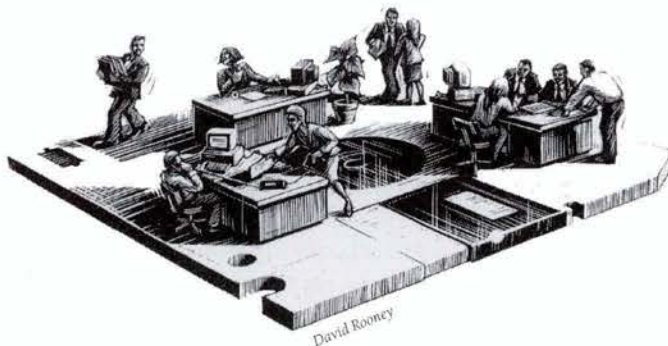
The new role of policy

How have business and industry policies changed in this dynamic new global environment?

For a start, governments have moved away from the old protectionist and reactive approach of attempting to save or protect domestic industries and jobs against the tide of globalisation and liberalisation. Many past practices, such as those of targeting established

sectors and firms, or attempting to pick future winners, have been largely abandoned. Instead, policy is increasingly setting itself the task of creating general conditions which encourage entrepreneurship and innovation, the development of new products, new ways of marketing and producing, even encouraging the birth of whole new activities.

Today, the primary concern of policy is to provide the conditions necessary for healthy competition and enhanced business performance globally. That means assuring an environment which encourages innovation and risk-taking, while at the same time providing a flexible, yet stable, policy framework. Governments are more



concerned with encouraging efficiency in markets than intervening directly in them. This also means looking outwards, taking into account the liberalisation of trade and investment, and new openings in capital and product markets, rather than adopting a purely domestic orientation.

Within this broad movement, government attention has turned to the quality of research, the supply of skills, the availability of strategic services and the provision of efficient communications, transport and other business infrastructure. Companies investing internationally seek not only new and enlarged markets, but also simple rules

on corporate start-up and operation, and understandable, consistent and reliable regulations. This is illustrated by the preponderance of international investment going to OECD countries (over 70% of total global inflows) and by the extent to which the more open OECD economies have benefited from those flows. Moreover, the globalisation of capital and business has led to downward pressure on corporate tax rates, even in traditionally high tax environments.

There have been four major shifts in the knowledge-based economy since the early 1980s which governments have had to take note of. The first is in R&D and innovation, which firms increasingly depend on for their competitiveness. OECD firms now spend around 1.8% of their business gross domestic product on R&D, with the industry-financed share increasing by some 30% in the last 15 years. Governments have become more selective and focused and their share of financing business R&D has dropped to around 10% of the total (see *Observer* No. 213). A major priority of government-

backed research must be to enrich the global knowledge base by backing science and technology in universities and research institutions, encouraging exploration of uncertain and untried scientific and technological areas, and training future employees. Facilitating the diffusion and application of knowledge is another priority. Governments can encourage this by providing an appropriate legal and institutional framework for the knowledge-based economy, to underpin the commercial use of intellectual property, for example.

A second shift in the knowledge-based economy has been the growing acceptance of the principle of a 'learning

society'. Most governments are now grappling with how to implement life-long learning. Indeed, the last issue of the OECD *Observer* dedicated its special report to the question. Improving vocational and technical training is necessary in most countries, while increasing mobility between vocational/technical and conventional academic studies is desirable. All countries could benefit from enhancing the links between business and education.

A third new development is reflected in attempts by OECD governments to improve their policies for small businesses and to unblock the bottlenecks which they frequently encounter. Measures recently introduced include: improving access to finance, technology and innovations; developing human resources and management capabilities; promoting networks and alliances; and encouraging the diffusion of best business practice.

A fourth important shift which the knowledge-based economy has brought about, and one which has accelerated the pace of globalisation, is the acceptance by governments of the virtues of privatisation and market liberalisation and of the need to reduce unnecessary public-sector intervention. Most governments now believe that their influence is best deployed to increase flexibility and encourage innovation and competition.

Implementing policy

These shifts in emphasis are taking place only slowly. Much lip-service is paid to the challenges of globalisation and the need to expand the knowledge base and its application, but governments have been slow to reflect new realities in their policy priorities for business and industry. True, OECD governments all face different circumstances which have a bearing on policy design and implementation. Yet there

is no denying the need for new policies and some common principles are discernible which will help governments to build them.

The first job is to improve policy design and delivery. This means clearly identifying policy objectives, defining the rationale for policy actions, and setting them in a flexible, though robust, policy framework. From the outset policy makers should think about how to bring business and other interested parties into the process. And once the framework is in place, policies should be monitored and assessed constantly to improve them and to provide feedback into the policy-making process.

Increased co-ordination between national, regional and local authorities in the design and implementation of policies and programmes is another important component of any successful strategy. Co-ordination improves the scope of policy, and helps to reduce duplication and inefficiency. Although collaborating and networking are established practice among private firms, OECD governments are only now emphasising them in their relations with business associations, financial institutions and public and private bodies. This is evident in new initiatives to help small businesses, such as the Canadian Technology Network, where industry associations, research organisations, governments and educational institutions work in partnership to provide intelligence on technology and crucial business services. Similar initiatives have been taken elsewhere, for example, in Finland and the Netherlands.

A third step is to find ways of making business and industry policies work alongside other policies. Policy formulation is a holistic exercise, and policies can no longer be viewed in isolation. For instance, education and

training are increasingly important in industrial and economic policies. In addition, seeking a balance between policies promotes social cohesion and growth. In practical terms, that implies co-ordinating policies aimed at the generation of wealth with those whose focus is more social.

Finally, learning from the experience of other countries is always important, but never more so than in these times of change. International comparisons help governments to identify where reform and improvement are most urgent, and where particular measures might succeed or fail. There is a wealth of experience in different countries on improving policies and the overall business environment. The value of sharing such experiences should never be underestimated. After all, when it comes to business policies in the global knowledge economy, governments too must be ready to learn. ■



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A moderate rebound in 2000¹

Some calm has recently returned to international financial markets following 18 months of sharp, and widening, turbulence. The outlook is for a further slowdown in the OECD area as a whole in 1999, and if the calm persists, a moderate rebound should follow in 2000.

Until the middle of 1998, economic developments remained rather favourable in North America and Europe, despite financial turbulence in emerging market economies. By September, however, it became increasingly evident that financial turmoil was also adversely affecting OECD countries' financial markets, especially following the financial collapse in Russia, with significant falls in equity markets, a widening of spreads between corporate and government bonds in some OECD countries, and trading losses by some large investment funds. At the same time, indications that the economic situation in Japan was deteriorating and that problems in the banking sector were not improving added to market uncertainty. Finally, the US dollar started to depreciate *vis-à-vis* other major currencies.

These developments led to a change in perception about the balance of risks affecting future economic prospects in OECD countries and authorities in several countries have taken some action.

Monetary policy has been eased in the United States, the United Kingdom and in a number of countries in the euro area. In Japan, a broad agreement was achieved to revitalise the financial system.

In Brazil, the government announced an ambitious programme to restore its budget and current account positions, and the broad lines of a financial package to help protect the exchange rate have been agreed with the IMF. Finally, in late October, the G7's leaders for-

mally endorsed several specific reforms to strengthen the international financial system.

Outlook Summary^a
Seasonally adjusted at annual rates

	1998	1999	2000
Real total domestic demand (% change from previous period)			
United States	4.9	2.0	2.2
Japan	-3.3	-0.1	0.6
European Union	3.3	2.5	2.6
Total OECD	2.4	2.0	2.5
Real GDP (% change from previous period)			
United States	3.5	1.5	2.2
Japan	-2.6	0.2	0.7
European Union	2.8	2.2	2.5
Total OECD	2.2	1.7	2.3
Inflation ^b (%)			
United States	1.0	1.2	1.8
Japan	0.7	-0.4	-0.5
European Union	1.8	1.8	1.8
Total OECD less high inflation countries ^c	1.3	1.3	1.5
Total OECD	3.3	2.6	2.4
Unemployment (% of labour force)			
United States	4.6	5.0	5.4
Japan	4.2	4.6	4.9
European Union	10.6	10.3	10.1
Total OECD	7.1	7.3	7.3
Current balance (% of GDP)			
United States	-2.7	-3.1	-3.1
Japan	3.2	3.3	3.6
European Union	1.4	1.3	1.3
Total OECD	0.0	-0.1	-0.1
Short-term interest rates ^d (%)			
United States	4.7	3.8	4.0
Japan	0.7	0.5	0.5
Euro area	3.9	3.0	3.1

a) Assumptions underlying the projections include:
 • no change in actual and announced fiscal policies,
 • unchanged exchange rates from 27 October 1998; in particular \$1 = ¥ 119.25 and DM 1.66;
 • the cut-off date for other information used in the compilation of the projections was 4 November 1998.
 b) GDP deflator, percentage changes from previous period.
 c) High inflation countries are defined as countries which have had, on average, 10% or more inflation in terms of the GDP deflator during the 1990s on the basis of historical data. Consequently, the Czech Republic, Greece, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.
 d) United States: 3-month Treasury bills; Japan: 3 month CD; Euro area: 3-month interbank rates.

Source: OECD

Following these moves, financial tensions appear to have abated in emerging market economies while equity markets in most OECD countries have rebounded. The OECD now projects a slowdown in real GDP growth for the OECD area, from above 3% in

1997 to about 2.25% in 1998 and then to 1.75% in 1999, before a recovery to around 2.25% in 2000. This reflects different economic situations across the major OECD regions.

In Japan, for example, strong deflationary forces are expected to continue acting on the economy (see p. 8). In the United States, the economy is projected to slow to below potential growth over the next two years, reflecting lower business profit expectations, the widening in credit spreads and the stabilisation, if not a reversal, of equity prices. In the euro area, real activity is also expected to decelerate somewhat, although growth should remain around potential in both 1999 and 2000, reflecting the momentum for recovery in domestic demand.

In most emerging markets, the outlook is for continued weakness, while prospects for stabilisation in Russia appear bleak in the short run.

A number of downside risks to the outlook are still present. To avoid them, it will be important that OECD countries do not resort to protectionist measures and that their markets remain open to exports of emerging countries affected by the crisis. In Japan resolution of problems in the domestic banking sector is essential to heading off the risk of global recession. In the United States and in the euro area, monetary policy should remain biased towards easing, as inflation risks have been considerably reduced or become non-existent. Nonetheless, there is no case for an activist fiscal policy, as there is still a need to reduce public debt to levels sustainable over the longer term. ■

1. This article is based on the OECD Economic Outlook, No. 64, December 1998.

Curbing harmful tax practices

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The proliferation of harmful preferential tax regimes and tax havens is a growing concern for governments and business. Why? And what can be done about it?

In April 1998 the OECD published a report on harmful tax competition in response to a request by the OECD countries to 'develop measures to counter the distorting effects of harmful tax competition on investment and financing decisions and the consequences for national tax bases'. The report was endorsed by OECD Ministers in May. The worry at the heart of the report is the rapid spread of preferential tax regimes in both OECD and non-OECD countries and tax havens. Liberalisation and globalisation have led a number of governments to adopt harmful preferential tax regimes, particularly offshore regimes, not so much to attract real foreign direct investment, but as predatory policies whose main purpose is to siphon off part of another country's tax base.

During the past 15 years virtually every OECD country has adopted some type of preferential tax regime. Over the same period the number of tax havens has more than doubled. From 1985 to 1994 the value of investments into low tax jurisdictions in the Caribbean and south Pacific islands grew fivefold, to over \$200bn. The tax haven business is no longer confined to the very rich and self-proclaimed havens can be found in almost every corner of the world.

The OECD's position on preferential taxes is unambiguous. The existence of low or no income taxes is not in itself enough to constitute harmful tax competition. Rather, when low or no taxes are combined with other legislative or administrative features, such as

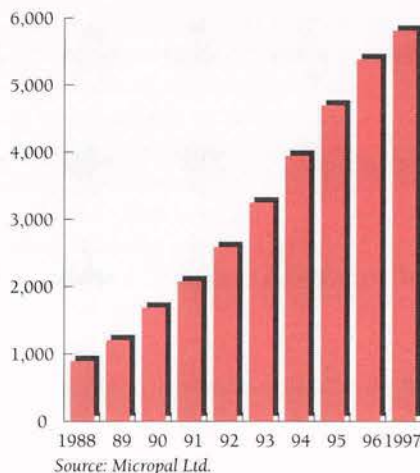
'ring-fencing', a lack of transparency, the absence of exchange of information, then harmful tax competition may arise. The OECD report provides a framework for identifying harmful regimes and suggests counter-measures for them.

Accordingly, harmonising tax rates across countries or installing minimum tax levels is not the aim. Countries must remain free to decide their own tax rates with checks and balances coming from competitive forces of the global marketplace and thereby encouraging countries to adopt 'best practice' policies on taxation.

Focus on financial services

The main focus of the OECD's work is financial and other services. The reasons are simple: these are the activities which are the most geographically mobile and therefore sensitive to tax

Number of offshore investment funds, 1988-97



differentials. They form an important sector, driving much of today's global economy. Tax havens located outside the OECD area and harmful preferential tax regimes in OECD countries are of particular interest for these activities.

The concept of 'tax haven' refers to tax jurisdictions which offer themselves as a place which non-residents can use to escape tax obligations in their countries of residence. A number of factors identify these havens, in particular the virtual absence of taxes, combined with minimum business presence requirements, and a lack of legislative and administrative transparency. Bank secrecy and other features preventing effective exchange of information are also discernible. Using these definitions, a list of jurisdictions identified as tax havens is expected to be published in October 1999. The list should help to form the basis for unilateral or collective counter-measures.

The concept of 'harmful' preferential tax regimes refers to low tax regimes – provided for either in the general tax legislation or as administrative measures – that are primarily tailored to tap into the tax bases of other countries. Characteristics of such regimes are their low effective taxes combined with 'ring-fencing', whereby they are partly or fully insulated from the domestic economy. There is often a lack of legislative and administrative transparency here too, as well as difficulties accessing information. The potentially harmful regimes in the OECD area tend to target banking, financing, insurance, location of headquarters, distribution and similar services, although of themselves these are legitimate commercial activities.

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 OECD Tax home page: <http://www.oecd.org/daf/fa/index.htm>

To deal with harmful preferential tax regimes, OECD countries have agreed to non-binding *Guidelines for Dealing with Harmful Preferential Tax Regimes*. They have undertaken to eliminate within five years of the adoption of the OECD's report on harmful tax competition or, if a particular 'grandfather clause' applies, at the latest on 31 December 2005, the features of those preferential tax regimes identified as harmful under the Guidelines. Furthermore, the OECD has established a *Forum on Harmful Tax Practices* to discuss the implementation of the 19 Recommendations contained in the report.

Besides the tax haven list and the guidelines, both of which are of a multilateral character, recommendations are made on how the OECD countries might strengthen their domestic and bilateral measures against harmful tax practices. At the national level, OECD countries are encouraged to adopt Controlled Foreign Company or equivalent legislation. This generally enables the home country of the parent to exercise taxing rights over lowly taxed foreign subsidiaries that the parent controls. They are also encouraged to adhere to certain defined standards in providing tax rulings and to apply strictly the 1995 OECD Transfer Pricing Guidelines, which provide for internationally agreed upon standards for establishing prices on intra-group transactions.

Bilaterally, OECD countries are encouraged to intensify their exchange of information on tax havens and preferential tax regimes. A provision is being considered for the OECD's Model Tax Convention to deny entities operating under harmful tax regimes access to certain or all of the convention's benefits. Furthermore, the report asks countries to consider terminating any treaties they might have with tax havens.

Countries around the world are reaching a point where they can choose either to step up the tax competition race, damaging as it may be, or to help with international efforts to build some new rules for the game. It should not be forgotten that the world has already experienced its fair share of trade wars, and unbridled tax competition could



Valérie Maccom/REA

Not just an affair of islands in the sun.

be just as counter-productive, to put it mildly. While there is such a thing as healthy tax competition – for example, when it leads to curbs in excessive government spending – if it is left unfettered it would not only shift the tax burden from capital to labour (sometimes referred to as the 'race to the bottom'), but investment decisions would become excessively driven by tax considerations. Mostly, a free-for-all would cause tension between countries as preferential tax regimes begin to bite into the tax systems of third countries.

International co-operation through a multilateral tax competition framework is the best way to ensure stability and the peaceful co-existence of different tax systems. In the longer term, the degree of success of the Guidelines and other OECD initiatives to combat harmful tax practices will, however, depend not only on the progress made by the OECD countries, but also on the ability to bring non-member countries into the process. Judging from the response by non-OECD countries at a series of regional informal tax competition seminars held last year in Mexico, Singapore and Turkey, it is

clear that several non-OECD countries share the OECD concerns on these issues.

Tax competition may be bad economics

Another key challenge is to convince the markets that eliminating harmful tax practices makes economic sense. That will not be easy. On the face of it, less tax competition arguably means less money in the pocket of the taxpayer and more revenue to the authorities. However, too much tax competition leads to complex and costly anti-avoidance legislation, which in turn places an increased burden of compliance on taxpayers. It also leads the market to become distorted, since not all taxpayers have access to foreign avoidance opportunities.

Rising compliance costs on international operations may discourage small and medium-sized companies from expanding to certain countries. Moreover, co-operation in building international guidelines is important so that companies resident in countries with efficient anti-avoidance legislation do not see their competitiveness penalised compared with those based in countries where the anti-avoidance legislation is ineffective or not fully enforced. Fair tax competition depends on the establishment of a 'level playing field' for business without the costly effects of harmful tax practices and the resulting defensive measures. Both government and business will benefit if these goals can be achieved. ■

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Billabongs, dugongs, Internet and tax

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An uncertain world ...

Dr. Christopher Owens, a visiting professor of Anthropology at a prestigious US university, sits in front of his laptop computer in central Australia watching the sun set over a billabong, the only surface water for 400 km. A few weeks previously he had purchased an exquisite ceremonial mask in Papua New Guinea on the understanding that his university would reimburse him and acquire it for its collection. He was quite annoyed that the university finance committee had not subsequently approved the funds and he was now offering the mask to a specialist art dealer in Amsterdam by e-mail over a mobile phone. His next step was to send by e-mail samples of digital photos of Australian and New Guinean wildlife, including some spectacular shots of dugongs, a rare aquatic mammal, to stock photography libraries in Singapore, the United States and the United Kingdom. In the following weeks he makes sales to each of the libraries.

One morning Dr. Chris receives a response from the art dealer in Amsterdam who wants to buy the ceremonial mask. After an exchange of e-mails between Amsterdam, Australia and Dr. Chris' lawyer in New York, a contract is settled. However, the art dealer assumes that Dr. Chris is in New Guinea when the contract is finalised.

A few weeks later the art dealer offers the mask as one lot in an Internet auction. The successful bidder pays with electronic money such that the art dealer is not quite sure in which country the buyer lives, although the shipping address is Germany. The mask is delivered to the buyer, but there is no accompanying documentation because all of the details were completed online and the buyer has forgotten to keep a copy of her e-mails.

Towards the end of the financial year, Dr. Chris receives a cheque from a stock photography library in Singapore indicating that they have sold some of his photos to a book publisher and that the cheque represents the copyright royalties of the first press run of a new book. This reminds Dr. Chris that he probably has to pay some tax in Australia. He is quite concerned because he has never had to consider the international tax environment and so he logs onto the Internet to download electronic copies of the Australian tax forms and advisory information.

Dr. Chris may have to consider whether his income from the sale of the mask should be declared in Australia or the United States and whether the contract documentation, which indicates that he was in Papua New Guinea, will cause problems. He will also need to work out where his royalty income should be declared.

The art dealer, who has found that the Internet gives his small business global reach, will need to consider whether consumption tax, like Value-Added Tax (VAT), is payable on his international sales. If consumption tax is payable, the dealer will need to determine whether it is payable in the Netherlands or the country of the purchaser and, if payable in the latter, how to determine that country and the appropriate tax rate.

The art purchaser, an avid Internet user, begins to wonder where she is going to find suitable documentation to enable her business to claim deductions or depreciation for her various commercial purchases on the Internet. The Singaporean stock photography library has to work out how to account for one set of payments to Dr. Chris when he was in Australia and another when he was in the United States.

