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Product Market Competition and Economic Performance in the United Kingdom

Maria Maher,

Michael Wise

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ABSTRACT/RÉSUMÉ

Product market competition and economic performance in the United Kingdom

This paper assesses what role product market competition and regulatory reforms may have played in the performance of the British economy over the past decade. Competitive pressures appear to be relatively strong in the United Kingdom, with regulations inhibiting competition and barriers to trade amongst the lowest in the OECD. Nevertheless, there is scope for improvement and the recent overhaul of competition legislation should help to further promote competition. Much progress has been made in the professional services sector. Self-regulatory bodies are no longer exempt from competition legislation and professional bodies have undertaken a number of actions towards removing or easing restrictions that inhibit competition. In the retail sector, market power remains a problem and the competition authorities will need to remain vigilant. The government's recent approach to planning has made new large scale entry very difficult, impeding competition and inhibiting entry. Industry regulators also need to remain vigilant in the electricity, gas and telecommunications sectors. Reforms in these sectors have led to increased productivity, though international comparisons suggest that there is scope for prices to fall. While recent steps by the government overcome the most serious weaknesses of the privatised rail system, continuing problems regarding incentives and responsibilities remain to be resolved.

JEL *classification: K21, K23, L11, L16, L40, L43, O51.*

Keywords: United Kingdom, market structure, competition, productivity and growth, antitrust law, regulatory policies, network industries.

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Concurrence sur les marchés de produits et performance économique au Royaume-Uni

L'objet du présent document est d'évaluer le rôle que la concurrence sur les marchés de produits et les réformes de la réglementation ont pu jouer dans les performances de l'économie britannique au cours des dix dernières années. Les pressions concurrentielles semblent relativement fortes au Royaume-Uni, où les réglementations entravant la concurrence et les obstacles aux échanges figurent parmi les plus modestes de la zone OCDE. Il existe néanmoins des marges de progression, et la récente refonte du droit de la concurrence devrait contribuer à promouvoir davantage celle-ci. Des avancées considérables ont été accomplies dans le secteur des services professionnels. Les organismes d'autoréglementation ne sont plus exclus du champ d'application du droit de la concurrence, et des organismes professionnels ont pris un certain nombre de mesures en vue de lever ou d'assouplir les restrictions à la concurrence. Dans le secteur de la distribution, la question du pouvoir de marché reste problématique et les autorités de la concurrence devront rester sur le qui-vive. L'approche adoptée récemment par le gouvernement en matière d'urbanisme a rendu très difficile l'installation de nouvelles grandes surfaces, ce qui entrave la concurrence et l'entrée de nouveaux acteurs sur le marché. Les autorités de régulation compétentes doivent également demeurer vigilantes dans les secteurs de l'électricité, du gaz et des télécommunications. Les réformes menées dans ces branches d'activité ont débouché sur des gains de productivité, mais des comparaisons internationales laissent à penser que les prix peuvent encore baisser. Si les récentes initiatives des pouvoirs publics ont permis de remédier aux défaillances les plus graves du système privatisé de transport ferroviaire, les problèmes persistants relatifs aux incitations et au partage des compétences doivent encore être résolus.

Classification JEL : K21, K23, L11, L16, L40, L43, O51

Mots clés : Royaume-Uni, structures de marché, concurrence, productivité et croissance, droit de la concurrence, politiques de réglementation, industries de réseau.

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PRODUCT MARKET COMPETITION AND ECONOMIC PERFORMANCE IN THE UNITED KINGDOM

by Maria Maher and Michael Wise[1]

Introduction

There is a well–identified empirical connection between the intensity of competition in product markets and better productivity performance (OECD, 2002a). In general, competitive pressures appear to be relatively strong in the United Kingdom but this does not mean that there is no room for improvement. The overhaul in competition legislation that occurred in recent years was long overdue and active enforcement along with the new market studies and market reference regimes of the competition enforcement agencies should help to ensure that markets are competitive. In service sectors the United Kingdom has experienced relatively strong labour productivity growth over the 1990s and a large part of this is due to the introduction of increased competition over this period. However, market power on the part of incumbent firms in some sectors remains a concern and current planning restrictions are inhibiting competition in the retail sector. While recent steps by the government overcome the most serious weaknesses of the privatised rail system, problems regarding incentives and clear lines of responsibility remain to be resolved.