The drive for certainty

Electronic commerce has the potential to be one of the great economic developments of the 21st century but, as the example above shows, the lack of certainty in many areas, including taxation, could hamper its growth. Tax authorities recognise that taxpayers demand certainty about their tax position. Certainty can be delivered by a clear statement of the rules. Some options that have been suggested are for a tax-free Internet or for special taxes, like 'bit' taxes. While these options might provide certainty, they must also

be assessed against tax policy criteria like neutrality and efficiency.

Tax-free electronic commerce is not neutral, it would create an uneven playing field with the rules unfairly stacked against traditional physical markets. It would not contribute to the effective financing of the government's provision of health, education, welfare, defence and other services.

'Bit' taxes, whereby each data bit in an electronic data stream is subject to tax, are also inequitable. An electronic message that consists of 100 bits of

data will be subject to 100 units of tax. If the message results in 1,000,000 francs or 5 francs profit, the tax on the message will be same: 100 units. Worse, if the message is a personal letter, the tax is still 100 units. 'Bit' taxes are inconsistent with sound tax policy principles and have been rejected by tax administrators, tax policy-makers and taxpayers.

The above options represent extremes and neither seems feasible. However, there is a correct approach and it is a simple one: neutrality. Electronic commerce should be subject to existing

taxes to the same extent as conventional commerce. This approach brings over 50 years of carefully crafted tax policy decisions to bear on the treatment of electronic commerce.

Even at this stage of development in the technological and commercial environment it appears that under existing taxation rules these principles can be implemented. However, in recognition of the unique characteristics of electronic commerce, innovative measures should not be precluded, provided that they are intended to assist in the application of the existing taxation principles, and are not intended to impose a discriminatory tax treatment of electronic commerce transactions.

The challenges

The challenges posed by electronic commerce for taxation have been well documented at the OECD. The basic ones include: how to identify taxpayers engaged in electronic commerce and determine their taxing jurisdiction; how to ensure that appropriate records are created of business conducted by electronic commerce; how to collect taxes in the electronic commerce environment; how to ensure that any consumption taxes are levied in the jurisdiction where the final consumption takes place; and how to apply international treaty issues, such as permanent establishments and classification of income in electronic commerce. Another question is how to apply the OECD Transfer Pricing Guidelines to electronic commerce. Still another test – and one which is often overlooked in the tax debate – is how to use new technologies to improve taxpayer service.

In simple terms, tax authorities need to identify taxpayers to ensure that they are only taxed once and that they are only asked to pay tax for which

they are legally responsible. Part of the identification is to determine which country the taxpayer is in when conducting a transaction so that tax is not paid to the wrong country. Details about the transaction are important, as the type of income (for goods or for services, as a royalty or for a sale) can change the rate of income or consumption tax, or the country in which it is paid. Details are also important where there are dealings between related taxpayers (a parent and subsidiary company for example) so that the tax obligations can be correctly split between the related taxpayers. Finally, details are required to determine whether a type of electronic commerce activity is substantial enough to be considered as conducted through a permanent establishment, which can change the country in which a taxpayer owes tax.

The OECD response

Information is important in taxation (see pp. 18–21). Traditionally, the taxpayer is the primary source of information about transactions and this should remain the case in the electronic commerce environment. However, tax authorities should work with intermediaries to ensure that tax issues are also addressed systemically. Some of the commercial initiatives to consider include protocols to generate receipts, invoices and other documentation and those to ensure the integrity of information such as by the use of digital signatures. These types of developments will help the art purchaser get the documentation she needs to make her taxation claims. In the case of related taxpayers this type of information will probably mean that the tax

obligations can be properly met in both jurisdictions where the related party operates.



One of the traditional sources of independent, third party information about transactions has been the financial sector and this could continue to be the case for electronic commerce activity. While many electronic payment systems create very good commercial documentation, there is the prospect of 'unaccounted' systems which operate like cash. As the 'cash economy' is thought to be a major sector of the untaxed economy in conventional commerce, tax authorities are understandably concerned about the prospect of a significant untaxed 'electronic cash economy'. Tax authorities will work with financial industry associations and banking supervisory bodies, such as central banks, to address the potential challenges of an electronic cash economy, while recognising that it is unreasonable to attempt to enforce third party accounting for the myriad of minor private transactions.

On the issue of identification, businesses are developing authentication techniques to ensure that the buyer can identify the seller and vice-versa. Tax authorities could adopt or adapt these commercial techniques to make sure taxpayers are properly identified. They would be guided by the existing identification requirements, such as those to complete tax returns or for businesses to register as employers. Identification requirements for businesses engaged in electronic commerce would then be similar to those for conventional business.

Tax authorities have concluded that rules for the consumption taxation of cross-border trade should result in taxation in the jurisdiction where consumption takes place. Immediately this helps to resolve some of the questions that the art dealer is facing. VAT would be levied in Germany rather than the Netherlands, for example. While some questions remain, the art dealer has a good signal as to the direction that tax authorities are moving in and an assurance that they are working on reducing uncertainty. The stock photography library in Singapore would be interested to know that tax authorities have come to a view that where businesses in another country purchase the rights to use their stock photographs, those businesses may be able to use reverse charge or self-assessment mechanisms to determine the consumption tax. This would relieve the Singapore business of some of the burden of trying to keep track of all the consumption tax rates around the world. However, existing reverse charge mechanisms would need substantial revision to be suitable for business-to-consumer transactions.

While Dr. Chris probably does not have to consider whether his laptop, mobile phone and physical presence in Australia represent a permanent establishment, other taxpayers will have

to consider such questions. The OECD will be providing more information, in the Commentary on the OECD Model Tax Convention, as to how the current definition of permanent establishment applies where electronic commerce transactions are concluded through a web site on a server located in a given country.

In order to collect tax in an efficient manner in an increasingly global economy, the OECD will consider developing an Article for inclusion in the OECD Model Tax Convention to allow assistance by one State in the collection of tax for another State. The OECD's Committee on Fiscal Affairs is also examining ways to improve the use of existing bilateral and multilateral agreements, like the Council of Europe/OECD Convention on Mutual Administrative Assistance in Tax Matters.

Finally, some tax authorities have already developed Internet web sites offering up-to-date information and providing taxpayer guidance to help taxpayers engaged in electronic commerce get the information they need about their tax affairs. These sites might also be used to accept tax returns or other forms or data. In the example above, Dr. Chris has already started to benefit from this type of facility. Tax authorities could also use electronic payment systems to place taxpayer refunds directly into taxpayer accounts or to accept electronic payments, saving time, postage costs and mailroom processing, among other things.

Global co-operation

Dialogue, often at the behest of the OECD, has enabled tax administrators and policy-makers to understand the commercial reality of electronic commerce and business groups to gain a greater appreciation of the concerns of

tax authorities. There is a growing environment of trust and co-operation between tax authorities and the business community, which will prove useful in the drive to reach satisfactory tax solutions in electronic commerce. Obviously governments around the world, both inside and outside the OECD, will have to co-operate with each other too. Some of that co-operation is already in evidence. Several non-OECD countries were involved in the Turku tax roundtable on electronic commerce in 1997 and participated in the dialogue on tax and electronic commerce in the run-up to the OECD Ministerial conference in Ottawa in October 1998 (see p. 45). Other representative bodies, such as the Commonwealth Association of Tax Administrators (CATA) and the Inter-American Center of Tax Administrations (CIAT), were also involved.

These are all welcome signs of progress. But more international co-operation between all concerned parties will be needed if a neutral way of taxing electronic commerce is to be worked out. Only then will Dr. Chris begin to feel truly at ease about his tax obligations no matter where in the world he does his business. ■

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Overcoming fiscal borders in the global economy

GRACE L. PEREZ-NAVARRO, HEAD OF TAX ADMINISTRATION UNIT

Tax authorities run the risk of being left at the border while the rest of the world reaps the benefits of globalisation. One important way of empowering them to combat international tax avoidance and evasion is to improve the cross-border exchange of information.

The OECD has long advocated the progressive liberalisation of trade and financial markets as a means of stimulating economic growth and improving living standards around the globe. Substantial progress has been made towards that goal. However, the increased opportunities for business to operate globally have in turn expanded the opportunities for taxpayers to avoid or evade tax at the international level. National borders may in many ways be disappearing, but they still broadly define the area within which governments can act to administer their national tax laws. Indeed, most countries would consider it a violation of their sovereignty if their borders were crossed by foreign tax authorities to administer their own tax laws.

Fiscal borders pose a serious problem for tax authorities. They simply cannot carry out their work without information about a taxpayer's income-producing activities, including those that take place abroad. They cannot always rely on domestic sources of information to determine and collect tax, particularly where cross-border transactions are concerned. As a result, tax authorities need some means of gathering information internationally in an increasingly globalised world.

A growing problem

The scope of international tax avoidance and evasion is always difficult to measure. As one tax administrator quipped, 'if we could measure it, we could tax it.' Nevertheless, most experts agree that the problem is substantial and growing. A recently issued report commissioned by the United Nations Office for Drug Control and Crime Prevention suggests that the size of the tax evasion problem is some multiple of the amount of the proceeds of all types of crime.¹ One of the authors of the report, Jack A. Blum, recently testified before the US House of Representatives that 'most of the world's money laundering in offshore centres involves tax evasion.' In its annual report for 1995-96, the multilateral Financial Action Task Force, based in Paris, estimates the size of the money laundering problem

to amount to hundreds of billions of dollars annually. If most of this money involves tax evasion, governments and citizens alike should be concerned.

The problem is getting worse. This has been suggested by the increase in certain types of cross-border activity, such as in the foreign assets and liabilities held by deposit money banks in OECD countries, as shown in the charts.

The tremendous increase in foreign assets and liabilities in the United Kingdom is particularly intriguing. This figure is likely to represent the substantial growth of financial activity in the City of London but it also represents the growth of activity in UK dependencies such as the Cayman Islands. Undoubtedly, the growth of both the foreign assets and liabilities held by deposit money banks is significant, though it does not by itself point to a rise in international tax avoidance and evasion. In fact, most of the increase in foreign assets and liabilities held by deposit money banks is likely to represent legitimate commercial activity which has been properly declared for tax purposes. Nevertheless, operating through foreign banks can present opportunities for tax avoidance and evasion, particularly if tax authorities do not have access to the information they require. That is why exchange of information between tax authorities is so vital.

Since its adoption in 1963, the OECD's Model Tax Convention on Income and Capital has included a provision to permit tax authorities to exchange information. The convention generally allocates primary taxing rights to the taxpayer's country of residence, which means the tax authority of one country will often require information from

1. Financial Havens, Banking Secrecy and Money Laundering, June 8, 1998 commissioned by the UNODCP.



Freddy Cats

another country. Today, over 225 treaties between OECD member countries and over 1,500 world-wide are based on the model convention. More detailed provisions for exchange of information were developed jointly by the OECD and the Council of Europe in the Convention on Mutual Assistance in Tax Matters.

How exchange of information works

Most countries have laws that protect the confidentiality of information that tax authorities have gathered about a particular taxpayer. In fact, tax authorities are normally subject to some of the most stringent confidentiality requirements imposed on government departments. As a result, one country generally cannot provide information about a taxpayer to another country without a legal instrument that permits such disclosure. Historically, exchange of information generally has been carried out by OECD member countries under bilateral tax treaties which contain provisions based on Article 26 of the Model Tax Convention. The OECD/Council of Europe Convention also provides for exchange of information, but offers the added benefit of permitting it on a multilateral basis. Furthermore, that convention provides for exchange of information with respect to direct and indirect taxes, while the scope of most bilateral tax treaties is limited to direct tax matters, such as income taxes.

There are three main ways that countries send information to each other: after a specific request, by automatic exchange or spontaneous exchange. The most important is the first one. Under both the Model Convention and the OECD/Council of Europe Convention, countries are expected to rely on their domestic sources before making a specific request to a treaty partner. The request has to be precise (details about the taxpayer in question, the fis-

cal year, the transactions under scrutiny, the relevance of the information being sought). Speculative requests without specific justification – so-called fishing expeditions – are prohibited. All of these requirements are designed to prevent countries from overburdening each other with demands and to ensure that taxpayer information is disclosed only when necessary.

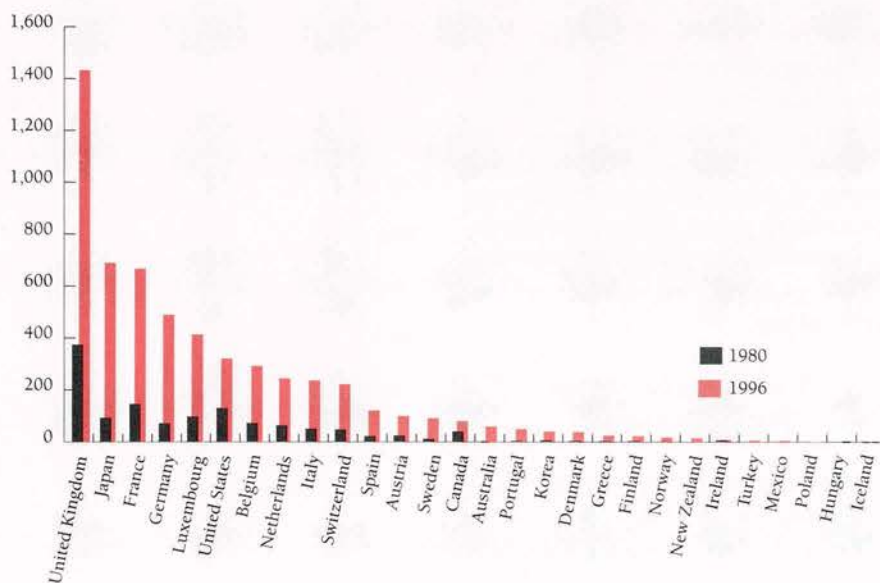
The second means of sharing information is through automatic exchange. This mainly concerns information about routine, periodic payments, such as interest and dividends paid to non-residents which may be taxable in the taxpayer's country of residence. This type of exchange is growing in importance, particularly as countries improve their ability to match the information received with details about their own taxpayers. It may also benefit taxpayers by reducing their compliance costs.

The third type, the spontaneous exchange of information, typically hap-

pens in the course of an audit when one tax authority uncovers details which it thinks may be of interest to its counterpart in another country (usually the taxpayer's country of residence). More general information may also be exchanged between tax authorities. For example, tax authorities may wish to share their experiences in dealing with issues that arise in a particular industry, such as insurance or oil. Some countries also permit authorised representatives of one country to visit the other for information gathering purposes.

The Model Convention and the OECD/Council of Europe Convention both require the protection of the exchanged information from disclosure. It must be treated as secret and may only be disclosed to persons and authorities, such as judicial bodies, involved in the assessment, collection, and enforcement of the taxes covered by the applicable convention. This condition aims to protect the rights of taxpayers. In fact, the OECD/Council of Europe Convention requires that

1. Deposit money banks – foreign liabilities
billion \$



Source: IMF



taxpayers be notified before information is exchanged about them.

Apart from limiting disclosure, the obligation to exchange information at all is qualified under both conventions. First, to provide information a party is not expected to take measures that might go beyond its own internal laws and administrative practices or those of the requesting party. Second, a party is not required to give information that is normally unobtainable under either its laws or procedures or those of the requesting party. Thus, a lack of reciprocity may remove the obligation to exchange information. Third, there is no obligation to provide details that would disclose any trade, business, industrial, commercial or professional secret, or whose disclosure would run contrary to public policy. This allows governments to protect commercial and public interests where appropriate.

Eliminating the barriers to effective exchange

Despite the sound substantive legal framework of the Model Tax Convention and the OECD/Council of Europe Convention, improvements could be made in the implementation of the

exchange of information provisions. Progress could be made by expanding tax administrators' domestic access to information. Another aim should be to enhance the quality of information available. New technologies could be exploited further and better use made of existing mechanisms for information exchange.

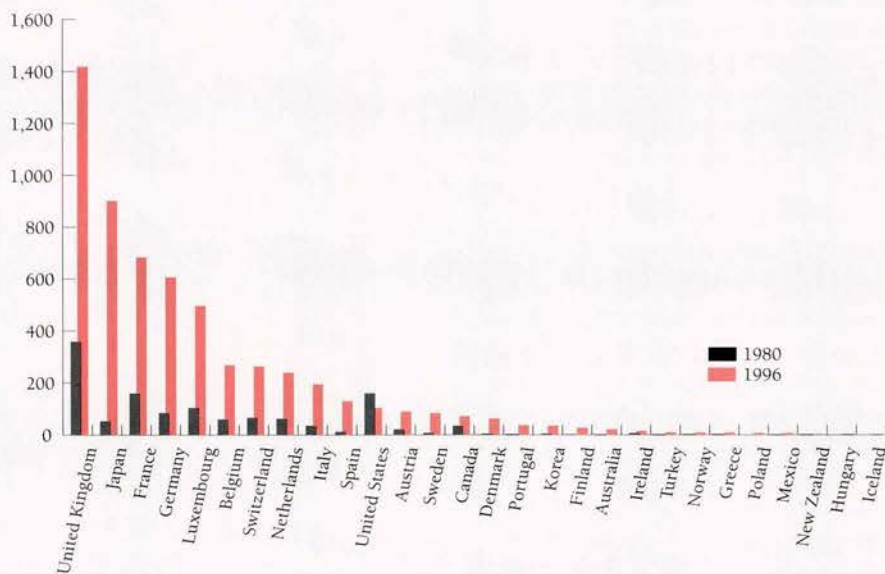
As noted above, the extent to which exchange takes place under the provisions of the Model Convention and the OECD/Council of Europe Convention generally depends on the domestic laws of the countries involved. Thus, if the laws of the countries provide minimal or cumbersome access to information for tax purposes, the exchange of information provisions will not be effective. For this reason, countries should re-evaluate any internal legal barriers to obtaining information which, due to the reciprocity provisions of tax treaties, might also prevent them from receiving information from elsewhere. After all, countries cannot expect to receive information

from treaty partners that they themselves cannot provide.

The quality of information available domestically could also be improved to facilitate better international exchange. A primary area for action is to establish reliable mechanisms for verifying the identity of individuals undertaking transactions and to require the maintenance of adequate records of that information. The most obvious example of where such verification and record maintenance practices could be improved is in the banking sector. Much progress has already been made, mainly as a result of efforts to prevent and detect money laundering, but a few countries continue to have inadequate systems of customer identification.

Commercial secrecy also poses problems for tax administrators. A common practice in international tax evasion schemes is to incorporate multiple layers of entities in jurisdictions with strict commercial secrecy provi-

2. Deposit money banks – foreign assets
\$ billion



Source: IMF

sions. Tax administrators have to peel away at the layers in a bid to uncover the true originators of the transaction. More transparency in corporate ownership would make life more difficult for tax evaders and make things a little easier for the authorities.

One of the major complaints about existing procedures for exchange of information is that they take too long. Greater use of new communications technologies could radically change that. Moreover, some countries have expressed frustration at not being able to match the information received automatically with their taxpayers' information. To help get over this problem, the OECD has recommended that countries encourage non-resident recipients of income to disclose their resident country tax identification numbers (TINs). All but five OECD member countries currently use TINs.

Another important way of making progress would be to have more countries ratify the OECD/Council of Europe Convention. So far, only Denmark, Finland, Iceland, the Netherlands, Norway, Poland, Sweden and the United States have ratified. Belgium has signed but has yet to ratify it.

The cost of inadequate information exchange

If exchange of tax information is not improved to meet the demands of the global economy and rising cross-border activity, governments and their



citizens may suffer a number of adverse consequences.

First, most governments depend heavily on tax revenues as a means of providing public services to their residents. If they cannot counter international tax avoidance and evasion and this results in a reduction of tax revenues, governments may be forced to cut the public services they provide, shift more of the tax burden to less mobile factors of production, such as labour and immovable property, while possibly increasing their public deficits.

Second, the playing field for taxpayers will remain distorted because compliant taxpayers will have lower net incomes than those who are not. As a result 'good' taxpayers will bear a heavier share of the tax burden, which in effect depends to some extent on the ability to avoid or evade taxes, rather than on the democratically decided fiscal policy.

Third, improving the exchange of information would help to reduce the

costs that tax administrations incur in their attempts to uncover schemes of cross-border avoidance and evasion. The savings would allow tax administrations to devote more of their resources to improving their service to taxpayers.