This paper assesses what role product market competition, and the policies that impact upon competition, may have played in the performance of the UK economy over the past decade and what further measures might contribute to enhancing growth. The main links between stronger competition and macroeconomic performance are reviewed in the first section of this paper, while the second section lays out the competition legislation framework and the recent introduction of the Enterprise Act. In the third section, competitive conditions, regulation and recent reforms are analysed for a wide range of service sectors. This includes service industries that are competitive, such as retail distribution and professional services, and network industries containing non–competitive segments, such as telecommunications, electricity and rail. A concluding section draws on the analysis and provides a set of policy recommendations that highlight areas in which stronger competition can boost performance.

Product market competition and macroeconomic performance

1. The United Kingdom's average annual productivity growth (per worker) between 1990 and 2001 is slightly higher than the OECD and EU averages, and the highest amongst the G7 countries (**Table 1**). However, superior annual productivity growth of the order of a few tenths of a percentage point needs to be put into context: the magnitude of the productivity gap with the United States and the major continental European countries is still around 20 percentage points or more, although the gap with the latter has been closing. A sectoral comparison of labour productivity growth shows that the United Kingdom had the highest productivity growth of the G7 countries in construction and

1. This paper was originally prepared for the *OECD Economic Survey of the United Kingdom 2004,* which was published under the authority of the OECD's Economic and Development Review Committee. Maria Maher is a senior economist in the Economics Department and Michael Wise is a lawyer in the Competition Division in the Directorate for Financial and Enterprise Affairs. The authors would like to thank Mike Feiner, Andrew Dean, Val Koromzay, Peter Hoeller, Willi Leibfritz, David Turner and Jens Lundsgaard for valuable comments. Special thanks to Marie-Christine Bonnefous for statistical assistance and Celia Rutkoski for her technical assistance

Table 1. Output, employment and productivity

1990 to 2001

	United States	Canada	Australia	Japan	Germany[1]	France	Italy	United Kingdom	OECD[2]	EU-15[3]
Average GDP growth	2.8	2.5	3.3	1.7	1.5	1.9	1.7	2.3	2.5	2.0
of which:										
Labour productivity	1.6	1.3	1.9	1.3	1.7	1.1	1.6	1.8	1.6	1.5
Employment	1.2	1.2	1.4	0.4	-0.2	0.8	0.1	0.4	0.9	0.6
Labour productivity growth in selected industries										
Total manufacturing	3.3	2.2	2.4	2.7	2.5	3.3	1.9	2.6	n.a	n.a
Electricity, gas and water supply	1.2	0.9	5.9	2.6	5.1	3.0	3.4	10.1	n.a	n.a
Construction	0.0	0.3	0.6	-2.4	0.0	0.1	0.0	2.5	n.a	n.a
Wholesale and retail trade; restaurants and hotels	3.3	1.3	1.9	2.2	-0.6	0.8	1.0	1.7	n.a	n.a
Transport and storage and Communication	2.7	3.0	4.4	1.5	7.3	2.6	3.6	3.9	n.a	n.a

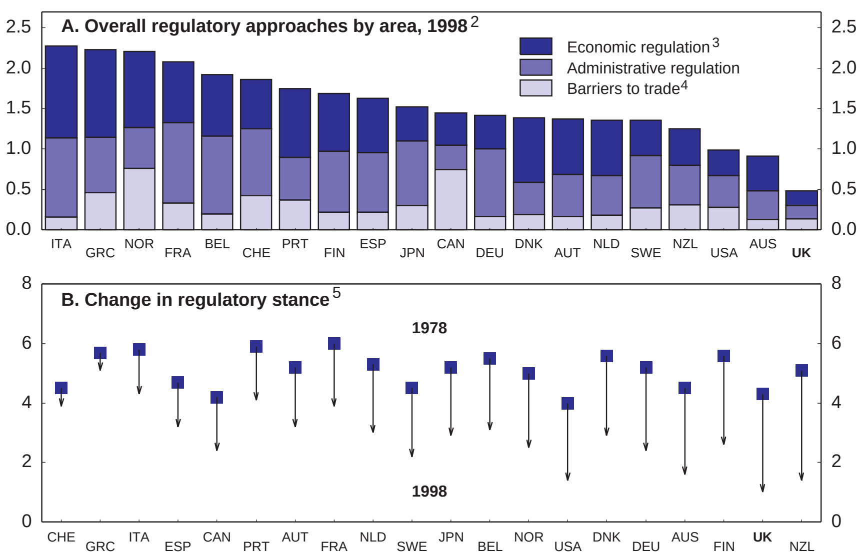
1. Average growth 1992-2001.
2. OECD except Austria, Luxembourg, Poland and Turkey.
3. EU except Austria and Luxembourg.
Source: OECD.