Finally, public confidence in the fairness of their tax system would be undermined if by simply crossing the border (physically or electronically)

some taxpayers could avoid or evade taxes with little fear of being detected or caught. A better international exchange of information can help governments overcome fiscal borders to ensure continued confidence in the fairness of the tax system. ■

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Taxing financial services: a future with options

ANDREW SCOTT, CONSUMPTION TAX GROUP

VAT is a key part of the fiscal revenue of many countries. Yet financial services are exempt from it. Why? And what are the economic implications of this exemption and the options open to governments in their attempt to prevent market distortions?

Value added tax (VAT) is a broad-based tax on household consumption. With the exception of Australia¹ and the United States, all OECD countries levy VAT, or a similar tax, on consumer expenditure. Over the years the importance of VAT as a source of revenue has been on the increase (chart 1). In some countries, such as France and Turkey, the revenue yield from VAT exceeds that from personal income tax (chart 2). VAT is a broad-based tax on consumer spending, but some services are VAT exempt, including most financial services. This state of affairs may seem puzzling to some, especially given the significance of that sector and the size of its value-added in today's world economy.

The reason why financial services should typically be exempt from VAT is a practical one. No country has found an entirely suitable and straightforward way to tax them. New Zealand, for example, examined the idea

when they introduced VAT in 1986, but quickly abandoned the attempt. On close study it proves hard to determine the tax base, in part because of uncertainty over the true nature of the service provided. Also, there is a question about whether it is reasonable to charge a consumption tax on transactions which are often directly related to household saving. Another problem is that subjecting those services to VAT might, by extension, require smaller non-finance sector companies to charge and collect tax in respect of money they have deposited with banks, since those deposits are effectively loans. Such considerations have led to the introduction of various special consumption taxes on financial services, such as the insurance premium taxes paid by the policyholders. It should be noted that businesses which provide VAT exempt services must pay VAT on such expenses as computer services and stationery.

Economic distortions

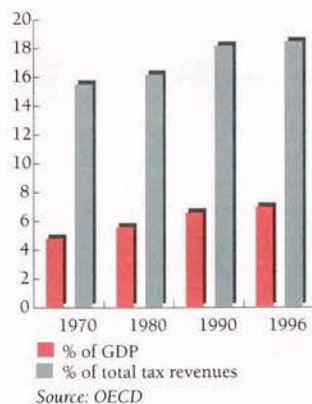
VAT is levied on the value that is added by business at each stage of the production process. The tax is collected by an elegant mechanism. In principle, firms charge VAT on all of their sales. Before handing the VAT revenue collected from their customers to the fisc, firms will deduct the VAT already charged to them by their suppliers. As a result, each firm pays exactly the tax due on the value it has added. Businesses that provide VAT exempt services and those not engaged in economic activity, for example, non-business organisations and private

consumers, have no right to deduct prepaid VAT. As a consequence, those sectors and households end up paying the total amount of VAT included in the prices of the goods and services they buy. This explains why some so-called exempt institutions, such as charities, find themselves 'stuck' with the VAT on the goods they buy from companies.

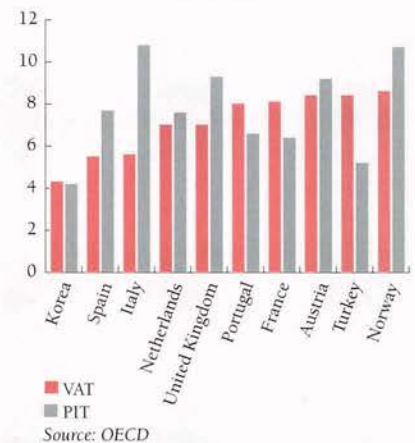
Services which are exempt from VAT include medical, housing and financial services. The latter involve mainly banking services, dealing in shares, insurance and related brokerage services. Providers of exempted services charge no VAT to consumers. Enterprises providing exempted services, however, cannot recover the VAT included in prices of goods and services they buy from their suppliers, such as computer, accounting and legal services. This VAT, sometimes referred to as 'hidden' or 'sticking' tax, ends up by being included in the cost of services sold by banks, insurers and other providers of financial services. It is in this sense that the exempt financial institutions incur VAT costs.

If enterprises subject to VAT buy the exempted services they cannot then

1. VAT revenues in OECD countries
% of GDP and of total tax revenues



2. Value added and personal income taxes in ten OECD countries, 1996
% of GDP



reclaim the hidden tax. Thus when businesses selling taxable goods use financial services, the price of the goods probably includes the amount of VAT included in the cost of financial services. In this instance the amount of VAT payable is calculated on a price which includes some tax. This leads to a 'tax on tax' effect and goes against the principles of the VAT system, which is designed to tax only the value-added at each stage of production. It may also create a distortion of competition, especially at the international level. For example, there may be an incentive for companies to import services which are free of tax in preference to buying from local providers whose services may include some hidden VAT. Other distortions are possible, such as the case where certain professional services provided by an exempted financial institution may escape VAT legitimately, while other providers are subject to the tax, potentially making theirs more expensive. Surveyors' services to house-buyers is a good example of this. When provided as a distinct and separate service by an independent expert, those services would be subject to VAT. If a bank provides the service in providing the mortgage loan the VAT will not be charged on any survey fee.

To remove any distortion a feasible method of taxing financial services has to be found. If the current exemption were eliminated, banks and insurers could claim all prepaid VAT and such distortions would no longer occur. The financial institutions would, however, be required to charge VAT on their services. The calculation of the taxable amount may not be so difficult for relatively straightforward services, such as the operation of a bank account where the amount of value added can be calculated, or share-dealing services

1. The Australian Government has recently announced its intention of introducing a VAT.

where a fee is charged. But financial service businesses engage in a vast range of transactions, such as institutional investments, which may seem far removed from customer services, but which are nonetheless related to the provision of services to clients.



Scrutinising options.

Mal Curtis/Photonica

Arrangements for a comprehensive system of taxation have therefore proved problematic. Moreover, the cost of system changes and on-going administration for banks and revenue authorities leads to questions about the relative merits of any reform.

A revenue paradox

As in most problems with seemingly straightforward answers, there is a paradox in that it is not certain that the exemption for financial services has any effect on the revenue collected under VAT. If the current exemption were replaced and these services were subjected to VAT, revenues would in part be lost because financial industries would claim pre-paid VAT. Moreover, other indirect taxes on financial transactions, for example on insurance premium taxes, may have

to be repealed or reduced as a consequence of bringing these transactions into the VAT net. There could be additional revenue generated from a positive rate of tax on these services. However, some governments remain sceptical of any estimate showing a net revenue gain.

VAT treatment of certain financial services and instruments in OECD countries differs considerably. Taking a comparatively straightforward example, credit card services, there is quite a disparity in the VAT treatment. The disparity ranges from services being outside of the scope of the tax to being exempt. Some countries, for example Germany, provide taxpayers with the right to opt to impose taxes on otherwise VAT exempt services. The legal basis for this somewhat unique taxation provision is available in accordance with European VAT law.

Financial services are evidently complex transactions. Care must be taken to ensure that in making any comparison of treatment, the services compared are exactly the same in every detail.

Options open to government

There are three options open to government to deal with the VAT conundrum. The first is to maintain the status quo. Continuing with the exemption of financial services for VAT has the attraction of 'staying with the devil you know'.

A second option would be to bring these services into the VAT net, which would imply a major change in the existing coverage of VAT and raise issues on how to measure value-added by financial institutions.

A third option would be to look for a radically new approach to taxing these services, but still under VAT. The Euro-

pean Commission, for example, is currently exploring the feasibility of taxing them on a 'cash flow' basis. The aim is to apply tax to the value-added to services provided by banks and insurance companies, for example by taxing cash movements. As a basis of tax on value added for credit transactions for example, the difference between the charge made to borrowers and the rate of interest paid to investors could be targeted. In the case of insurance, VAT could be paid on the difference between premium income and the sum of claims met. This approach helps to identify value added and may lead to solutions for some of the technical problems previously identified.

At this stage it is unclear which of these options will find favour. But given the global stature of the financial services industry, whichever option is chosen it is essential to have an internationally coherent set of rules. ■

Tax and the euro

JOHN NEIGHBOUR, HEAD, FINANCIAL TRANSACTIONS UNIT

The long-standing project to create a single currency for the EU has become a reality for 11 of its 15 member states. Although individuals will be relatively unaffected until the coins and notes of their domestic currencies are replaced by a common denomination in 2002, the effect on businesses and tax administrations will be immediate.

The process of considering the tax implications of economic and monetary union (EMU) has already been underway for some time. From 1 January 1999 the euro has to be used for a variety of paper transactions, including intergovernmental payments, issuance of government debt and transactions in the inter-bank market. Of more relevance for taxation, many businesses will take up the option of using the euro for issuing bonds, pricing goods and services, general invoicing and accounting from that date. Accordingly, many businesses will be conducting a significant part of their business in the euro long before the introduction of the notes and coins.

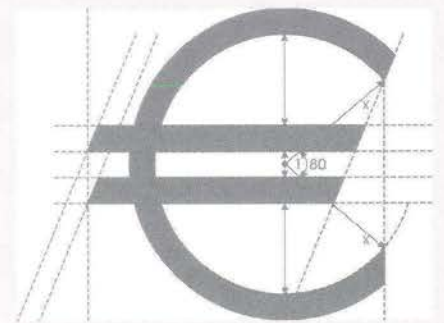
The emergence of the euro and the disappearance of domestic currencies in the euro area – so-called Euroland – raises important conversion issues, and not just for participating countries. There are longer term economic questions to be addressed as well.

Conversion to the euro

Any country whose residents have active interests in the EMU area will have to consider how to cope with the euro for a variety of tax purposes. Even if taxpayers have no business operations in the euro area, they may still be affected if they hold taxable assets denominated in one of the 11 disappearing currencies. The most immediate issue is how to deal with the consequences of any conversion into the euro of taxable assets and liabilities previously denominated in one of the

EMU currencies. This will occur from 1 January 1999 for the businesses who opt to account in euros at the earliest opportunity and for everyone else by 30 June 2002.

There are three broad possible approaches to coping with conversion, which the following example may help to illustrate. Consider an individual in the United Kingdom who owns a FF100,000 bond in a French company. The bond was bought when the French franc/sterling exchange rate was FF10:£1 and so was worth £10,000. At 31 December 1998 the French franc/sterling exchange rate is, say, FF9.52:£1 and so the bond is worth £10,500, i.e. there is a foreign exchange gain of £500. On 1 January 1999 the French company re-denominates the bonds in



euros. Owing to interest rate movements, the market value of the bond at 31 December 1998 has increased to FF105,000.

Now, the first approach is that the conversion of the French franc bond to a euro denominated bond should be

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treated as an event for tax purposes and so give rise to an immediate gain or loss ('immediate recognition'). In our example the taxpayer would be treated as if he or she had sold the old bond and bought a new one at the conversion date and so would be taxed on the foreign exchange gain of £500. Potentially, the person could also be taxed on the gain of FF5,000 arising from the increase in market value of the bond.

The second approach also involves the recognition of the conversion for tax purposes but instead spreads the recognition of any gains or losses over a number of years ('spreading'). In the example, the foreign exchange gain of £500 could be spread over five years and only £100 taxed each year.

The third approach is to ignore the conversion for tax purposes ('deferral'). In our example, no exchange gains or losses would be triggered until the person sold the re-denominated bond.

The decision whether to opt for immediate recognition, spreading or deferral, will depend on a number of policy considerations, in particular the general view on the treatment of exchange gains and losses and the government's wider approach to the euro. There are no obviously right or wrong solutions, nor any real precedents. Even among the 11 countries going into EMU, there is no uniform view. A majority of participants have gone for some form of the deferral option. However, other countries have gone for immediate recognition or have not proposed to change existing tax systems which are based on that option for some types of monetary assets, such as trade debt.

The different treatment adopted by the countries of the euro zone creates the possibility of businesses being taxed

more than once on their true profits ('double taxation') or of being taxed on less than their true profits by exploiting those differences in tax treatment ('tax arbitrage'). One example of possible tax arbitrage would be for a taxpayer to arrange to have exchange losses on conversion to the euro in countries where they will be recognised immediately, while the expectation is that exchange gains on conversion will arise in countries opting for deferral. The taxpayer will get an immediate tax deduction for conversion losses, while he will not have to pay tax on conversion gains until some time later.

Some longer-term effects

The big policy question is whether it is possible to have a single currency without having a common tax policy that goes beyond the 1997 Stability and Growth Pact (box, p. 5). Perhaps a tighter co-ordination of tax rates and systems than currently exists would be useful. Interestingly, the budgetary discipline needed for the introduction of the euro has already promoted some higher degree of fiscal co-ordination among the EU member states. Examples include the publication of the Code of Conduct for Business Taxation (aimed at counteracting harmful tax competition) and the proposed Directive on the effective taxation of savings by individuals.

The advent of the euro has already led to a wave of mergers, take-overs and business reorganisations, which can be expected to continue apace. This will indirectly have a number of tax effects, for example, making transfer pricing issues more common as previously independent firms are taken over by larger European-wide multinationals. More generally, the volume of cross-border transactions of all kinds can be expected to increase within the euro area because of the elimination of for-

eign exchange risk and the creation of a truly single market. The abolition of currency risk in the euro zone should increase cross-border investment and lead to more diversification of investment in terms of the types of assets and countries chosen.

There are also likely to be major changes in the nature and types of financial products, operation of financial markets and exchanges and in the behaviour of investors, pension funds and intermediaries. Such changes are likely to lead to the creation of much wider and deeper European capital and financial markets, thereby reducing the cost of borrowing as well as providing increased investment opportunities.

However, in the absence of any move to co-ordinate the tax rules in the euro area, the authorities will still pay considerable attention to their domestic boundaries, even if those boundaries become less important to businesses. This dichotomy between the tax and business dynamics may lead to more pressure to co-ordinate the tax systems in Euroland. This pressure may well increase if recent adverse global events, such as the spread of the Asian financial crisis, threaten to knock the euro off course or affect some parts of the euro zone considerably more than others (an asymmetric shock). For example, any further collapse of the Russian economic system would have a much greater effect on the eastern members of Euroland than on its southern members. At a minimum, the authorities may have to review their existing tax policies to maximise the benefits of the changes brought about by the euro. Issues will also arise on how tax policies formulated in the euro zone will affect other OECD countries. Whatever happens, the move to the euro is likely to make the next few years very interesting indeed for tax policy-makers everywhere. ■

Russia's tax reforms

SUSAN HIMES, NON-MEMBER COUNTRY UNIT, AND MARTINE MILLIET-EINBINDER, TAX ADMINISTRATION UNIT

Taxpayers and tax administrators expect stability in their fiscal systems. But in Russia's crippled state there can be no stability, only decline, unless difficult tax reforms are forced through. The draft tax code which is still before the Duma offers some guidance as to the way forward.

The challenges Russia faces in transforming its current tax system are enormous. Russia is in the grip of its most difficult economic crisis since the collapse of the Soviet Union, putting the new government in a political and fiscal bind. International lenders have made it clear that they will pull their money out and refuse to make new loans unless they see reforms throughout the economy. Of particular importance is Russia's tax system and the imperative of improving collection. But any fiscal reforms have to be carefully designed and implemented, especially as Russian citizens, who generally find new taxes repugnant, have already been angered by lost wages and pensions from collapse of the economy and corruption. Adding to their ire is the prospect of rampant inflation as a result of the recent sharp devaluation of the ruble.

Russia's best hope to restore tax collection and stabilise the economy remains the implementation of the proposals set out in the current draft tax code, whose final approval in the Duma cannot be guaranteed. While far from perfect, the new code would simplify the tax rules by substantially reducing the number and rate of taxes

and eliminating numerous exemptions and loopholes. The OECD is working closely with Russia – which has observer status in the Organisation's Committee on Fiscal Affairs – to ensure that the code being enacted brings Russia closer to international standards, while equipping administrators



'Look. There are no hidden taxes.'

East News

with new tools for collecting taxes in a non-discriminatory and fair manner.

Current tax situation in Russia

Russia's tax system has performed very poorly since its creation in 1991 for a number of reasons. For a start, it is a cumbersome system. Today there are about 30 separate federal taxes and over 170 local and regional taxes. Russia has 89 regional tax offices and 2,639 local tax offices employing over

180,000 tax officials. Yet, evasion is endemic as Russians are not accustomed to paying income taxes, which were unknown under the Tsars and communists. The nominal tax rates are very high, but there are numerous exemptions for a wide range of favourably treated taxpayers. Emergency tax collection involves draconian penalties, but these penalties are applied at the discretion of tax officials, leaving the system open to abuse and corruption. Regional authorities routinely issue guidelines that contradict centrally issued instructions, where the latter exist. In the absence of clear legislation and procedures, tax inspectors have tended to act autonomously, leading to a very uneven treatment of taxpayers. And while tax collection did increase before the current crisis, almost half of all average regional budgetary revenue and expenditure is now in some form of money surrogates, particularly barter.

Not surprisingly, the outcome is a tax system which fails to produce adequate revenue to government. Furthermore, it impedes growth, puts

off foreign and domestic capital and drives investment under ground. A major comprehensive tax reform is therefore long overdue and represents the only feasible escape from the current trap.

New tax code

The draft tax code is the embodiment of that proposed tax reform. Successive versions of the code have been under discussion since 1995, but it was

only this year that the Duma, the lower house of Parliament, began seriously considering its individual provisions. Part I of the tax code on administration, tax assignments and related materials was passed by the Duma and signed by the president in July 1998. Parts II, III and IV containing the substantive laws have passed the first reading, but further progress in the Duma will be difficult.

The draft tax code represents a significant improvement over the current Russian tax legislation. In general, the aim is to lower the tax burden on businesses, eliminate exemptions and shift more of the tax burden to consumption. It is grounded in practical considerations, with detailed rules to provide guidance to taxpayers and tax administrators, as well as uniformity and transparency. While it adopts many Western practices, the code reflects the laws, experiences and choices of Russian policy-makers. If implemented effectively, it should help administration, boost revenues and reduce evasion, while distributing the tax burden more fairly than is presently the case. The main policy themes and features of the code are discussed here.

Income tax: lower, broader and simpler

The new code keeps to the trend set internationally over the past two decades, and seeks to reduce the number of federal taxes and lower the top marginal tax rate on profits from 35% to 30%. The ability of regional governments to grant specific exemptions has been restricted, a move which outlaws tax competition between the regions. Because there is a shift in the tax burden from companies to individuals, the cut in the rate should increase incentives for companies to save and invest

and draw more economic activity into 'legitimate' markets. To finance this rate cut and simplify the tax structure, the draft code aims to broaden the tax base substantially, particularly with respect to personal income tax. For example, current exemptions for housing allowances and cars would be abolished as well as the exemption for bank deposit interest and insurance proceeds, which are at the heart of many tax avoidance schemes. Similarly, to reach the large though untaxed bartering market, the government has proposed a new tax of 0.8% on promissory notes known as *vekseli*.

Another important simplification is the new forfait tax system¹ for small businesses. Enacted this summer as part of the government's anti-crisis tax package, the new system requires small businesses to pay an advance tax of 20% of their imputed income. Like imputed income systems in other countries, the amount of income expected to be earned by a business would depend on a number of objective criteria, such as staff levels, sales, size of business and so on. Using such criteria to determine the amount of tax should simplify the calculation and payment of income taxes, particularly for start-up and less sophisticated businesses. On the other hand, such arbitrary taxation formulae could over-tax many start-up businesses and may under-tax those with the most ability to pay.

Modern accounting rules

One of the main tasks has been to displace the antiquated accounting laws used to determine the tax base. To a large extent, these old accounting rules and administrative procedures, which were inherited from the Soviet era, were designed primarily to control and monitor physical production rather than to measure the tax base accurately and facilitate compliance with tax

laws. For example, the old rules disallow the carrying forward of losses and the deduction of many common business expenses, such as advertising, resulting in an overstatement of the tax base relative to modern accounting systems, while exaggerating the profits tax rate.

The draft tax code is more up to date. Under it, all reasonable and necessary business expenses, including advertising, research and development, would be deductible unless a specific provision disallowed the deduction. In a similar step, tax depreciation would approximate economic depreciation and large enterprises would be required to use the accrual method of accounting, which should reduce incentives for deliberately running arrears. Barter would become less attractive and loss-making firms would be identified more quickly. The new accounting rules would bring Russia's profit tax system in line with Western standards by taxing real profits only.