phenomenal rates in electricity, gas and water, where annual productivity growth averaged just over 10 per cent a year, primarily due to liberalisation and regulatory reforms undertaken in electricity and gas over the past decade. In relation to the G7, productivity performance in transport and communications was relatively good, but average in manufacturing. Although productivity growth in distribution was higher than in most other major countries, perhaps more tellingly it was only half the rate of growth achieved in the United States. Overall, while productivity growth over the last decade appears encouraging, there is considerable scope for reducing the productivity gap with major competitors further.

Indicators of the intensity of product market competition

2. Overly stringent product market regulations can have an impact on the strength of competition in domestic markets either by exerting direct control on economic activities or by maintaining high barriers to trade and foreign direct investment. Various barriers to entrepreneurial activity (*e.g.* restrictions on market access or administrative burdens and red–tape on firms) can also inhibit competition and discourage entry by both domestic and foreign firms. In international comparison the United Kingdom's institutional and regulatory arrangements are in general among the most favourable to competition. For example, a recent study by the European Commission (EC) shows that, both in terms of cost and time, British firms incurred the lowest costs and faced the lowest waiting times for starting up a new business (EC, 2002a). And focusing on regulations that restrict competition and market mechanisms (*e.g.* economic and administrative regulations and barriers to trade and foreign direct investment (FDI), OECD indicators of regulation show that in 1998 the United Kingdom had the least restrictive economy–wide regulatory stance in the OECD area (**Figure 1**).[1] Contributing to the low economy–wide indicator are the reforms that the United Kingdom undertook in the 1980s and 1990s in the utilities and transport sectors.[2]

Figure 1. Indicators of product market regulation[1]



1. The regulatory stance is measured by a synthetic indicator ranging between 0 (least restrictive) and 6 (most restrictive).
2. Indicator of economy-wide product market regulations.
3. Includes barriers to competition and state control.
4. Includes trade and FDI restrictions.
5. Reports changes in the regulatory stance in seven non-manufacturing industries (gas, electricity, post, telecommunications, passenger air transport, railways and road freight) between 1978 and 1998.

Source: Nicoletti *et al*. (2001); Nicoletti and Scarpetta (2003).

3. Although it is difficult to classify markets according to the strength of market forces, the degree of product market competition may be gauged from jointly considering a number of imperfect proxy measures. The measures of product market competition presented below primarily look at the manufacturing sector but some non–manufacturing sectors are also considered. Manufacturing industries are grouped into four categories. A distinction is made between low R&D and high R&D industries; and between fragmented industries, which are those industries that are less concentrated and characterised by a large number of firms, and segmented industries, which are more concentrated industries characterised by relatively large firms.