Combating capital flight

The current tax system with its many exemptions, underdeveloped international tax rules, and dubious treaties with tax havens has resulted in substantial capital flight. The devaluation of the ruble is likely to make it worse. Part I of the code includes new transfer pricing rules modelled, in principle, on the OECD guidelines. If consistently applied, these rules would help Russia collect tax from large enterprises while ensuring that the same income is not taxed by more than one jurisdiction, including from other countries. Another promising development is the government's plan to renegotiate its tax treaties with international offshore locations. Most assume the initiative is primarily directed at tightening up the Russia-Cyprus tax treaty of 1982, which is commonly used in Russia to avoid tax.

1. Taxation on an estimated tax base (forfait) which is used in a number of countries.

Again following the trend in OECD countries, the tax code would shift the burden from income to consumption taxes. The shift could increase the incentive to save by reducing the difference between pre- and post-tax returns on savings. And consumption taxes should be less easy to avoid or evade than income taxes.

True, consumption taxes do tend to place a higher burden on lower income earners, whose savings ratio is small compared with higher earners and who through their daily expenditure end up paying tax on virtually all of their disposable income. But as most of the evasion and avoidance takes place in higher income brackets, the shift to what are generally seen as regressive consumption taxes may ironically turn out to be relatively progressive in Russia's case. After all, even the most elusive of top earners would have to pay at least some tax when spending their income on goods and services.

A major area for reform is the value-added tax (VAT). By decree, the government expanded the tax base by cancelling the reduced rate of 10% for socially significant goods, including some food products and children's items, such as clothes. On the question of moving to an accruals system, however, the tax code provisions are flawed. The system is not a full accruals system, but a hybrid; VAT refunds will be paid on a cash basis, while the

tax itself will be paid on a deferred basis. True reform of VAT would involve moving to a full accruals system and requiring the retail sector to adopt a credit invoicing system to monitor VAT refunds.²

One of the changes which has already come into force allows regional governments to place a retail sales tax of up to 5% on top of the VAT in lieu of minor local taxes. Not surprisingly in the present environment, the current 4% local turnover taxes would be retained, making Russia a unique jurisdiction in applying potentially four separate consumption taxes: a 20% VAT, excise tax which is applied on a unit basis, a 4% turnover tax and a 5% retail sales tax. While the new sales tax is expected to raise \$17 billion annually, there is a question mark over the wisdom of so many layered consumption taxes. They are likely to apply to the same tax base, and once their sums are done, taxpayers could end up paying their consumption taxes to as many as four different government bodies. They would also run the risk of being audited for one or more consumption taxes twice in the same fiscal period, once by the State Tax Service (STS) and once by the region.

Changes to administration rules

Until now, certain legal rights and powers that are widely used by Western tax authorities to facilitate collection have not been available to their Russian counterparts. Part I of the tax code would provide many of these important legal powers. For example, the code would provide the legal basis for a general taxpayer identification number, or 'TIN'. The number would allow the authorities to computerise tax collection and pension payments and improve payroll tax compliance. Widespread use of TINs would help the authorities to compile a master file containing details on

every taxpayer. The code would also provide authority to the STS to allocate income, deductions and credits among and between related taxpayers based on comparable transactions. In cases of non-payment of tax by liquidated companies, the STS would be able to sue the owners for the debts.

Part I, however, also contains provisions which would substantially restrict the ability of the STS to collect taxes and seem to be constructed to protect the interests of the taxpayer. It includes a provision allowing the taxpayer to correct mistakes and avoid prosecution. Another article provides that all ambiguities and inconsistencies in tax legislation, of which there are many, be resolved in favour of taxpayers. Other provisions prohibit the tax authorities from auditing a taxpayer more than once per year, and limit the period during which the tax authorities may freeze a taxpayer's bank account.

The penalty and interest regimes have also been substantially revised. While Russian current tax penalty and interest provisions are severe by Western standards, the new law tips the balance far more in the taxpayers' favour. Even in situations where arrears remain unpaid, the amount of nominal payments is capped and liberal deferral provisions are included to allow taxpayers to delay payments without incurring interest and penalty charges. The taxpayer is also helped by the demand that the tax authorities obtain court orders before enforcing any collection action against a physical person and before collecting penalties from juridical persons.

Small-scale reforms would be a useful start

Despite the clear need for a new, modern tax code, passage of Parts II to IV of the code seems likely to be

2. Two significant developments for the Russian tax system occurred as this article was going to print. First, the Primakov government announced a series of plans to counteract the economic crisis gripping the nation. Precise details have yet to surface with respect to the tax changes, but in general the government intends to cut both the profit and VAT tax rate while cracking down on tax evasion. In the second development, the Constitutional Court struck down as unconstitutional the previous government's decision to impose a modified form of accrual taxation for VAT.

slow. An alternative plan would be to enact a smaller-scale reform through amendments to some existing tax laws. The amendments could be drawn from the draft tax code and consist of the highest priority reform proposals. While not as comprehensive as the draft tax code, the solution would be a good one. At the very least it would address the most serious problems in the current tax system and help pave the way for passage of the fuller tax code later.

In this climate, the OECD is advising the Russian Ministry of Finance and the State Tax Service on the outstanding design issues and implementation of the most important reform provisions in the code. The OECD is also continuing its practical tax training for STS officials at the Moscow International Tax Centre.

Despite the frustrating setbacks along Russia's road to economic transformation, now is not the time to give up on tax reform. Overhauling an antiquated and reviled tax system is a formidable challenge for any government, particularly after 70 years of central planning. And the very severe financial crisis and feverish political climate make the obstacles even more daunting. Yet the OECD recognises that in the present fragile conditions, the pressure to raise more revenue for government is set to increase, which makes reform more urgent than ever. ■



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Selected OECD publications on taxation

Fiscal Positions and Business Cycles

The Fiscal Positions and Business Cycles (FPBC) diskettes contain detailed quantitative information on potential output and output gaps, on actual and cyclically-adjusted government revenues, outlays and balances, and on government financial liabilities (including debt series consistent with the Maastricht criterion). Historical annual data from 1970 onwards and the projections of the OECD Economic Outlook are given for 19 OECD countries. The diskettes are a valuable data source for those interested in fiscal policy and in potential output and output gaps.

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The data on tax burdens and family benefits reported here are widely used in academic research and the preparation and evaluation of social and economic policy making.

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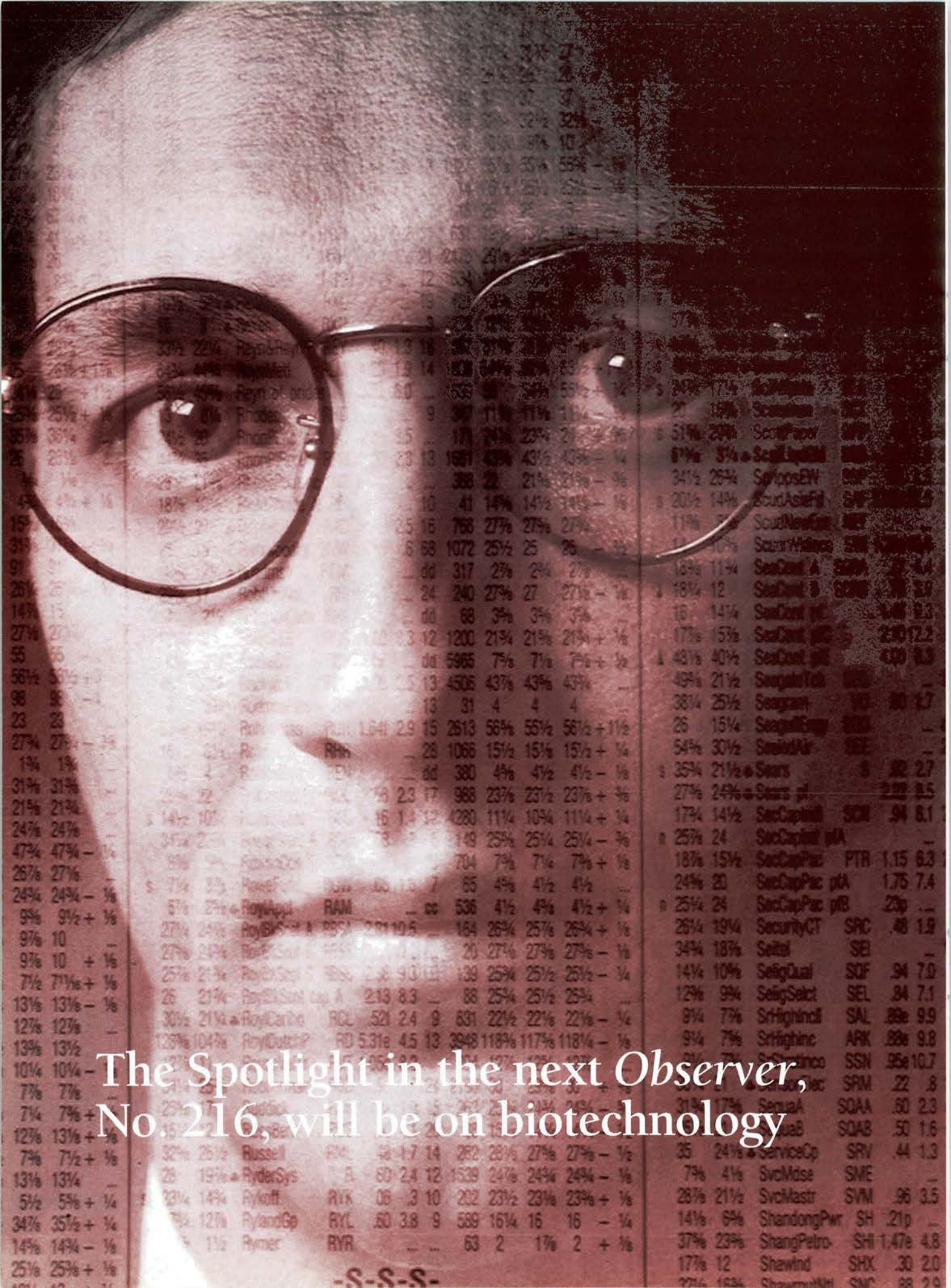
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Data on government sector receipts, and on taxes in particular, are basic inputs to most structural economic descriptions and economic analyses and are increasingly used in international comparisons. This annual publication gives a conceptual framework to define which government receipts should be regarded as taxes and to classify different types of taxes. It presents a unique set of detailed and internationally comparable tax data in a common format for all OECD countries from 1965 onwards.

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DM118 £39 ¥8,500

Also available on diskette (23 98 06 3 D)
ISBN 92-64-06704-3, FF760 US\$145
DM225 £97 ¥16,000



The Spotlight in the next Observer, No 216, will be on biotechnology

New molecular technologies for safe drinking water

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Microbial pollutants of water are a major cause of health and economic problems. Progress is being made in the techniques used to identify the pollutants, but there are questions about the costs. They have to be answered if a crisis is to be averted.

Until recently, water issues were overshadowed by other environmental concerns, such as climate change. But now water and its related problems have moved to the front of international environmental and health policy agendas. According to the World Health Organization, a third of the world population suffers from diseases derived from contaminated drinking water. Every year about 13 million people die from waterborne infections; of these, 2 million are children. The majority of these deaths occur in developing countries. However, waterborne pathogens – the agents that cause disease – are a growing hazard and a major economic burden in OECD countries too. For example, in the United States about 900,000 cases of illnesses and 900 deaths occur every year as a result of microbial contamination of drinking water. The annual cost to the US of waterborne diseases is about \$19 billion.

In 1993, a major outbreak of gastrointestinal illness caused by *Cryptosporidium*, a parasite which is commonly found in cattle, was reported in Milwaukee, the largest city in the state of Wisconsin. The disease outbreak cost the Milwaukee community over \$55 million. Some 400,000 residents were infected, and more than a hundred people died.

This dramatic event revealed the vulnerability of the US water systems and led to a report in 1996, *Global Decline in Micro-biological Safety of Water: Call*

for Action by the American Academy for Microbiology.

The American Society for Microbiology (ASM), a different though related professional organisation, has now prepared a second expert report underpinning the first one (*Call for action*) with further data and forecasts, some of which are quite ominous. It says,



Moschetti/REA

Is it safe?

for example, that more than 20% of the US groundwater systems are contaminated. This has significant implications, since more than 100 million Americans rely on groundwater as a source of drinking water.

The ASM report also highlights how many of the outbreaks are associated with pathogen contamination of municipal water systems that operate

according to governmental norms. Could this mean that current methodologies might be inadequate to monitor water quality or to detect failures of treatment systems? Indeed, current technologies lack the precision and specificity to measure low levels of pathogens and many micro-organisms, particularly viruses and parasites, can escape detection.

Even more disconcerting are recent reports on the possible long-term effects of waterborne viral infections. Enteric viruses, such as Coxsackie B, appear to be associated with heart diseases, in particular myocarditis, an illness which affects the muscular wall. This could be extremely significant, given that most deaths in OECD countries are cardiovascular-related.

To add to the problem, the Environmental Protection Agency in the United States has recently published a list of likely new contaminants of drinking water (*Drinking Water Contaminant Candidate List*). The list includes among other pathogens, *Helicobacter pylori*, a bacteria that has recently been associated with chronic gastric diseases. The situation in the United States is mirrored by other



Warning signs.

OECD countries. Disease outbreaks have recently been reported in Australia, Japan and Western Europe.

Solutions and goals

Today, the assessment of microbial quality of drinking water is based exclusively on culture techniques. Since these methods do not allow for the detection of specific water pathogens, 'indicator' bacteria showing the possible presence of pathogens are monitored.

Most pathogens in drinking water are generally faecal in origin. That means they can be found in human and animal wastes. Thus the coliform bacteria, which are always present in the digestive systems of humans and animals, are commonly used as indicators. They are simply an indication that the water supply is contaminated and that disease-causing bacteria may be present. The method offers a good margin of safety against most bacterial pathogens, but is not effective against some other bacteria, viruses and protozoan parasites. For example, the deadly *E. coli* O157 may be present even when faecal coliform measurements show negative. Furthermore,

viruses and most protozoan parasites, such as *Giardia* and *Cryptosporidium*, are resistant to chlorination and filtration, which usually kill coliform bacteria. As a result, coliform bacteria cannot be accurate indicators in such cases, particularly in chlorinated waters.

Furthermore, the indicator method usually requires cultivation on nutrient media which makes it impossible to obtain a reliable result within less than one day. By the time the results are available, pathogens might have spread wide in the water distribution system. There is clearly a need to find new approaches to monitor the microbiological quality of water.

New molecular technologies

Thanks to rapid advances in biotechnological research in the last few years, a wide range of new methods, principally based on the detection of nucleic acid material and its amplification, is becoming available. They offer a novel, more sensitive and specific way of detecting micro-organisms. They can also identify organisms that would not be detected with current culture techniques and can be used to

track new pathogenic entities, including variants of otherwise harmless micro-organisms.

To date there are countless reports on the application of these methods in bacteriology. For example, 16S-ribosomal RNA probes and antibodies tagged with fluorescent labels allow the direct microscopic detection of target organisms within hours. Similarly, designed gene probes help in the detection of specific nucleic acid sequences which signal the presence of a particular organism in the sample. Amplification methods, such as polymerase chain reaction (PCR), can then be used to increase sensitivity.

There are probably very few groups of micro-organisms that have not been located with these amplification techniques and indeed several test kits have already been commercialised. This offers some hope for isolating some pathogens. But there are some important technical bottlenecks to overcome before they can be used to assess water quality and the microbiological safety of drinking water. At an OECD workshop at Interlaken (Switzerland) in July 1998¹ several steps for improvement were agreed: research would have to target micro-organisms at levels useful for risk management or investigation; micro-organisms would have to be recovered from large amounts of water and tests run within minutes or hours, or even in real time; researchers would have to discriminate between viable and non-viable micro-organisms and identify specific pathogens of public health concern. Importantly, the running cost of monitoring would have to be made as affordable as possible.

The economics of water

To be useful, any methodologies for assaying microbial water quality must fulfil the needs of public health and

environmental regulators. They also have to be cost effective enough not to impose an unacceptable burden on water suppliers and consumers. While it is not a viable option to have populations exposed to infected drinking water, it would not be realistic to raise operational standards of drinking water stations without considering the full economic and environmental costs.

Today, in most OECD countries the adoption of safety standards, such as in pesticides control, has led to major capital investments. For example, England and Wales have invested over a billion pounds to comply with safety standards. But few reliable figures exist on the relative costs of conventional and new technologies, though some speculation may be made based on the history of biotechnology innovation.

Three issues of major economic significance have to be considered. First, the costs of new technologies are almost always highest at the beginning, and come down over time. In the case of new diagnostics, a cost factor is also the fact that first generation technologies can seldom replace standard technologies and are primarily utilised to complement them. The open question then is how long will it take for the costs to come down, and what will the time-lag be between first and better second generation technologies? In the case of outbreak investigation, where rapid and sensitive diagnosis is a decisive factor, there is every reason to assume that molecular methods will ultimately be more cost-effective.

Second, cost considerations must be the long-term economic price of not using a new technology. This 'opportunity cost' will no doubt be different

1. Molecular Technologies for Safe Drinking Water – Interlaken, 5–8 July, 1998 – hosted by the Swiss Government.

for rich countries than for poor ones and each country will have to make its own assessment on this. For grave diseases, such as cholera, the opportunity cost will be much more evident than for less severe ones. And even where the costs of non-action might seem low, pointing against the outlay, extending the cost-benefit analysis over a longer period of time could dramatically change the outlook. The example that water-borne infections can lead to heart and gastric diseases suggests the long-term economic costs of not using the best detection methods, whatever their price, could be very high indeed.

The third and final issue relates to the 'therapeutic gap' between detection and prevention. That gap varies according to the disease and there are major economic implications when the gap is wide. In many cases, detection of diseases is moving ahead faster than our ability to prevent or cure them. However, perhaps more can be done, and faster, to prevent and cure water-borne infection than other diseases.

An international response

The demand for new molecular technologies raises diverse issues of its own. Different countries have varied problems. Some have plenty of water and others a scarcity, requiring recycling. In many OECD countries, the proportion of the population that can be reasonably connected to a community or municipal water plant is approaching its practical economic limits. Several countries have done well in providing water to small communities, and the application of appropriate technology can bring further progress at reasonable cost. On the other hand, to meet quality objectives for drinking water in densely populated areas, it has become necessary to treat sewage water. Soon cities will

probably have to treat urban storm-water and wet-water overflows of sewage as well.

Most developing countries and many small community water systems in OECD countries do not have the necessary sophisticated laboratory infrastructure to comply with safe drinking water requirements. The differences in conditions underscore current variations in acceptable levels of pathogens and the fact that the concept of tolerable risk varies from country to country. Even in the United States there is no uniform view and standards vary from state to state.

To date there are international agreements on legal limits for pathogens – as reflected by EU directives and the World Health Organization's international quality and safety standards – but only nationally-agreed measurement protocols. Yet common surveillance tools for water-borne disease are needed to reduce risk. That means standardising methodologies and validating them, preferably on an international basis. A mechanism for sharing validated methods is required. And last, but by no means least, wider exchange of comparable information is crucial so that research can meet public health needs while taking management and economic realities fully into account. ■

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World energy to 2020: prospects and challenges

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What are the key trends to expect in world energy demand and supply over the next two decades? The IEA's projections point to some vital challenges facing governments.

There are two basic ways of looking at the future for energy demand and supply and considering their effects. One is to take a business-as-usual view (BAU) and assume that no new policies are adopted to reduce energy-related greenhouse gases. The other is to expect that the energy policies existing before the Kyoto conference of December 1997 will be adapted to tackle the issue of pollution and climate change. That Conference established a Protocol to the United Nations Framework Convention on Climate Change obliging developed countries (subject to entry into force) to reduce emissions for six greenhouse gases (GHGs) by a total of about 5% below 1990 levels by the years 2008–12. Kyoto will undoubtedly have an influence on future energy supply and demand, but to understand how, a look at the no-policy-change scenario would be useful.

Emissions will rise sharply under BAU

If energy policies remain as they are today, world energy demand would grow by 65% and carbon dioxide (CO₂) emissions by as much as 70% between 1995 and 2020. This sharp rise assumes a rate of world economic growth of 3.1% per year, based on 1990 US dollars adjusted for purchasing power parity. There is nothing exceptional about this growth rate, which is close to the one recorded since 1971. What is striking is that two-thirds of the increase in energy demand before 2020 will arise in China and the other developing countries. CO₂ emissions under the BAU

scenario are therefore expected to rise, and the rate of increase will accelerate, reflecting the stabilisation of nuclear power generation worldwide and the continued rapid growth in coal use in China and other Asian countries.

The first chart illustrates IEA projections of world energy demand by type of fuel under a business-as-usual approach. Oil continues to dominate world energy consumption, with transport use increasing its share of the total. Gas consumption rises to approach coal. Hydro-electric power and renewables rise steadily, but remain at low levels. As for nuclear power, consumption stabilises by 2020. Energy intensity, which relates energy use to growth, falls for the world as a whole, by 1.1% per year; this is because total energy use rises by 2% per year while economic activity rises by 3.1% per year. This decline in intensity follows the trend of the past 15 years.

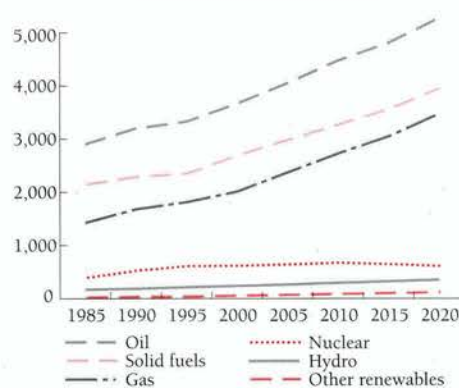
Examining demand by fuel type offers some useful hints about the future, but to analyse demand more closely, we have to look beyond fuel type and focus on four major energy uses, or so-called energy-related services. They are fuels for power generation, electricity consumption, fossil fuels used for mobility (transportation) and fossil fuels used for stationary purposes, such as space and water heating. These uses are plotted against GDP in the second chart.

Some key trends in fuel uses are important to bear in mind. For the OECD area and the world as a whole, electricity consumption and

energy use for mobility closely followed the trend in economic output up to 1995. Mobility demand was largely unaffected by the 1973 and 1979 oil price shocks, although in North America it shifted a little in 1979–82, partly because of the introduction of Corporate Automobile Fuel Efficiency (CAFE) standards in the United States. Fossil fuel demand by stationary users, on the other hand, was strongly influenced by the two oil shocks. Subsequent energy-efficiency drives, a shift towards service-oriented economic activities and the relocation of some industrial activities to developing countries explain the stabilisation of fossil fuel demand for heating purposes in OECD countries as a whole since that time.

One interesting trend is that since the late 1970s, most of the rise in use of fossil fuels for heating has taken place outside the OECD. This is because the increase is driven by economic development, especially in industry, and the substitution of non-commercial traditional fuels by commercial fuels. Some energy uses become saturated as incomes increase. An example is the heating of homes and public and commercial buildings. In high-income countries, most buildings are already

1. World total primary energy supply¹
million tonnes oil equivalent



1. Data after 1995 based on projections.
Source: IEA

heated to optimum comfort levels and a 50% increase in GDP in these countries would not mean buildings heated to higher temperatures. However, if the number and size of such buildings increased, then energy use would of course rise.

After Kyoto

In the forecast period to 2020 the IEA business-as-usual model shows world demand for electricity and fuel for mobility continuing to rise. Fossil fuel demand for non-mobile uses is set to flatten out in the OECD area, but will continue upwards in China and developing countries as industrialisation rapidly increases. Energy demand by power generators will be in line with electricity demand, but growth is expected to slow as new generating plants with higher efficiency are introduced.

But what if the energy policies that existed before the Kyoto Conference were changed and new policies adopted to reduce energy-related greenhouse gases? The IEA expects future world energy use to turn out to be quite different from that described in the BAU projections, and not just because economic growth, energy prices, technology and consumer behaviour can alter over time. Most of the difference will be because the BAU scenarios are simply unacceptable, particularly in view of rising greenhouse gases. Governments in developed countries will therefore want change, as the Kyoto conference demonstrated.

It is of course not possible to prepare an accurate projection of energy demand and supply, or of CO₂ emissions, without first knowing the policies to be applied and analysing their potential effects. The base for that work does not yet exist. But it is possible to get some idea of where CO₂ emissions

might be reduced and the types of action that would be required of energy consumers.

The IEA analysis is intended purely to illustrate the opportunities and constraints involved and is limited to the hypothesis that each OECD region seeks to meet its own Kyoto commitment in 2010. Within this constraint two analyses have been made, the first based on regulation to tackle emissions, the other on raising prices.

In the first one, called Kyoto Analysis 1, approximately half the reduction in CO₂ emissions is achieved by imposing a uniform additional reduction of 1.25% per year from 1998 to 2010 in energy intensity across all sectors of final demand throughout the OECD. The other half of emission reductions is achieved by substituting fossil fuel in power generation by non-fossil fuel, whether nuclear or renewable energy.

In the second scenario, which is called Kyoto Analysis 2, instead of regulation, a uniform carbon value, or charge, is added to the price of fossil fuels in the OECD which reflects the carbon content of each fuel. The additional charge would be sufficient to achieve approximately half of the fall in CO₂ emissions necessary to meet the Kyoto targets. The charge to achieve that reduction has been calculated at \$250 per tonne of carbon content.

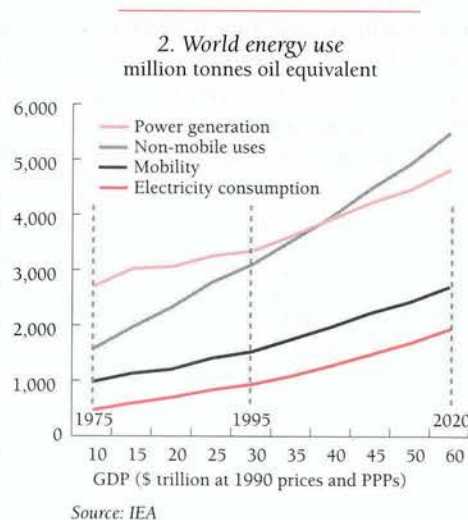
The two Kyoto analyses are quite different in their impacts. Because of different consumer reactions and dynamics, changes in fuel use under the market-based approach of Kyoto Analysis 2 vary considerably between fuels and between different energy uses. For example, throughout the OECD, electricity and fuel consumption for the purposes of mobility is much less price-sensitive

than demand for fossil fuel for non-mobile uses. That means that most of the impact of the carbon value would be felt in demand for heating fuel, for example. Energy demand in North America is generally more price sensitive than elsewhere in the OECD. This is because energy prices are very low to begin with, so that any extra charge will have a higher marginal effect on the total cost.

Pricing policies are better

Policies aimed at achieving a uniform reduction in energy intensity across sectors and countries via regulatory action are likely to result in more welfare loss to consumers than pricing policies which are flexible and responsive to different circumstances and conditions. In other words, pricing policies are on balance more likely to achieve reductions in CO₂ emissions where reductions are most needed. (The possibility of countries implementing their obligations jointly or engaging in emissions transfers or trading has not been taken into consideration in this study, which is highly aggregated by region.)

In the case of OECD North America and OECD Pacific, total power gen-



eration is reduced because of the electricity cuts imposed on final demand in Kyoto Analysis 1; the carbon value added to fossil fuel prices in Kyoto Analysis 2 has a similar downward effect on demand. And where electricity demand grows more slowly, less new generating plant is built.

commissioned early anyway. As a consequence, electricity generation from coal in the Kyoto Analyses is substantially lower than that in the BAU projection in all regions by 2010.

The Kyoto Analyses are encouraging. But they are only illustrative tools and

change will not happen unless firm policy measures are put in place by governments straight away.

Firm action will, according to the Kyoto Analyses, deliver the right results. However, the IEA study also shows the importance of China and the other developing countries in determining growth in world CO₂ emissions. These countries will play an important role in finding the long-term solution to the greenhouse gas problem. ■



Elodie Grégoire/REA

Charging up.

In OECD Europe electricity demand would rise with a carbon value added to fossil fuel prices because of a cross-price effect: the rise in domestic gas prices would cause a shift in final demand towards electricity for heating, a shift which would more than offset any reduction in electricity demand from deliberate electricity price rises. But as any extra electricity capacity would be mostly gas-fired anyway, overall emissions would be lower in the Kyoto analyses than in the BAU projection.

Under both the market and regulatory approaches half of the reduction in emissions to meet Kyoto commitments is achieved by the expansion of non-fossil generation (nuclear or renewable) instead of coal-fired generating plants, many of which would be de-

do not necessarily represent future outcomes. In practice, policy responses are likely to combine changes in price signals, either implicitly or explicitly, with the tighter regulations. Some reduction of CO₂ emissions will take place anyway without policy changes, and these estimates are already included in the BAU scenario.

There are many possible combinations of energy saving and fuel substitution that can help to meet the Kyoto commitments. The next step for governments is to identify the combination of policies that best fits their circumstances. But all involve large deviations from past trends together with considerable practical difficulties. The short time remaining to the period 2008–12 in which the Kyoto commitments have to be met makes it quite clear that

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Abstract from OECD Policy Brief No. 8 – Sustainable Development

The overarching objective of sustainable development is to maximise human welfare, and provide a sound economic, social and environmental base for both present and future generations. The 1987 report of the World Commission on Environment and Development (The Brundtland Commission) contained what is perhaps the most widely accepted definition of sustainable development, describing it as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' OECD governments have committed themselves on numerous occasions to the goal of sustainability, including at Rio in 1992 and Kyoto in 1997.

Full Policy Briefs are available on request to *Observer* subscribers.

Behind the veil of human capital

JOOP HARTOG, PROFESSOR OF ECONOMICS, UNIVERSITY OF AMSTERDAM

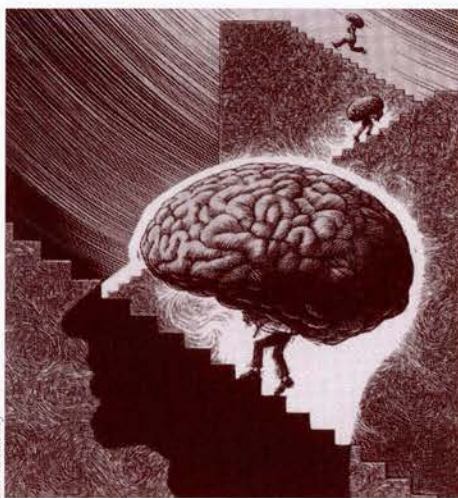
Human capital is one of the buzzwords of the knowledge society. But how do we value it? And what does it tell us about education and future wages? The *Observer* invited a leading expert in labour economics, Professor Joop Hartog, to explain.

Human capital has become a household word. The concept lay essentially dormant for two centuries after Adam Smith first introduced it, but it was kissed awake in the 1960s by American economists, such as Gary Becker and Jacob Mincer, who then exported it triumphantly around the world. Human capital is a beautifully unifying idea, facilitating the quantitative analyses that economists are so fond of. It is an excellent vehicle for framing policy discussions too, whether on schooling, training or labour market performance. But because of the term there is a tendency to see the labour market rather like one sees financial markets, although for human rather than financial capital. This seriously distorts perceptions and may lead to damaging political decisions.

According to a recent OECD report, *Human Capital Investment: An International Comparison*, human capital may be defined as the knowledge, skills, competence and other attributes embodied in individuals that are relevant to economic activity. Human capital is therefore a notion which captures the valuation of the attributes people invest in. But the main problem is not so much how to define human capital as how to measure it. And for that, we have to look at financial returns, which are defined broadly as the increase in earnings for every year spent in school.

Extensive work has been carried out to estimate the return on investment in human capital throughout the world. It has thrown up some inter-

esting findings. Investment in formal schooling tends to have a rate of return of 5–15% in additional earnings for every year in school. The returns are higher for private individuals than for society, because schooling is mostly subsidised and hence individuals do not pay the full price for their education.



The rate of return is different for each level of education: primary education generates the highest returns, secondary level has lower returns and third level education has higher returns than secondary education. Also, the rates of return on investing in human capital are higher in developing economies than in developed ones. In recent years, the relative wage of university graduates has risen strongly for several countries, particularly the United States and the United Kingdom. Many studies suggest that this has to do with technological progress favouring the demand for higher education. Others suggest that the relative strength of the

wage in these economies rose because the wage of the low skilled has fallen with the shift of low-skilled industries to developing countries.

Looking only at earnings gaps generated by schooling hides the fact that individuals in different levels of schooling have different abilities. When the evidence is adjusted for this, it shows that about a third of the returns on investment in human capital is in fact a return on higher intellectual capacity. Despite difficulties in getting the data, there is some evidence that cognitive abilities make a contribution too, as do social abilities and manual skills. Research in psychology shows us that personality factors also have an effect in terms of additional earnings. But, when it comes to predicting an individual's earnings, abilities like these play a minor role in generating a return compared with the actual years spent at school.

When over-education is a good thing

A clearer picture of the returns on schooling can be gained by looking at the type of job an individual takes up after graduation. Not so long ago the main policy concern was about 'over-education'. The question everyone asked was whether there would be enough high quality jobs around to match the increased level of education in the labour force. That question drove research in several countries, and some consistent patterns have emerged.

Suppose we characterise a job by the level of education required to get it. The level would be identified, for example, by referring to the qualifications specified by trained job analysts. We then can compare an individual's education to the education required for the job, and also measure possible gaps: 'over-education' (more than

required) and 'under-education' (less than required). Interestingly, according to the research, the years spent in 'over-education' always bring a positive return on investment. The return may be less than that on each of the minimum schooling years required, but it is a fair return nonetheless, of at least 4% a year in real terms. The finding emphasises the fact that the labour market will find a way to extract value from schooling years. 'Over-education' is not strictly speaking an inefficiency.

Conversely, if an individual brings insufficient education to the job, there is a penalty, but the penalty is smaller than the returns the individual has already made on the years spent in education. This emphasises the importance of basic schooling. A recent study on Portuguese men will help to illustrate. For a job requiring exactly the number of school years that the individual actually has, the returns were estimated at 13% in additional wages per year of schooling. For the years above the required minimum the return is 10% per year. In other words, if an individual has 16 years of schooling and the job only requires 14, the returns are 13% for the first 14 years and 10% for each of the last two. If the individual has a job that requires more education, the penalty for not having the required amount is 8% per year. That means if you bring 12 years to a job requiring 14, you get 13% for each of the first 12 years of training and only 5% for each of the last two years (13% less the penalty of 8%).

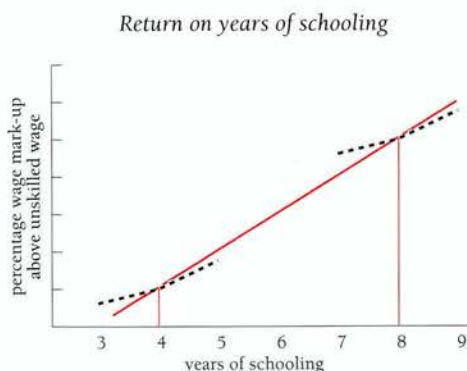
This relationship between wages and schooling is depicted in the chart. The solid line gives the compensation for jobs matching a given education. The dashed lines represent a job requiring a particular level of schooling. Bringing more education to a given job moves you up along the dashed line to the right, giving you a higher financial return

on your investment. Bringing less education into the job moves you down along the dashed line to the left, which illustrates a lower return.

And under-education?

Remember that this thinking developed out of a concern about 'over-education'. But policy concerns today are more about under-education. The question now is whether people are sufficiently equipped for the knowledge society. A simple conclusion from the research findings presented above is that a lack of formal education can be compensated for later on, thanks to personal attributes, on-the-job training, experience and so on. As the chart indicates, a lack of formal education does not generate complete punishment in wages, and presumably not in productivity either. If, with a given education, you work in a job requiring more education, you get paid more than if you work in a job just matching your education.

But, of course, this is only a crude picture, and perhaps the key worries concern the bottom end of the labour market. For the lower skilled at least, a good start in learning would appear essential to improving educational and job chances later in life (see 'Pathways to lifelong learning', *Observer* No. 214).



Source: after Joop Hartog

In many cases on-the-job training can compensate for any lack of formal education. It can also be applied to upgrade the workforce when technological change demands it. The returns of on-the-job training are commonly found to be quite high, at easily over 15%. That might suggest under-provision, since if it were so profitable, firms would devote more resources to it. It throws into question any need for fiscal incentives, since if there is such a high return on businesses investing in their own training, why subsidise? The problem with on-the-job training is precisely what generates those high returns. Perhaps it is not just the training, but its combination with innovations in work organisation and new technologies which is responsible for the high return. And training is often given selectively to individuals who are strong performers anyway. It is arguable that the same training would provide the same high return with lower skilled workers, although it would probably generate some return. These questions have not yet been answered.

The US paradox

Human capital is like a mystery bag of groceries: we know the price (what we paid for in earnings forgone when in school) and the rewards (higher wages), but we do not quite know what groceries are in the bag. In other words, we are not absolutely sure what it is we learn at school that makes us more economically valuable. Researchers have tried to find out.

One of the more exciting projects is the International Adult Literacy Survey (IALS) which the OECD carried out jointly with Statistics Canada. It attempts to measure individuals' information processing skills directly, by applying an identical survey to individuals in differ-

ent countries. The skills are differentiated as digesting prose (newspapers), documents (government forms, maps and tables) and quantitative information (applying mathematical operations as instructed in printed material). The survey reveals some interesting results. For a start, the average skill level of the population varies very little across countries (with the exception of Poland and Sweden). But the dispersion is very unequal. Few would doubt that the top universities and schools in North America are among the best in the world. But a low education level in the United States and Canada implies a much lower skill level than in other countries. European welfare and redistribution arguments might not be enough to explain the different income gaps. Indeed, the survey's results indicate that a low education level in the United States, in particular, is simply a poorer bag of groceries than its counterpart in Europe. ■

China: a world economic leader?

COLM FOY AND ANGUS MADDISON, DEVELOPMENT CENTRE, CENDEV.CONTACT@OECD.ORG

China's great history is a checkered one, but its economic performance since 1978 has been impressive. Though still essentially poor, it could, according to certain measurements, overtake the United States as the world's largest economy in the next 20 years.¹

In terms of both population and GDP, China was the largest economy on the planet until the early 19th century. Indeed, China's existence as a definable political and economic entity predates virtually all other countries. Its bureaucracy was already a profession by the 10th century, and it already had access to printing. The base of China's prosperity and stability was intensive and efficient agriculture, nurtured by a centralised political system which depended on it for its income. But because it relied on the force of tradition, rather than military or feudal might, to maintain order, its vast territory became an easy target for outside colonial powers. In short, the Chinese system was to find itself no match for the entrepreneurial prowess and military forces of Europe and Japan.

By the time of the First Republic in 1911, imperial China was in ruins: the social system was in collapse; central authority had evaporated; the most lucrative parts of the economy were in the hands of foreigners; and significant areas of territory had been lost. Thereafter, the situation became more and more chaotic, culminating in the country's military collapse under the weight of the Japanese invasion and the Second World War.

When the Chinese Communist Party came to power in 1949 it restored central control under the People's Republic. National unity with economic independence was its priority. From 1952 to 1978, GDP measured by value in purchasing power parities was

multiplied by three, while per capita income increased by 80%. The economy's structure was transformed and industry's share of GDP rose from 10% to 35%. Inputs of labour and physical capital rose dramatically and the quality of human capital was improved.

However, China's politics still leaned towards autarky. Though the communist party was socialist in the Marxist tradition, it was fiercely independent of the Soviet Union and deeply suspicious of the Soviet domination of the socialist camp. This led the government to hunt for a unique Chinese way of resolving political and social problems, ultimately provoking the Sino-Soviet split and disastrous economic experiments, such as the Great Leap Forward, which were designed as short cuts to industrialisation, and political errors, the most destructive of which was the Cultural Revolution.

Another of the weaknesses of the People's Republic was its early belief in economies of scale. People's communes with workforces averaging 6,700 were created in 1958 out of 130 million family farms, with a disastrous effect on agricultural production. The size of the production unit was reduced three years later to 30 workers. The experience was the same in industry and services. Resource allocation was entirely government-directed and China's isolation

1. This article is based extensively on the Development Centre book, *China's Economic Performance in the Long Run*, by Angus Maddison, 1998 (also available in Chinese).

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from the world economy deprived it of innovation and caused consumer interests to be neglected. Isolation – chosen *vis-à-vis* the Soviets, imposed by the United States – did not help. It led to economic stagnation, whereas 1950–73 proved to be a remarkable period of growth for the world economy and for OECD countries in particular. In China by 1978 the average firm had 11 times more workers than in Japan. Only after isolation was ended and reforms begun in 1978 would Chinese growth take off dramatically.