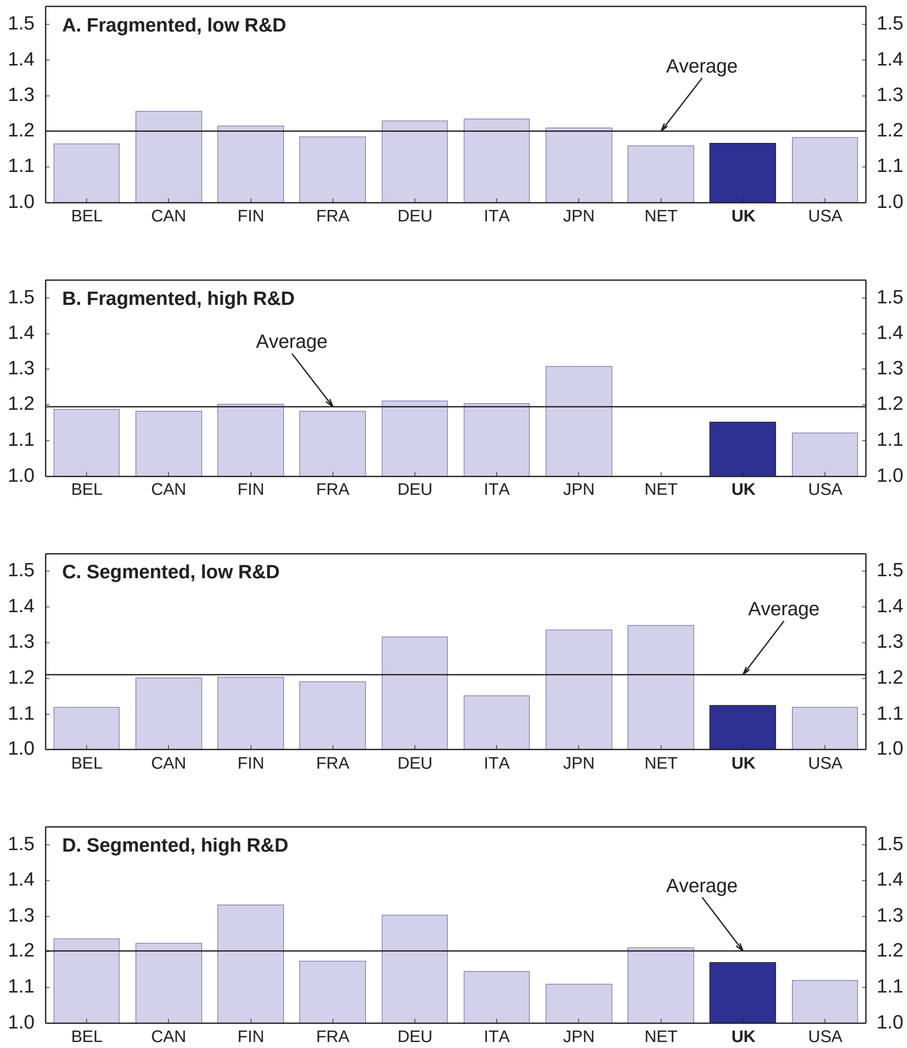
4. Structural measures such as industry concentration ratios or indices are often used as an indicator of competitive forces. Hirshman-Herfindahl indices show that, in general, UK industry (both manufacturing and services) is somewhat less concentrated than in comparable countries like France and Italy (**Table 2**). In general, mark–ups, a frequently used gauge of market power, and thus competitive pressures, appear to be relatively low in UK manufacturing compared with other countries (**Figure 2**). According to this indicator, competition pressures in manufacturing seem to be quite intense in all market structure classifications. Lower than average estimated mark–ups imply that manufacturing firms in the United Kingdom have relatively little market power.

Table 2. Hirshman-Herfindahl indices of industry concentration

	United Kingdom 2000	France 1999	Italy 1999
Manufacturing industry			
Segmented, high R&D			
Chemicals products	43.5	30.0	38.6
Office & computing machinery	284.8	1292.5	710.6
Electrical machinery	31.0	97.2	23.3
Radio, TV and communication equipment	133.6	226.5	106.8
Motor vehicles	89.7	139.9	148.2
Other transport equipment	116.6	339.2	289.8
Fragmented, high R&D			
Medical appliances, optical instruments, watches and clocks	42.9	48.5	24.0
Machinery and equipment	16.9	22.1	8.9
Furniture and other manufacturing	13.1	52.1	5.6
Segmented, low R&D			
Coke and petroleum products	n.a.	753.1	830.4
Basic metals	111.6	114.7	60.1
Plastic and rubber products	21.7	48.1	24.5
Food and beverages	27.2	14.9	11.7
Tobacco products	n.a.	n.a.	2334.5
Fragmented, low R&D			
Textiles	19.4	20.5	8.2
Wearing apparel	29.0	23.8	18.1
Leather and footwear	134.0	58.0	11.2
Wood products	15.6	14.3	3.4
Paper and pulp products	78.8	63.2	76.9
Publishing and printing	14.1	15.4	46.6
Non-metallic products	44.4	59.6	25.6
Fabricated metal products	8.6	9.0	1.6
Non-manufacturing industry			
Electricity and gas	n.a.	1327.9	436.7
Water	n.a.	709.5	151.5
Land transport	16.4	182.0	56.8
Water transport	101.5	471.3	112.0
Air transport	144.3	1375.7	n.a.
Post and telecommunications	105.5	1186.8	825.2
Construction	4.0	2.3	0.7
Sale and repair of motor vehicles	17.2	7.0	n.a.
Wholesale trade	3.4	2.6	n.a.
Retail trade	13.6	10.5	n.a.
Hotels and restaurants	11.3	5.8	4.1