From reform to growth

The temptation to compare China's reform performance with that of the former Soviet Union has been too strong for commentators to resist, but some of these comparisons have been ill-founded. The Soviet economy operated at a higher level of income and was much more industrialised by the time *perestroika* got under way. China, by contrast, was still a predominantly rural country; huge as the state enterprises were, they still employed a minority of the population and surplus

labour was to be found in the rural areas. Moreover, the communist party remained the sole political power in the country and its territorial integrity has been maintained since the start of reform in 1978, whereas the former Soviet Union split into its constituent parts and finally collapsed.

The main difference with Russia of course is in the progress made in improving the economy. Since 1978 major policy changes in China have succeeded in generating substantially higher growth in per capita income. There has been a modest increase in the growth of capital stock, but the major reason for the improvement was better use of resources and substantial growth of total factor productivity.

There were several forces which contributed to the greater efficiency and higher productivity growth of the Chinese economy. Peasants regained

control and management of their land. The average production unit became the farm household employing 1.4 people on less than half a hectare.



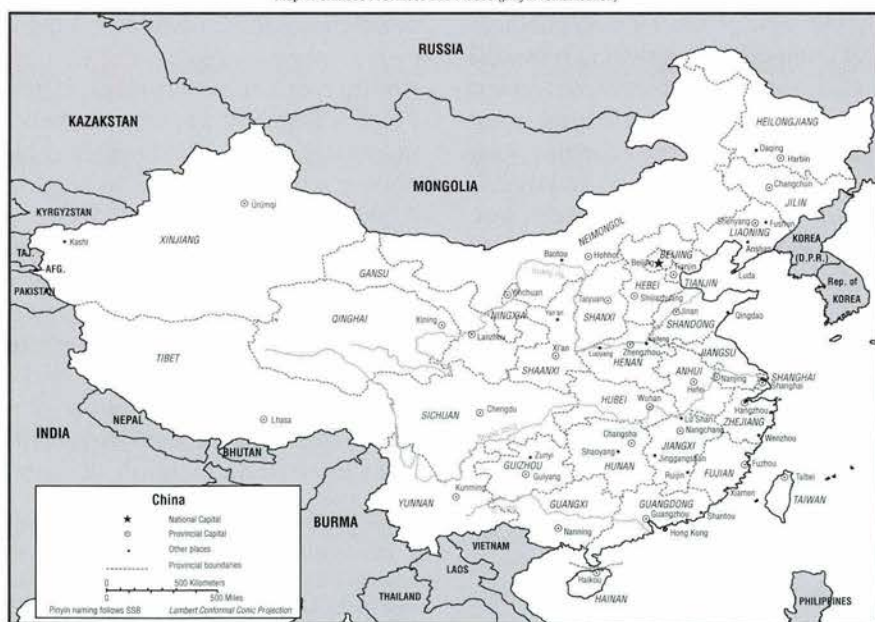
Relaxed about the future.

There were better prices for farmers, and easier access to markets. The result was a large improvement in incentives and productivity.

Another force was the huge expansion of small-scale industry, particularly in rural areas. The average size of state enterprise did not change, but in the non-state sector it fell from an average of 112 to 8 persons, so the overall average fell from 175 to 14 employees per firm. Productivity growth was much faster in the non-state sector, which has lower labour costs, virtually no social charges and a much smaller and more efficient use of capital.

The rigid monopoly of the government over foreign trade and the policy of autarky were abandoned after 1978. Foreign trade decisions were decentralised. Between 1980 and 1997 there was a five-fold devaluation of the yuan. Special economic zones, such as Shenzhen, were created not as free trade areas as is often believed, but as windows of new opportunity and bridges for co-operation between China and foreign investors. In response to the greater yielding to market forces, competition emerged, re-

Map 1. Chinese Provinces and Places (pinyin romanisation)



The boundaries and names shown on this map do not imply official endorsement or acceptance by the OECD.

K. Smith

source allocation was improved and consumer satisfaction was increased. The volume of foreign trade rose by 13.5% a year and China's share of world trade increased from 0.8% to 3%. There was a significant inflow of foreign direct investment, particularly after 1992.

The success of Chinese policy making is reflected in per capita incomes, which rose by 6% a year from 1978 to 1995. That was faster than any other Asian country except Korea, and very much better than the 1.5% a year in the European Union and the United States, and six times as fast as the world average. China's per capita GDP, in 1990 international dollars adjusted for PPP, rose from a quarter to a half of the world average level to stand at \$2,653 by 1995. Its share of world GDP increased from 5% to 10%, and it became the world's second biggest economy, again measured in PPP terms, after the United States. The big questions are whether this catch-up process can last and, if so, for how long.

Catching up with the United States?

It has become popular, if unrealistic, to speak of levels of growth of around 10%. This is understandable, in a sense; Chinese official figures, upon which most other estimates are based, do show such rates of growth. However, the Chinese national accounting system is based upon old Soviet methods, essentially relying on output reports from enterprises and production units in the countryside. This method is crude and unsound, and can be used to provide only part of the calculation. When standard OECD accounting procedures are employed to evaluate China's GDP growth in purchasing power parity terms, however, it can be shown to have been lower, though still strong, at 7.5% per year since 1978.

For China to reach an overall level GDP equal to the United States, the world's largest economy, an annual rate of growth of some 5.5% would be required up until about 2015. On past performance, this would appear to be perfectly possible, particularly if China's leadership continues to allow the economy to adapt itself to the requirements of international competition. This implies continued improvements in the efficiency of human and physical capital allocation; further embracing foreign technology and adapting it to the country's special needs; and allowing identification and implementation of comparative advantages.

The economy remains handicapped by an excessive number of loss-making state enterprises which will either have to be reformed or closed. In the former Soviet Union and in other economies in transition from command to market economy, this process has caused hardship and political instability. China will have to tackle certain problems carefully, particularly that of unemployment, since state-sector employment currently offers social benefits such as health care and housing upon which workers depend given the absence of state-wide systems. Suppression of jobs would thus have serious social consequences.


Linked to the problem of inefficiency in state enterprises is the need to reform the banking and financial system. During the early stages of opening up the economy, the Chinese monetary authorities were unable to control the financial system's development. This contributed to inflationary pressures and inefficient allocation of savings. While the banking system, which is propping up inefficient state enterprises through the bad loans it has made to them, remains under state control, a parallel system of non-banking financial intermediaries (NBFIs) has evolved which provides financing

for the non-state sector by using a proportion of private savings. These NBFIs – trust and investment companies, urban credit co-operatives – have helped to satisfy enterprises' needs for investment loans and have benefited from transfers from the state banks which use them for their specialised knowledge. The result has been excessive credit creation. Reforms in 1994 went some way to remedy the situation, but this mix still needs to be reconciled and the non-bank financial intermediaries will have to become real competitors of the banks through a wide-ranging rationalisation and renewal of the entire financial system.

Finally, the weak fiscal position of central government must be strengthened. Current relations between the central and regional governments for tax-raising purposes will have to be clarified and the tax base widened to replace the current use of extra-budgetary income.

On the whole, as we enter the 21st century, China remains a poor country. This makes high growth rates, of

CHINA - No.1 in 2015?



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course, easier to achieve, but it also means that per capita incomes have a long way to go to reach those of the United States and other major OECD countries. Per capita GDP rose by an average annual rate of 6% from 1978 to 1995; it can be expected to grow by a more modest (but still honourable) 4.5% between now and 2015. That increase will bring China up to somewhere around the world average, but still well below the OECD average and to only one-fifth of the US figure. With 5.5% overall GDP growth in the same period, China would account for 17% of world GDP, giving the country a much greater weight in the global economy. This implies growth in Chinese exports, but also corresponding increases in imports which would stimulate the world economy generally. Despite the current difficulties in Asia's normally dynamic economies, the region as a whole can be expected to recover and assume growing importance in the world economy over the medium term. Provided it continues to open up to the world economy, China will have a key role to play in determining the pace and form of that recovery. ■

Understanding development needs

BRIAN HAMMOND, DEVELOPMENT CO-OPERATION DIRECTORATE

In the first of a series on development, we take a brief look at the problems of assessing and measuring development needs.

In 1996 ministers and heads of aid agencies set out a vision for development co-operation which included achieving a limited number of goals by 2015. In February 1998, the OECD Development Assistance Committee, together with the UN, the World Bank and developing country partners, agreed on a working set of core indicators to measure progress towards these goals.

Identifying and selecting a common set of indicators is an important step towards enhanced development performance, though only as part of a coherent policy-driven process. Indicators can provide a yardstick to assess needs on a comparable basis across countries. They show some positive historical trends. For example, taking all 171 developing countries and countries in transition as a group over the past 20 years: average family size has

declined from 4.7 children to 3; 10% more children are attending primary school; three people in five have access to safe water, up from two in five; and infant mortality has fallen from one in ten to one in 16.

Gathering comparable data is one problem. Presenting them in a meaningful and useful way poses a number of difficulties. One method of assessing needs is to plot one or more of the indicators on world maps (see map). While this graphically shows where the needs are greatest, it allows analysis of only one dimension of development at a time.

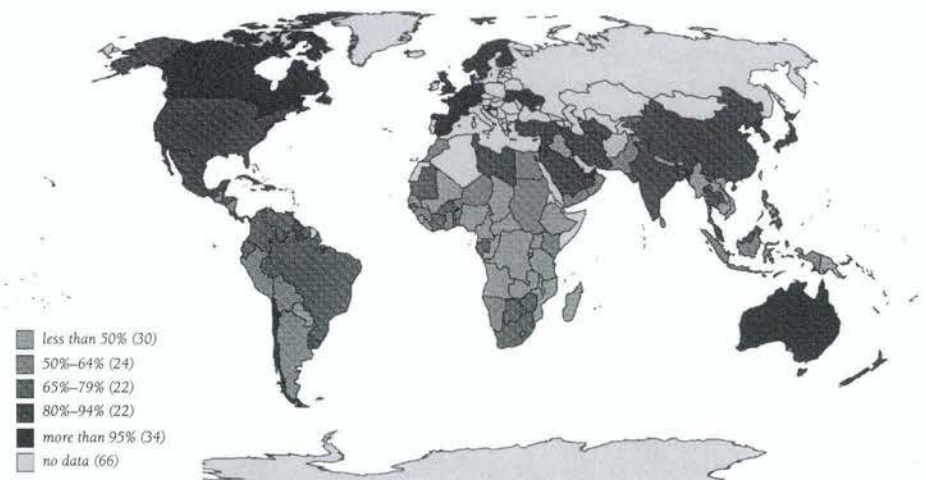
Another method is to group countries by combining a number of dimensions of development. The United Nations Development Programme does this in its annual Human Development Report by use of the Human Develop-



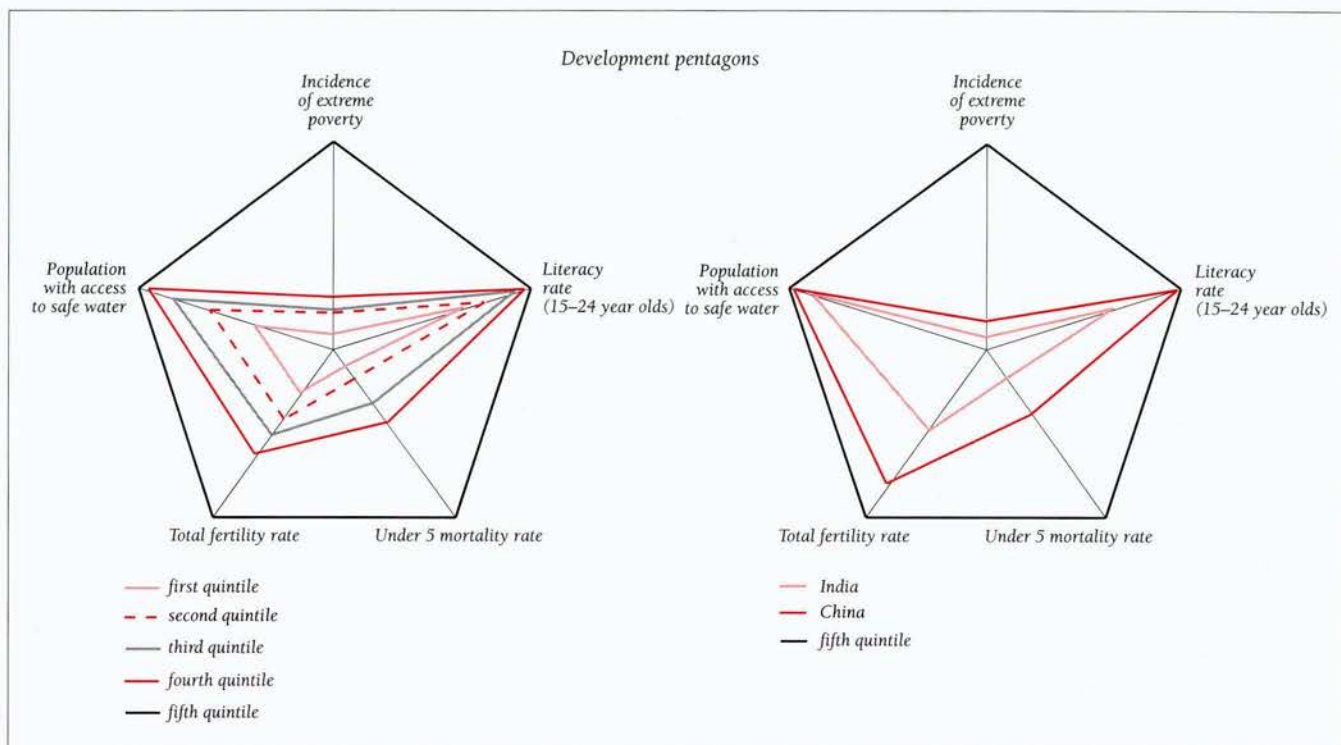
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Population with access to safe water, 1993-95



Source: World Development Indicators 1998, WHO



ment Index. This index is a composite of life expectancy, educational attainment and GDP per capita (in dollars at purchasing power parities). Rather than calculating individual ranks (scores) for each country, an alternative approach adopted for this set of core indicators is to place countries in five equal-sized groups (quintiles) by combining their relative ranking on a selection of indicators related to the selected goals. (See the Development Indicators Web site at <http://www/oecd.org/dac/indicators> to see the goals and indicators selected, which countries are in which quintile, the indicators used to group the countries, and the latest data for the indicators in the core set.) This approach provides a proxy for measuring a country's distance from the goals. The precise distance cannot be measured for two reasons. First, the goals are global ones and individual countries will set the goals that suit their own circumstances; and second, a number of the goals are relative, for example, two-thirds cut in child mortality, and

so for the baseline year all countries are, by definition, equidistant from them.

The results are best shown by use of development pentagons which indicate the relative performance of each group of 34 countries on a selection of indicators (see chart). The outer line reflects the levels for the highest group, which are roughly equivalent to levels in developed countries. A pentagon is shown for each of the lower groups. The further they are on each axis from the outer pentagon, the greater the progress that that group needs to make on that dimension to reach developed country levels.

Thus the groups highlight disparities in levels of development. On poverty, for example, the lower groups are a long way from the outer line, reflecting the fact that much higher percentages of the population in these groups live in poverty. On literacy, by contrast, the lower groups are much closer to the outer line, because literacy is more

evenly distributed among the country groups.

For the 34 countries in the first group, the most recent data covering 1990-95 shows: nearly 40% of the population live in extreme poverty; less than half the children go to school (and of these only seven girls for every ten boys); women have an average of six children, one of whom is likely to die before its fifth birthday; and two-thirds of the people lack access to safe water.

Such stark facts show the value of the key indicators to demonstrate the needs of this group of countries, many of which are further burdened by current or recent conflict which inhibits providing effective assistance for long-term development. ■

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International labour and co-operation

REMARKS BY POUL NYRUP RASMUSSEN, PRIME MINISTER OF DENMARK

Trade Union Advisory Committee, 50th Anniversary Seminar Paris, 20 November 1998

Mr. President, Deputy Secretary-General, Ladies and Gentlemen, I am so delighted to be here, not just for nostalgic reasons, but also to assure you that even if one changes one's job one does not forget lessons learned, friendships made and why we are here.

There are good reasons to celebrate this 50th anniversary of TUAC. It is important that international trade-union organisations formulate high quality policy advice and develop high quality arguments, and direct both to the highest possible level. This is TUAC's primary mission. In today's world, it is not only the level of noise you make that counts, but also the quality of the arguments you present.

One of TUAC's important roles is to be a watchdog and source of inspiration and, as such, to make sure that policy-makers and economists do not forget society's most important challenge, namely to improve living conditions for all citizens and to encourage job creation, to maximise wealth and to minimise unemployment. To that end, TUAC has historically made important – very important – contributions to the way we all think about economic policy.

Not that long ago, at the beginning of the 1980s, I took part in TUAC's work as Chairman of the Working Group on Economic Policy. During that period, I also chaired a working party which produced a report entitled 'It pays to co-operate'. Now, everybody can agree with that on a theoretical level, but when it comes to the points and the arguments, we had some difficulty. Imagine the situation. It was in the

aftermath of the two oil price shocks – which had had dramatic effects on all OECD countries. We saw an explosion in unemployment. Millions lost their jobs and their self-esteem and were unable to make their contribution to the development of our societies. As a matter of fact, it was at that point that the concept of long-term unemployment was born. Many of those who lost their jobs never regained them.

The effects linger. One major reason why we have such high unemployment in Europe and elsewhere in the world today is the lack of a co-ordinated response by governments to the two oil price shocks. At that time, the question we asked was, how can we avoid fuelling high and rising unemployment?

Our answer was clear. Countries should avoid rather than pursue national strategies that push their problems onto neighbouring countries. That was a recipe for failure. In 1974 and 1979, each country had a national strategy and did not look at what its neighbours were doing. What we saw, especially after 1979, was a series of uncoordinated, mutually reinforcing budget reductions. I think we should take that as a lesson about how not to react to shocks. Our working group's report says that there is 'no excuse for lack of action'. We meant that the governments should begin stronger co-ordination of policy as soon as possible.

Since then our thinking has been refined, but the basic message remains the same – it pays to co-operate. And yet there are not that many examples

of success. But let me mention one. Our work in Paris, I feel, played a part in the process which led to the creation of the internal market, which strengthened the European Union. Today, with the Amsterdam Treaty, we have a powerful instrument for intensifying co-operation on job creation. The moment is promising because we are beginning to create the tools we need. The challenge is to use those tools to exchange information, to learn from best practices, to plan the timing of our policy responses carefully – in short to co-ordinate better.

The European Commission has made a very interesting analysis of Europe as an economic entity. The main point is that around 90% of its economic activity is internal. Looking at the Union in this way makes it clear that the degree of freedom to create jobs without damaging the balance of payments is much higher than we believed it to be, and our ability to counteract international shocks is much greater than we realised.

Two lessons can be drawn from this year's discussions of the international financial crisis. First, given the fiscal consolidation which we have undertaken to prepare ourselves for EMU, Europe is better prepared to withstand a crisis. Second, it is paramount that we do not react as we sometimes did in the past. We must avoid sudden cutbacks in our economies which could unleash a mutually reinforcing depression.

The economic history of the post-war era clearly demonstrates that when we do the right things together we succeed. When we do the wrong things, and act on our own, we fail miserably. But what is the right thing to do together. I, together with the international labour movement have always argued for strong co-ordination among governments in partnership with a

strong, co-ordinated labour movement. An inclusive society and a wealthy society are not opposites. Far from it, in fact.

I have always argued that social protection, competitive strength and dynamism are mutually-reinforcing. Giving each individual a sense of security must, as I see it, go hand in hand with globalisation and increased trade. I am not arguing theoretically. My own country stands in evidence. We have high social protection, high labour force participation rates for both men and women and low unemployment, all at the same time.

People will move provided they don't risk everything. This is important because we are now asking workers to

prepare to change their jobs eight to ten times over their working life.

Social protection and active education policy in our member countries are the best ways to equip wage earners to accept change. This model is capable of generating high employment with low inflation and durable growth. What we must focus on in the era of globalisation is a knowledge-based strategy, not a low wage one. In Denmark we have found that an active employment policy focused on a range of initiatives from education to efficient and responsible policies for the unemployed is the right path.

My final point will be this. Even in the era of globalisation policies do matter and they do have an effect. There is a

choice to be made. I hope that Europe will not develop into a fortress Europe, but will use its dynamism to produce good co-operation with all the regions in the world. Fortunately, regional integration has gone hand in hand with strengthened global co-operation.