Source: OECD, Statistics on enterprises by size class (SEC database).

Figure 2. Average mark-ups by market structure
1981 to the latest available year[1]



1. The average mark-up is an un-weighted average of the available mark-ups, based on Roeger's method (Oliveira Martins *et al.*, 1996). ISIC, Rev3 classification. 1981-2000: Belgium and Finland, 1981-99: France, Netherlands and United States, 1981-98: Italy, Japan and United Kingdom, 1981-96: Canada, 1992-99: Germany.

Source: OECD STAN database.

5. The strength of competitive pressure also depends to a large extent on how exposed industries are to international competition. Import penetration ratios indicate that British producers face relatively stronger competitive pressure from foreign firms than their counterparts in other large European countries (**Table 3**).[3] Among comparably sized economies, only Canada has a higher import penetration rate in total manufacturing. A sectoral breakdown shows that competitive pressures are across the board and reflect the fact that the United Kingdom is a relatively open economy. FDI inflows are also an indicator of the relative openness of an economy. The United Kingdom has comparatively high inflows and outflows of FDI, with both higher inflows and outflows as a percentage of GDP of any of the G7 countries (**Figure 3**). The relatively high import penetration rates and FDI flows, in conjunction with lower than average mark–ups suggests a lack of barriers to entry and the existence of competitive pressures on manufacturing firms.

Table 3. Import penetration by manufacturing industry

Latest available year

	Canada	France	Germany	Italy	Japan	United Kingdom	United States
	1999	2000	2000	2000	2001	2000	2001
Total manufacturing	55.4	36.6[1]	40.8[1]	30.6	11.6	44.8	23.1
Fragmented, low R&D							
Textiles	65.0	52.1[1]	88.1	20.0	35.6	54.0	27.2
Wearing apparel	42.7	53.4	77.1	23.2	33.8	65.2	53.3
Leather products and footwear	81.8	80.6	89.2	37.9	57.2	86.2	79.5
Wood products	19.3	22.9	20.7	17.8	25.6	32.0	12.7
Paper and pulp	. .	38.9	42.7	27.4	4.6	35.2	10.4
Printing and publishing	. .	9.0[1]	7.1	7.0	1.8	8.0	2.5
Non-metallic products	40.9	18.9[1]	18.4	8.7	4.8	17.9	13.5
Fabricated metal products	35.8	14.3	15.0	7.3	3.9	16.7	8.9
Fragmented, high R&D							
Medical precision and optical instruments	. .	44.7	58.9	59.9	68.1	63.5	22.7
Machinery and equipment	84.1	54.0	36.2	37.4	8.3	57.0	26.4
Other manufacturing	56.8	33.4	38.8	19.5	9.9	38.8	38.5
Segmented, low R&D							
Refined petroleum, coke	13.2	18.1[1]	33.2	17.1	10.8	21.4	17.9
Basic metals	41.9	45.7	47.5	42.7	6.7	46.9	22.0
Shipbuilding and repairs	52.9	11.8	32.4[2]	18.9[2]	2.9[3]	21.0	6.8
Rubber and plastic[4]	46.3	30.9	29.2	22.0	4.7	26.6	12.1
Food, beverages, tobacco[4]	18.6	18.5[1]	19.0	19.0	11.2	20.5	6.3
Segmented, high R&D							
Chemicals	60.3	49.9	53.2	44.5	12.1	53.3	20.4
Pharmaceuticals	56.6	42.6	60.3[2]	33.1[2]	8.8[3]	63.1	18.7
Office and computing machines	113.9	110.6	107.3	97.8[2]	28.8[3]	105.7	68.2
Electrical machinery	91.0	47.5	33.1	20.7[2]	12.0[3]	53.6	46.6
Radio, TV and communication equipment	67.4	73.6	97.5	61.0	14.7[3]	90.8	41.8
Motor vehicles	77.3	36.5[1]	34.6	58.5	3.7[3]	59.0	36.5
Aircraft	87.3	49.4	120.2[2]	69.5[2]	43.6[3]	87.4	30.2
Railroad equipment	36.6	51.7	39.7[2]	29.8[2]	186.9[3]	43.6	20.3
Other transport equipment	70.2	43.3[1]	98.3	54.6	32.6[3]	72.2	25.4

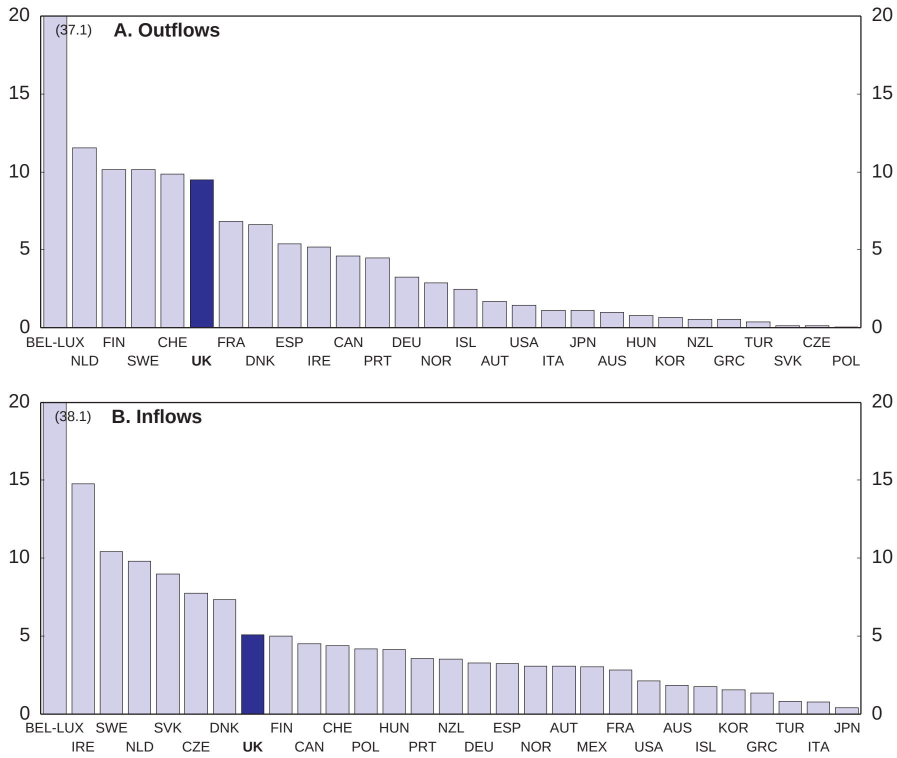
Note: Imports as a percentage of domestic demand (estimated as production minus exports plus imports). Values greater than 100 can occur when exports exceed production because of the inclusion of re-exports, *i.e.* products that are imported and then re-exported without any further transformation. ". ." indicates not available.

1. 2001.
2. 1999.
3. 2000.
4. Mix of fragmented and segmented sectors.

Source: OECD STAN database.

Figure 3. Foreign direct investment outflows and inflows

Per cent of GDP, average 1997-2001



Source: OECD, International Direct Investment Statistics.