Less-developed countries must be fully integrated into the global trading system. The argument here is that it is a 'plus-sum game'. We have experienced it in Europe. For the applicant countries membership of the European Union is not a zero-sum game. We redistribute wealth. Therefore, it is also to the benefit of all to have the less developed countries fully integrated into the world economy. I look forward to seeing 'it pays to co-operate' become the leitmotiv of the next century. ■

'A borderless world: realising the potential of global electronic commerce'

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OECD Ministerial Conference 7-9 October 1998, Ottawa, Canada

The Ottawa conference was the second major international meeting within the overall OECD effort on electronic commerce, building on the first meeting in Turku, Finland, on 19-20 November 1997. At Turku, the job was to identify general principles and issues. At Ottawa the discussion moved on to consider the solutions themselves.

Nearly a thousand participants attended the two-day conference, among them 30 ministers and high-level officials from all 29 OECD member countries, 12 non-member countries, 12 international organisations¹ and representatives from business, trade unions, consumer groups and other non-government organisations (NGOs). It



was the first time that an OECD ministerial event contained such a cross-section of stakeholders on the matter.

The conference considered the economic and social potential of electronic commerce, the barriers that currently limit this potential and solutions that may be used to dismantle these barriers. Perspectives were offered from all parties. The discussions focused on the issues of building trust for users and consumers and establishing the ground rules for global electronic com-

1. For a list of these organisations, visit http://www.oecd.org/publications/observer/214/Article6_eng.htm.

merce. The conference also clarified roles, responsibilities and commitments in terms of an action plan.

Ministerial Declarations which establish baseline principles and goals and provide guidance regarding the OECD's further work were adopted in three critical areas: protecting privacy; looking after consumer interests and rights, just as in conventional markets; and the authentication of electronic commerce, which includes amending any media specific rules impeding the development of electronic commerce.

For the OECD, a seven-point near-term programme of work was proposed to:

- extend the analytical work on the economic and social impacts of electronic commerce, its applications in government and particularly in education;
- set up specific technical advisory groups with business to address

taxation issues, for example, the treatment of royalties, permanent establishment, consumption taxes and look for ways to use e-commerce technologies to reduce the burden of paying taxes;

- develop guidelines for consumer protection in the context of electronic commerce in 1999;
- work on the practical implementation on global networks of the 1980 OECD Privacy Guidelines;
- initiate work on defining and measuring electronic commerce;
- continue examining the policy implications of evolving information and communication networks, including technological convergence, enhancing access to infrastructures and the requirements for open markets;
- analyse the technological models for authentication and certification to help formulate policy in this area. ■



Bibliography

The following ten background reports prepared by the OECD provided the background for the Ottawa conference: *The Role of Telecommunications and Information Infrastructures in Advancing Electronic Commerce*; *The Economic and Social Impacts of Electronic Commerce: Preliminary Findings and Research Agenda*; *The Year 2000 Problem: Impacts and Actions*; *Small and Medium-sized Enterprises and Electronic Commerce*; *New Developments in Educational Software and Multimedia*; *Protection of Privacy on Global Networks*; *Consumer Protection in the Electronic Marketplace*; *Inventory of Controls on Cryptography Technologies*; *Inventory of Approaches to Authentication and Certification*; *Electronic Commerce: Taxation Framework Conditions*

- John Dryden, 'Realising the Potential of Electronic Commerce', *The OECD Observer*, No. 214, October/November 1998
- 'Six Aspects of Electronic Commerce', *The OECD Observer*, No. 208, October/November 1997.

Global Year 2000 Summit

DANIEL BLUME, PUBLIC MANAGEMENT SERVICE, PUM.CONTACT@OECD.ORG

The OECD and several other international organisations and associations joined forces for the Global Year 2000 Summit in London last October, to call for stronger action to address the Year 2000 problem.

Also known as the millennium bug, or Y2K for short, the year 2000 problem stems from computer systems and embedded chips contained in a range of electronic devices that recognise only the last two digits of any year, leading in many cases to the misinterpretation of the year 2000 as 1900. Misreading of the date could lead to data loss or malfunctioning of computers, industrial control systems and other technologies, with potentially widespread impacts across the economy and government services. The costs of the millennium bug fall into two main categories – the direct costs of a fix where there is known to be a problem (these have been estimated to be around \$300–600bn worldwide) and the potentially higher costs of the disruption caused by failure to achieve compliance.

The OECD has already prepared reports on the issue and the London summit was further testimony to how seriously Y2K is being taken. It was the first meeting to bring together such a broad coalition of internationally active governmental and private sector groups on the issue: the OECD, the United Nations, World Bank infoDev programme, Asia Pacific Economic Co-operation Telecommunications Working Group, Pacific Economic Co-operation Council, the Joint Year 2000 Council (in association with the Bank of International Settlements), International Telecommunications Users Group, the International Chamber of Commerce, and the World Information Technology and Services Alliance. More than 300 people attended from

the public and private sectors, and at least 35 countries were represented.

The summit called for stronger global co-ordination and leadership, cross-sector dialogue and awareness-raising, and assistance for developing countries. It also highlighted two areas where action appeared to be lagging: small and medium enterprises, which are generally acknowledged as the least prepared part of the economy, and the development of international contingency planning. On the latter, many countries have not yet begun to develop such plans, despite the need to ensure the continued functioning of businesses and services in the event of possible disruptions in energy, utilities, telecommunications or transport.

Risaburo Nezu, director of science, technology and industry at the OECD, described the potential economic and sectoral impacts of the 'bug', and the actions that governments are taking to deal with it. Finally, he called on governments to play a stronger role in promoting action economy-wide and to accelerate their own preparations within the public sector. ■



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Changing labour markets and gender equality: the role of policy

CONCLUDING REMARKS BY LUCY SMITH, RECTOR, UNIVERSITY OF OSLO AND CHAIR OF THE CONFERENCE

OECD High Level Conference, Oslo, 12–13 October 1998

The Oslo Conference brought together 150 participants from 25 OECD member countries, representatives of the Business and Industry Advisory Committee (BIAC) and the Trade Unions Advisory Committee (TUAC) to the OECD, as well as experts from the European Commission, the International Labour Office, the Council of Europe, the Nordic Council and the Nordic Council of Ministers. The conference followed the line of the Ministerial meetings on labour and social policy held in Paris in 1998. At Oslo, Lucy Smith drew four conclusions, of which the following is an extended extract.

'My first conclusion highlights an important fact that must be taken into account in developing labour market policies. The old model of the sole breadwinner having someone at home taking care of his children and private life is not the norm any more in our countries. There has been a clear shift to dual breadwinner households. At the same time we witness a growing polarisation between 'work-rich' and 'work-poor' households. Hence, policy has to respond equally to the needs of all workers in all employment situations.

For many employers, more flexibility seems to be the answer to the demands for efficiency posed by globalisation and technical change. But it may be necessary to protect workers against some of the imperatives associated with the drive for flexibility and offer them a degree of security. The instruments for doing this – by law or by negotiation between the social partners – will have to differ from coun-

try to country, and between different sectors in working life. The goal in all this should be to avoid 'employment traps' where people are marginalised into unemployment or under-employment, or 'poverty traps' where people become marginalised in low-wage jobs. The less educated, older workers and people with heavy family responsibilities are particularly at risk from these traps and special care must be taken to ensure that women are assisted to escape them. This specific concern leads to my second conclusion.

All OECD countries have a labour market that is too gender segregated to ensure the best use of the available human resources. This calls for continuing our efforts with policies designed to fight gender segregation in working life and its effects on women's pay and career prospects. Policies that foster the better use of existing skills – women's skills and competencies, the skills acquired by learning on-the-job – are of vital importance in today's labour market. This puts a premium on developing and implementing effective strategies for lifelong learning involving both families and schools, the transition from school to work, vocational education and training, active labour market policies and on-the-job training. But this is not enough. It has to be complemented by family-friendly policies in the workplace and effective commitments to guarantee greater job satisfaction for women and offer them better career prospects.

This is often regarded as traditional policy for equality in working life. If

so, it has not outlived its role. We have to fight the low evaluation of so-called women's skills and tasks – social contact, empathy and caring. In real work situations, they are often the last to be taken into account when it comes to pay and career building.

My third conclusion is that as we stand on the threshold of the 21st century, our efforts to create a working life without gender differences and discrimination do not depend only on labour market policies and policy for equality in employment. They also depend heavily on the infrastructure or the arrangements we have in society when it comes to taking care of our dependants – both our children and the elderly. Labour market policy will have to cope with a world where employees – men and women alike – have family responsibilities which they want to combine with their responsibilities in the labour market.

My final conclusion concerns the appropriate strategy in today's labour market and society to achieve our goal of gender equality. Many speakers have stressed the need for 'mainstreaming' of gender issues, that is, placing them in all major policy areas. This is important, but it does not mean that we should relax our efforts in the traditional areas of policy for gender equality.' ■

Note to readers: In the next *Observer* (No. 216) Françoise Coré will be examining the question of women and inequality in the labour market.

















Site address

- agenda and conclusions: <http://www.oecd.org/els/women/women.htm>

Indicators

databank

			% change from:				% change from:	
			previous period	previous year			current period	same period last year
 Australia	Gross domestic product	Q2 98	0.9	4.2	Current balance	Q3 98	-4.37	-3.29
	Leading indicator	Sep. 98	-0.1	-0.4	Unemployment rate	Oct. 98	7.6	8.3
	Consumer price index	Q3 98	0.2	1.3	Interest rate	Oct. 98	4.82	4.83
 Austria	Gross domestic product	Q4 95	0.0	0.3	Current balance	Sep. 98	-0.72	-0.04
	Leading indicator	Oct. 98	-0.8	1.6	Unemployment rate	Oct. 98	4.4	4.4
	Consumer price index	Oct. 98	0.1	0.7	Interest rate	Nov. 98	3.60	3.85
 Belgium	Gross domestic product	Q2 98	0.6	3.8	Current balance	Q2 98	2.73	3.33
	Leading indicator	Oct. 98	-1.1	-7.6	Unemployment rate	Oct. 98	8.6	9.1
	Consumer price index	Nov. 98	0.0	0.6	Interest rate	Nov. 98	3.56	3.77
 Canada	Gross domestic product	Q3 98	0.4	2.3	Current balance	Q3 98	-1.11	-2.18
	Leading indicator	Oct. 98	0.8	-0.5	Unemployment rate	Oct. 98	8.1	9.1
	Consumer price index	Oct. 98	0.4	1.0	Interest rate	Nov. 98	5.13	3.99
 Czech Rep.	Gross domestic product	Q2 98	..	-2.4	Current balance	Q3 98	-0.02	-0.68
	Leading indicator		..	..	Unemployment rate	Oct. 98	7.0	5.0
	Consumer price index	Oct. 98	-0.1	8.2	Interest rate	Nov. 98	11.31	16.72
 Denmark	Gross domestic product	Q2 98	0.2	1.5	Current balance	Q4 97	-0.8	-0.91
	Leading indicator	Aug. 98	0.1	9.3	Unemployment rate	Oct. 98	4.2	5.2
	Consumer price index	Oct. 98	0.0	1.7	Interest rate	Nov. 98	4.26	3.90
 Finland	Gross domestic product	Q2 98	2.1	4.9	Current balance	Sep. 98	0.67	0.54
	Leading indicator	Jul. 98	-1.2	-6.2	Unemployment rate	Oct. 98	11.0	12.3
	Consumer price index	Oct. 98	0.0	1.1	Interest rate	Nov. 98	3.61	3.65
 France	Gross domestic product	Q3 98	0.5	2.8	Current balance	Aug. 98	1.58	0.98
	Leading indicator	Oct. 98	-0.2	3.2	Unemployment rate	Oct. 98	11.8	12.4
	Consumer price index	Oct. 98	-0.1	0.4	Interest rate	Nov. 98	3.59	3.69
 Germany	Gross domestic product	Q3 98	0.9	2.7	Current balance	Sep. 98	-1.14	1.51
	Leading indicator	Oct. 98	-1.3	-2.2	Unemployment rate	Oct. 98	9.3	10.3
	Consumer price index	Nov. 98	0.0	0.7	Interest rate	Nov. 98	3.63	3.74
 Greece	Gross domestic product	1997		3.2	Current balance	Mar. 98	-0.82	-0.75
	Leading indicator	Oct. 98	-0.8	1.2	Unemployment rate	..	..
	Consumer price index	Oct. 98	0.1	4.7	Interest rate	Nov. 98	10.50	11.50
 Hungary	Gross domestic product	Q2 98	..	5.1*	Current balance	Oct. 98	-0.1*	0.0*
	Leading indicator		..	..	Unemployment rate	Sep. 98	9.1	10.5
	Consumer price index	Nov. 98	0.3	1.3	Interest rate	Oct. 98	18.70	19.30
 Iceland	Gross domestic product	1997		4.4	Current balance	Q3 98	-0.06	-0.03
	Leading indicator		..	..	Unemployment rate	Oct. 98	2.5	3.9
	Consumer price index	Nov. 98	0.3	1.3	Interest rate	Oct. 98	7.50	6.90
 Ireland	Gross domestic product	1997		10.7	Current balance	Q2 98	0.70	0.21
	Leading indicator	Oct. 98	-1.1	6.7	Unemployment rate	Oct. 98	8.6	9.9
	Consumer price index	Oct. 98	0.1	2.9	Interest rate	Oct. 98	4.01	6.14
 Italy	Gross domestic product	Q2 98	0.4	1.1	Current balance	Jun. 98	3.94	2.10
	Leading indicator	Sep. 98	-0.5	0.2	Unemployment rate	Jul. 98	12.3	12.0
	Consumer price index	Oct. 98	0.2	1.7	Interest rate	Sep. 98	4.97	6.67
Japan	Gross domestic product	Q3 98	-0.7	-3.5	Current balance	Sep. 98	14.37	9.40
	Leading indicator	Oct. 98	0.0	-2.5	Unemployment rate	Oct. 98	4.2	3.4
	Consumer price index	Oct. 98	0.7	0.2	Interest rate	Oct. 98	0.61	0.53

			% change from:				% change from:	
			previous period	previous year			current period	same period last year
	Gross domestic product	Q2 98	-1.2	-6.7	Current balance	Sep. 98	3.68	-0.51
	Leading indicator		..	..	Unemployment rate	Oct. 98	8.5	2.5
	Consumer price index	Nov. 98	-0.3	6.8	Interest rate	Oct. 98	8.10	13.80
	Gross domestic product	1997		3.7	Current balance		..	..
	Leading indicator	Oct. 98	-2.1	-6.7	Unemployment rate	Sep. 98	2.2	2.6
	Consumer price index	Oct. 98	0.1	0.5	Interest rate		..	..
	Gross domestic product	Q3 98	2.0	5.0	Current balance	Q2 98	-3.54	-1.13
	Leading indicator	Aug. 98	2.1	8.1	Unemployment rate	Oct. 98	3.1	3.2
	Consumer price index	Oct. 98	1.4	16.6	Interest rate	Nov. 98	34.36	22.01
	Gross domestic product	Q2 98	0.7	3.7	Current balance	Q1 98	3.54	4.66
	Leading indicator	Oct. 98	-0.9	-1.7	Unemployment rate	Sep. 98	3.7	4.9
	Consumer price index	Oct. 98	0.2	1.8	Interest rate	Nov. 98	3.42	3.75
	Gross domestic product	Q2 98	-1.1	-1.0	Current balance	Q1 98	-0.27	-0.61
	Leading indicator		..	..	Unemployment rate	Q2 98	7.7	6.6
	Consumer price index	Q3 98	0.5	1.7	Interest rate	Oct. 98	4.85	7.76
	Gross domestic product	Q3 98	0.1	1.6	Current balance	Q2 98	-0.05	1.60
	Leading indicator	Jul. 98	0.1	-0.2	Unemployment rate	Q3 98	3.2	4.1
	Consumer price index	Oct. 98	0.0	2.2	Interest rate	Nov. 98	8.00	3.95
	Gross domestic product				Current balance	Sep. 98	-1.30	-0.45
	Leading indicator		..	..	Unemployment rate	Oct. 98	10.0	10.6
	Consumer price index	Oct. 98	0.6	9.8	Interest rate	Oct. 98	16.14	22.87
	Gross domestic product	Q4 97	1.9	4.8	Current balance	Q4 97	-0.69	-0.87
	Leading indicator	Sep. 98	1.4	3.5	Unemployment rate	Oct. 98	4.5	6.5
	Consumer price index	Oct. 98	0.3	3.2	Interest rate	Oct. 98	4.00	5.28
	Gross domestic product	Q2 98	0.9	3.9	Current balance	Sep. 98	-1.19	0.21
	Leading indicator	Oct. 98	-0.4	-0.4	Unemployment rate	Oct. 98	18.2	20.3
	Consumer price index	Oct. 98	0.0	1.7	Interest rate	Nov. 98	3.80	5.05
	Gross domestic product	Q2 98	2.2	4.2	Current balance	Sep. 98	0.74	0.87
	Leading indicator	Oct. 98	0.3	0.6	Unemployment rate	Oct. 98	7.5	9.5
	Consumer price index	Oct. 98	0.2	-0.9	Interest rate	Nov. 98	3.79	4.31
	Gross domestic product	Q2 98	0.3	2.4	Current balance	Q3 98	5.39	5.33
	Leading indicator	Oct. 98	-1.4	1.2	Unemployment rate	Oct. 98	3.4	5.0
	Consumer price index	Nov. 98	-0.2	-0.1	Interest rate	Oct. 98	1.23	1.73
	Gross domestic product	Q2 98	-1.2	2.6	Current balance	Q3 98	1.79	0.94
	Leading indicator		..	..	Unemployment rate	Q2 98	6.4	5.9
	Consumer price index	Nov. 98	4.3	72.8	Interest rate	Nov. 98	78.94	77.87
	Gross domestic product	Q3 98	0.4	2.3	Current balance	Q2 98	0.99	3.37
	Leading indicator	Oct. 98	-0.5	-4.0	Unemployment rate	Aug. 98	6.2	6.8
	Consumer price index	Oct. 98	0.1	3.1	Interest rate	Nov. 98	6.88	7.54
	Gross domestic product	Q3 98	1.0	3.5	Current balance	Q3 98	-61.30	-38.09
	Leading indicator	Oct. 98	0.7	-1.0	Unemployment rate	Oct. 98	4.6	4.8
	Consumer price index	Oct. 98	0.2	1.5	Interest rate	Nov. 98	5.24	5.74

Definitions and notes

Gross Domestic product: Volume series, seasonally adjusted except for Czech Republic and Portugal; **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 Australia, the United Kingdom and the United States;

Unemployment rate: % of civilian labour force – standardised unemployment rate; national definitions for Czech Republic, Iceland, Korea, Mexico, Poland, Switzerland and Turkey; seasonally adjusted apart from Turkey; **Interest rate:** Three months, except for Greece (twelve months) and Turkey (overnight interbank rate) .. *not available*

Sources: *Main Economic Indicators*, OECD Publications, Paris, December 1998. For Hungary, PIB*: CSO and current balance*: Central Bank.

Health care spending

In the United States public spending on health care came to 3.9% of GDP in 1980, and rose to 6.3% by 1995. Most countries saw some increase too, but a few countries saw their ratios fall, notably Sweden (8.7% to 7.1%) and Ireland (7.1% to 5.2%). The country with the highest ratio of public health care spending to GDP in 1995 was Germany, with 8.1%. US public spending on health care was about average for the 21 countries in the table, but the United States spends as much again on private healthcare. As a result US total spending on health care stood at 13.6% of GDP in 1995, significantly higher than any other OECD country.

Comparison of expenditure on health care

% of GDP

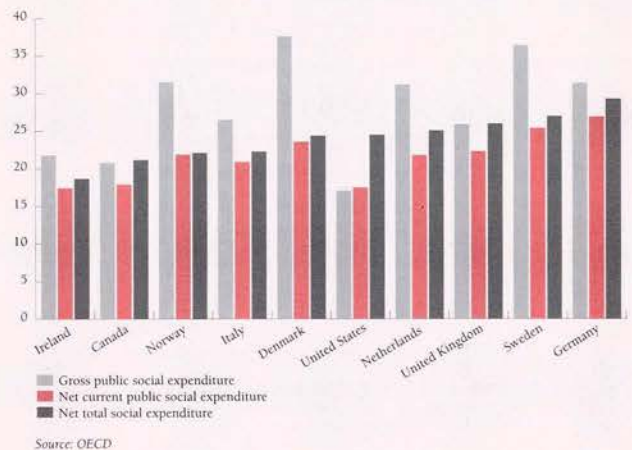
	Public expenditure		Total expenditure	
	1980	1995	1980	1995
Australia	4.6	5.8	7.3	8.6
Austria	5.3	5.8	7.7	7.9
Belgium	5.4	6.9	6.5	7.9
Canada	5.5	6.6	7.3	9.3
Denmark	7.7	6.5	8.7	7.6
Finland	5.1	5.7	6.5	7.6
France	6.0	7.3	7.6	9.8
Germany ¹	7.0	8.1	8.8	10.4
Japan	4.5	5.6	6.4	7.2
Netherlands	5.9	6.7	7.9	8.8
Norway	5.9	6.6	7.0	8.0
Sweden	8.7	7.1	9.4	8.5
United Kingdom	5.0	5.8	5.6	6.9
United States	3.9	6.3	9.1	13.6
Greece	2.9	4.4	3.6	5.8
Ireland	7.1	5.2	8.7	7.0
Italy	5.6	5.4	7.0	7.7
Luxembourg	5.7	6.2	6.2	6.7
Portugal	3.7	5.0	5.8	8.2
Spain	4.5	5.8	5.6	7.3
Switzerland	4.6	6.9	6.9	9.6

1. The old Länder until 1990.
Source: OECD

The effect of private spending on total health care expenditure is shown in the chart comparing the United States and Sweden, the latter having had the highest total spending on healthcare as a percentage of GDP in the OECD area in 1980.



Social expenditure in selected OECD countries, 1995



International comparisons of social expenditure: these are usually based on gross public expenditure data. This gives only a limited view of the whole picture, since by definition gross public expenditure does not include the effects of taxation and private spending on unemployment insurance, health care schemes and pension plans. The OECD has constructed a set of indicators to provide a more exact picture of the extent of social spending across its member countries.

In the chart, the first column from the left represents gross public social expenditure according to national accounts definitions. The middle column accounts for the effects of taxation, and is therefore expressed as net public social spending as a percentage of GDP at factor cost. The third column adds on both mandatory and voluntary private social benefits.

To get from gross to net public social expenditure taxes paid on benefits by recipients are excluded and the value of tax breaks provided for social purposes – tax exemptions in health insurance premiums and pension fund contributions – are added. The main effect of these adjustments is to reduce the actual net size of government transfers in countries with high public spending, such as Sweden, Denmark, Norway and the Netherlands, compared with lower spending ones, such as Canada and the United States. In the United States net public spending is slightly higher than the gross amount because the revenue forgone from tax breaks on employer-provided health and pension benefits is larger than the value of taxation on public benefits.

Net total social expenditure includes private social benefits and excludes individual arrangements, which are not regarded as social support as they are determined by market prices. Private social benefits predominantly concern employer-provided pension and health-care benefits. These health-care benefits represent as much as 5.5 % of GDP at factor cost in the United States. Private social pension benefit payments exceed 3% of GDP at factor cost in Canada, the Netherlands, the United Kingdom and the United States. When the effect of these outlays on employer-funded benefits are reflected in calculating the total cost of social protection, then OECD expenditure levels converge. And in the United States, total net social spending is in fact higher than even in Norway or Denmark, as the dark columns show.

On tax avoidance

The emphasis given to the problem of widening opportunities for tax evasion and avoidance as a result of globalisation, in the recent article, 'OECD taxes revisited' (*The OECD Observer*, No. 214) is to be welcomed. A great deal is said about the need to cut government expenditure and revenue to protect competitiveness, allow room for the private sector to develop and even to safeguard basic freedoms. Yet all modern developed economies need to raise a substantial proportion of national income as taxation to provide the conditions in which a modern economy can flourish – the rule of law and its enforcement, the education needed to participate in economic life, and the retention of a minimal level of civilised treatment of those who are unable to provide for themselves. Moreover, although some countries may spend and tax to an extent which many of us consider excessive, governments that do so can be voted out. If, as has recently happened in some European countries, they are not so voted out, or indeed if left-leaning governments are voted in, then though we may disagree, we should admit it as the legitimate democratic right of these countries to make that choice. If competition for ever more mobile factors of production were to make such free choice on the part of electorates impossible, then democracy would be weakened.

The OECD should work to ensure that destructive competition for resources, especially capital, does not undermine member states reasonable ability to raise taxation. However, while agreeing with the article's focus on capital taxes, I would question whether company taxation is the one requiring the most urgent attention. In fact, many OECD countries find they can tax companies at quite high rates and still attract in foreign investment.

Surely, the more immediate issue is that of personal income tax on investment income, on which the European Commission is trying to bring EU member states to agree on a common 20% withholding tax, or at least to agree to notify the tax authorities of the beneficial holder of the account, on investment income by EU residents. The objective in asking for a minimal degree of tax co-operation is not just to enable countries to retain their desired levels of taxation, but to make it possible to collect taxes in the first place. If competition for the management of interest-bearing investments leads, as it currently does, to making tax avoidance easier, it will not only weaken democratic choice but undermine the rule of law. The argument of those resisting the Commission proposal is that, if investors cannot avoid tax in the EU, they will go elsewhere. Co-operation at an OECD level would no doubt reduce the options for tax avoidance. Of course, some money would go to offshore tax havens. But in my view investors who want a low level of risk and the assurance of good regulation will probably opt for investments in OECD economies even if they have to pay a modest tax price to do so.

Yours truly,

Charles Jenkins, Economist Intelligence Unit, 15 Regent St, London, United Kingdom

Simply learning

I read with great interest Alan Wagner's article 'Redefining tertiary education' in issue No. 214 of the *Observer*. In this article Mr Wagner gives a lucid account of the sweeping quantitative and qualitative changes tertiary education is undergoing, and some of their implications. Nevertheless, I would like to make two points that perhaps did not receive all the attention they deserve.

The first concerns the catchphrase repeated in Mr. Wagner's article to the effect that it is no longer enough simply to learn, but that we must 'learn how to learn'. This catchphrase strikes me as being slightly dangerous. It is certainly true that useful knowledge becomes obsolete at an ever more rapid pace, and that the knowledge we actually use is less and less what we learned at school or university. But some of the knowledge mastered in school, such as mathematics or languages, and in particular our mother tongue, remains relevant throughout our lives. Moreover, the best way of 'learning to learn' is simply the learning process itself – to learn something, almost anything in fact, will train and prepare the learner. As Montaigne famously said, it is better to have a mind that is 'well formed' than one that is merely 'full of information'.

My second point concerns the content of education. The article appears to make the assumption that the knowledge to be passed on is already there, ready and waiting, and that the only issue is how, to whom and at what cost it will be transmitted. Unfortunately, this is not the case. Vitality important is how this knowledge is produced. And this is all the more crucial inasmuch as its content is changing and perishable and must always be renewed and reinvented. Much relevant knowledge is produced by research, but a good deal is also produced by business and government. We must therefore find ways of ensuring that this knowledge is transmitted to teachers, before we can begin to ask how it will be taught to students.

Yours truly,

Rémy Prud'homme, Professor at the Université de Paris XII, 6, rue des Haudriettes, 75003 Paris, France

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Agricultural Policies in Emerging and Transition Economies Monitoring and Evaluation 1998 September 1998

Are the central and eastern European countries (CEECs) now firmly on the path to sustainable levels of agricultural output? What are the remaining impediments to the emergence of a competitive agro-food sector in the major New Independent States (NIS)? What are the recent developments in other major players in the global agricultural economy, such as Brazil, China and India? These are some of the questions addressed in the 1998 edition of the annual OECD report *Agricultural Policies in Emerging and Transition Economies: Monitoring and Evaluation 1998*. In its sixth edition, the report also takes a critical look at three issues which are key elements to structural reform in the agro-food sector: credit and finance; foreign direct investment; and impediments to efficiency. The 1998 report also features: – a statistical annex of major agricultural indicators for various non-OECD Member countries – a watch on support levels to agriculture, featuring producer and consumer subsidy equivalents (PSEs/CSEs) in Russia and selected CEECs. The countries covered in this publication are: Albania, Belarus, Brazil, Bulgaria, China, Croatia, Estonia, India, Kazakhstan, Latvia, Lithuania, Romania, Russia, the Slovak Republic, Slovenia, and Ukraine.
(14 98 05 1 P) ISBN 92-64-16074-4, 296pp.
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Development and Aid

Development Centre Directory of Non-Governmental Organisations Active in Sustainable Development Part 2: Australia, Canada, Japan, Korea, New Zealand, United States November 1998

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FF395 US\$67 DM118 £41 ¥9,450

Aid Activities in Africa 1997/1998 Gazette Creditor Reporting System October 1998

(43 98 56 3 P) ISBN 92-64-05830-3, 100pp., bilingual
FF120 US\$20 DM36 £12 ¥2,800

Development Centre Studies

The Economics and Politics of Transition to an Open Market Economy

Egypt
Dieter Weiss and Ulrich Wurzel
September 1998

Egypt is lagging behind other countries in the Mediterranean region in reforming its economy. This book explains why. The authors contend that the Egyptian political system, based to a large extent on discrete patronage and dominated by powerful interest groups was inherently resistant to reform. In addition, the country's strategic position in Middle Eastern politics provided the environment for aid flows which mitigated the need for change by creating an illusion of economic well-being. Egypt has thus been protected from the pressure of the international market system. Yet, argues this study, such pressure is the only effective stimulus to fundamental reform.

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The Second-Generation Pension Reforms in Latin America

Ulrich Hiemenz
September 1998
More than a decade after Chile moved from a public pay-as-you-go to a private funded pension system, seven more countries in Latin America have reformed their pension systems. This study provides a detailed description of all second-generation pension reforms in Latin America to date, evaluates the first years of operations of the new systems and outlines the problems and challenges which the systems are still facing. The basic common feature of the 'second generation' pension reforms in Latin America is a greater role for funded, privately managed pensions. A move towards more funding is currently also discussed in many OECD countries as one possibility to confront the effects of ageing populations on pay-as-you-go pension systems. Thus, the Latin American reform experience is interesting not only for other developing countries about to embark on pension reform but also for policymakers and

pension experts in OECD countries and transition economies.

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Chinese Economic Performance in the Long Run

Angus Maddison
September 1998
See also pages 39–42 in this issue of the *Observer*.

(41 98 13 1 P) ISBN 92-64-16180-5, 200pp.
FF200 US\$33 DM60 £20 ¥4,550
Also available as an electronic book.

Public Attitudes and International Development Co-operation

Tony German, Henny Helmich, Judith Randel and Ian Smillie
October 1998

This collection of studies of public attitudes to development co-operation in OECD Development Assistance Committee (DAC) Member countries demonstrates that the concept of 'aid fatigue' is misplaced. A serious lack of adequate knowledge about development co-operation, however, is also revealed. The opinions of policy makers are, therefore, overwhelmingly important and development education efforts should be specifically addressed to them. The book also demonstrates that the role of NGOs is important in general development education. Not only do these organisations mobilise their members in the development field, but their activities create a fund of information within their societies. Remarkable progress by both governments and NGOs has been made during the 1990s in improving co-operation domestically and in operational development activities in the field. Most DAC Member countries have significantly increased the involvement of NGOs in their development efforts, and most NGOs have become increasingly effective in their work. The editors conclude that NGOs and governments both need to work towards more and better public and political-level understanding of development efforts. This will require a wide range of complementary activities, some of which are best undertaken by NGOs, and others by government agencies.

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Education

Overcoming Failure at School

November 1998
Failure at school: an old problem in a new context? In most OECD countries, there is some reluctance to acknowledge the problem of failure at school. And when the problem is acknowledged, it is not always easy to find effective means for combating it or, even, to agree on indicators of failure that would demonstrate its scale. What are the different manifestations of educational failure today? And what are the policies needed to address them? This book aims to develop a deeper understanding of the nature of failure at school in OECD countries. It restates the problem as it confronts policy-makers today and presents new findings. It proposes a set of national and international indicators of failure and compares various forms of intervention aimed at improving student achievement in Australia, Belgium, Canada, Japan, New Zealand, Spain and the United Kingdom.

(91 98 04 1 P) ISBN 92-64-16151-1, 100pp.
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Education at a Glance

OECD Indicators

1998 Edition

November 1998
Across OECD countries, governments are seeking policies to make education more effective while searching for additional resources to meet the increasing demand for education. The OECD education indicators enable countries to see themselves in the light of other countries' performance. The 1998 edition of *Education at a Glance – OECD Indicators* provides a richer, more comparable and up-to-date array of indicators than ever before. The indicators represent the consensus of professional thinking on

how to measure the current state of education internationally. They provide information on the human and financial resources invested in education, on how education and learning systems operate and evolve, and on the returns to educational investments.

The thematic organisation of the volume and the background information accompanying the tables and charts make this publication a valuable resource for anyone interested in analysing education systems across countries. In addition to reporting on continuing expansion of enrolment, particularly in higher education, the 1998 indicators trace the rapidly growing contribution of households and enterprises to educational resources. There is also a pressure to make tertiary studies more effective and to limit the time spent acquiring qualifications. This edition brings together evidence on passage through higher education, comparing the extent to which those who enrol eventually acquire degrees. It also takes a further step towards reporting internationally comparable data on lifelong learning and its impact on society and the economy. A significantly larger number of OECD countries are now providing data. This year, through the 'World Education Indicators' programme, a wide range of non-member countries have contributed to this edition, extending the coverage of some of the indicators to almost two-thirds of the world population. The companion volume Education Policy Analysis takes up selected themes of key importance for governments. The data underlying the OECD education indicators are accessible via the Internet (URL) http://www.oecd.org/els/stats/els_stat.htm.

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International Energy Agency

Coal Information 1997

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September 1998

This volume is a comprehensive reference book on current trends in the world coal market and long-term prospects to 2010. It contains an in-depth analysis of the 1997 international coal market covering prices, demand, trade, supply and production capacity, as well as over 475 pages of country-specific statistics on OECD and key non-OECD coal producing and consuming countries. The book also includes a summary of environmental policies on climate change and on coal-related air quality issues as well as essential facts on coal-fired power stations in coal-importing regions, on coal ports world-wide and on emission standards for coal-fired boilers in OECD countries. Coal Information is one of a series of annual IEA statistical publications on major energy sources; other reports are Oil Information, Natural Gas Information and Electricity Information. Coal Information 1997 is published in July 1998.

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This Outlook, the first since the Kyoto agreement on climate change, is based on a new methodology and a new world energy model. It analyses the major issues and uncertainties of the global energy scene from now till the year 2020. In this period, the Outlook projects world energy demand to grow by 65% and carbon dioxide emissions by 70% – unless governments impose strict policies to restrain them. Fossil fuels will remain the dominant source of global energy. But the balance among them is projected to change significantly. The market share of gas will increase while that of oil and coal will remain stable. Non-OPEC oil production is expected to peak before 2010. Importing countries will become increasingly dependent on Middle East oil and unconventional sources, such as shale oil and tar sands, will increasingly be tapped. The Outlook examines the emissions-cutting commitments made at Kyoto and points out that they will be impossi-

ble to meet if governments continue to treat energy on a 'business as usual' basis. Hence, a whole new policy-mix – including regulations, flexible market mechanisms and the encouragement of less polluting sources such as renewable energy and nuclear power – will be required to meet the Kyoto targets. Along with its global analysis, the Outlook contains separate, detailed studies of 10 regions. It will be essential reading for energy professionals, policy-makers and concerned citizens everywhere.

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Central and Eastern Europe and Russia have been actively building capital markets since the beginning of the transition period in 1990. Since that time, these countries have created or re-established equity markets and actively developed government securities markets. In some cases, corporate bond markets have also begun to flourish. Yet, many problems remain in achieving desired levels of efficiency, transparency and stability. For the first time, the evolution of both equity and securities markets in these countries is critically evaluated. The policy choices for promoting these objectives and further integration of the fledgling markets into the international capital markets are discussed, although they are not always straightforward and free of controversy. This book brings into focus some of the main obstacles on the road to building sound capital markets. Financial experts, economists from OECD member countries as well as government officials from several central and eastern European countries and Russia describe strategic choices and policy options based on their experiences with different privatisation methods, regulatory approaches and government debt management policies. The presentation of actual experiences and policy challenges encountered by government officials in creating and regulating securities markets – in particular, very frank accounts by Russian and Czech officials of attempts to combat fraudulent practices of certain market participants – makes this book unique. The range of lessons found here will provide support for countries currently in market turmoil and insights on the process of building capital markets for policymakers, academics and market participants.

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Labour Market and Social Issues

The OECD Jobs Strategy Fostering Entrepreneurship

October 1998

What is 'entrepreneurship'? It is much more than the competition and risk taking of starting your own business. Enterprises create jobs and wealth. Without the dynamism they bring to the economy, the challenges of globalisation and structural change would be all but insurmountable. Fostering entrepreneurship means chan-

neling entrepreneurial drive into a dynamic process which takes advantage of all the opportunities the economy can provide. This book analyses the factors that favour entrepreneurship and the obstacles that hinder it. It is the first to provide an international synthesis of entrepreneurship policies undertaken in countries as diverse as Australia, the Netherlands, Spain, Sweden and the United States. Despite varying degrees of entrepreneurship from one country to another, international comparisons show that success comes from a synergy between a conducive institutional environment, well-designed government programmes and supportive cultural factors. To flourish, entrepreneurship requires efficient financial markets, a flexible labour market, a simpler and more transparent corporate taxation system and bankruptcy rules better adapted to the realities of the business world. This book examines experiences in all of these fields, as well as addressing the increasingly important roles played by local and regional authorities, the contribution of entrepreneurship in the non-profit sector, and the emergence of entrepreneurship in transition economies. Clearly, the right balance between these factors is not easy to strike. But strike it we must, because fostering entrepreneurship is not only a major economic imperative but also an urgent challenge that must be met to reconcile the goals of economic growth and social cohesion. This book is the most recent in a series on the OECD Jobs Strategy and an integral part of this international organisation's broader mission to develop public policies to help OECD economies adapt to structural change and globalisation. This publication was prepared under the supervision of the OECD's Territorial Development Service.

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The Future of Female-dominated Occupations

October 1998

In all of the OECD countries, employment is seen to be sharply segregated by gender, with women's employment heavily concentrated in the same occupations: secretaries, primary school teachers, nurses and home helpers. These jobs, whose image has in many cases remained stereotyped and traditional, are at the heart of the information and service economy and have therefore been undergoing far-reaching changes due to information technologies, the development of a know-

ledge-based economy and population ageing. These transformations represent a major challenge for women's employment and for gender equality in the labour market. Beyond the high segregation and concentration scales which are a constant of women's employment in all countries, international comparisons show that there can be differences in the status of a given occupation from one country to another. These differences can stem from the way in which occupations are defined or from how the relevant activities and work are organised. Understanding these differences is essential to identify ways to promote women's career prospects in female-dominated occupations.

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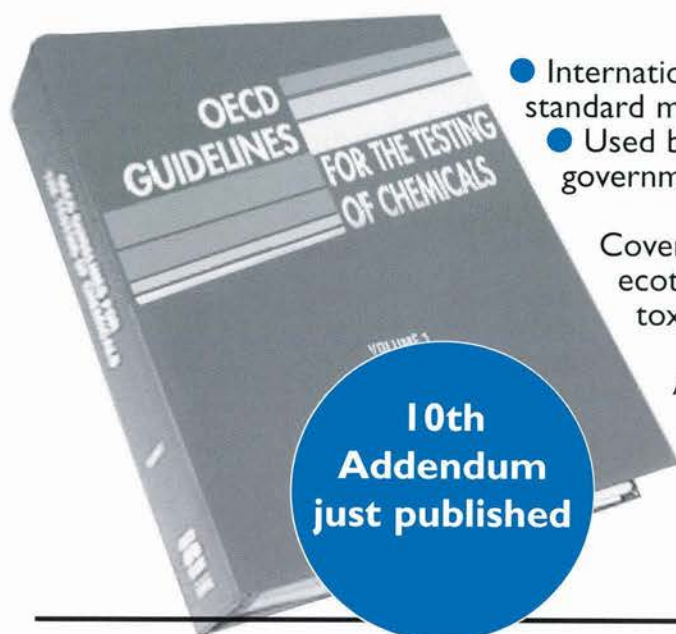
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