Competition, innovation and economic performance

6. Competition is generally considered a primary driver of innovative activity. A more competitive environment tends to strengthen R&D and diffusion of technologies, both of which are primary factors contributing to economic growth (Ahn, 2002; OECD, 2003a). Yet despite its relatively open and competitive environment, the United Kingdom is one of the few countries where R&D expenditure as a percentage of GDP has consistently fallen over the past two decades, falling by 25 per cent over the 1981 to 2000 period (**Table 4**). While R&D expenditure in the United Kingdom at the beginning of the 1980s was well above both OECD and EU averages, by the end of the 1990s it was just below the EU average and had fallen well below the OECD average. The fall in R&D spending is partly explained by the falling share of manufacturing in the UK economy .

Table 4. Gross domestic expenditure on R&D as a percentage of GDP
1981-2001

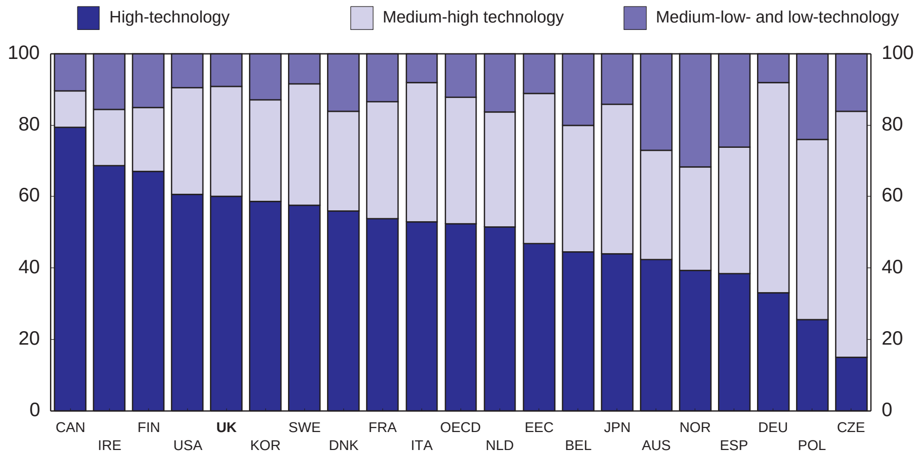
	1981	1991	1995	2001
Canada	1.24	1.60	1.72	1.94
United States	2.34	2.72	2.51	2.82
Australia	0.95	1.31[1]	1.66[2]	1.53[3]
Japan	2.29	2.93	2.89	3.09
Korea	. .	1.92	2.50	2.96
Denmark	1.06	1.64	1.84	2.19[4]
Finland	1.17	2.03	2.28	3.40
Norway	1.17	1.64	1.70	1.62
Sweden	2.17	2.70	3.35	4.27
France	1.93	2.37	2.31	2.20
Germany[5]	2.43	2.53	2.26	2.49
Italy	0.88	1.23	1.00	1.07[3]
Netherlands	1.79	1.97	1.99	1.94[3]
Spain	0.41	0.84	0.81	0.96
United Kingdom	**2.38**	**2.07**	**1.95**	**1.90**
EU	1.69	1.90	1.80	1.93
OECD	1.95	2.23	2.10	2.33

1. 1990.
2. 1996.
3. 2000.
4. 1999.
5. Figures for Germany from 1991 onwards refer to unified Germany.
Source: OECD.

7. While overall R&D expenditure in the United Kingdom as a percentage of GDP is comparatively low, that expenditure is primarily in high technology sectors. The manufacturing sector in the United Kingdom, as in other countries, accounts for the largest share of private R&D expenditure and high–technology accounts for the vast majority of manufacturing R&D expenditure in the United Kingdom (**Figure 4**). Only Canada, Ireland, Finland and the United States have greater R&D expenditure by high–technology manufacturing industries. This composition of R&D expenditure, biased toward high–tech, may in part reflect a successful adjustment in manufacturing and mitigate the effects of the United Kingdom's declining R&D expenditure overall arising from the falling share of manufacturing in the economy. Indeed, over the 1990s, high–technology industries increased their share of manufacturing R&D expenditure by 10 percentage points, a level markedly above the EU average (**Table 5**).

Figure 4. R&D expenditure in manufacturing by technology intensity

Percentage share in total manufacturing, 2000[1]



1. 1998 for OECD and Norway, 1999 for Ireland, Denmark, France, Netherlands and EU.
Source: OECD, ANBERD and STAN database, June 2003.

Table 5. Share of high-technology R&D spending in manufacturing

% share in total manufacturing R&D, 1991-2000

	1991	2000
Canada	68.7	79.3
United States	60.9	60.6
Australia	31.7	42.4
Japan	37.4	44.0
Denmark[1]	49.5	56.0
Finland	33.0	67.0
Norway[2]	42.0	39.4
Sweden	53.7	57.6
France[1]	57.4	53.8
Germany[3]	34.5	33.0
Italy	49.2	52.9
Netherlands[1]	30.4	51.5
Spain	48.3	38.4
United Kingdom	**50.7**	**60.2**
EU[1]		46.9
OECD[2]		52.4

1. 1999 instead of 2000.
2. 1998 instead of 2000.
3. 1995 instead of 1991.
Source: OECD (2001a), *Science, Technology and Industry Scoreboard.*

Competition legislation and enforcement

8. The overhaul of the United Kingdom's competition policy framework is now virtually complete, but an unusually large number of institutions still apply competition law (**Box 1**). Their intricately related functions may provide some checks and balances, but potential overlaps may also create uncertainties and delays. Repeated rounds of reform have transformed the original 1947 law based on the "public interest" into competition–based rules that largely follow those of the European Union, except market reference provisions, which do not have an exact parallel at EU level. Much of this had been achieved in the Competition Act in 1998, which came into force in March 2000; and the recent Enterprise Act, which became effective on 20 June 2003 in respect of the competition and consumer law provisions, completes the fundamental changes. The Office of Fair Trading (OFT), and (in the case of markets) sector regulators with concurrent powers, may refer a merger, or a market which does not appear to be working competitively, to the Competition Commission (CC) for an in-depth investigation. Decisions in merger and market investigations at the CC now (since June 2003) depend only on competition-based tests. The CC now has powers to decide and implement remedies. While the government may still refer cases for investigation in exceptional circumstances on the basis of certain explicit public interest considerations, its ability to do so is tightly constrained by legislation. Among the host of changes in substantive standards and procedures, the most distinctive feature of the Enterprise Act is the introduction of criminal penalties for a cartel offence.

Box 1. Competition institutions

An unusually large number of institutions, most of them independent from the government, apply competition law in the United Kingdom. These include:

- The Office of Fair Trading (OFT) is constituted as a board since 1 April 2003 and is now the principal decision-maker for non–merger matters, and decides most mergers at stage I.

- The Competition Commission (CC), an independent body of experts has been a collegial investigative body since 1947 (although going under different names). Its responsibility has been to conduct investigations into mergers and monopolies, referred to it for in-depth investigation. It has had no role in applying the basic "antitrust" prohibitions. It has recently received new powers to make final decisions about remedies, independence from Ministers and a potentially broader scope for its "market" investigations.

- The Serious Fraud Office (SFO) now has an important role in competition enforcement, as the prosecutor of the new criminal cartel offence. The OFT, however, can prosecute if the SFO does not.

- The Competition Appeal Tribunal (CAT), the specialised court for competition matters, is now formally separate from the Competition Commission. Both a court and an expert body, the CAT has potentially important new powers to review decisions by the OFT and the CC in merger and market investigations and to hear and decide actions seeking damages due to competition violations.

- The Department of Trade and Industry (DTI) no longer has a direct role in enforcement decisions to the extent they involve competition law and policy. Although the Secretary of State is trying to move into the background, DTI will continue to be a major player, with powers to make appointments, oversee performance, prepare legislation, and interpose considerations of the public interest.

- Sectoral regulators for communications, transport, energy, and water have concurrent enforcement powers with OFT for Competition Act 1998 decisions and market references, but not mergers, subject to oversight by the CAT and the Competition Commission. The Concurrency Working Party among OFT and the regulators keeps communications open, avoiding potential overlap.

9. After years of sustained attention to reforming the institutional structure, attention now must turn to how it is implemented. Some significant fines have been assessed, particularly for resale price maintenance. The OFT's enforcement strategy has been to increase public awareness of the importance of competition and to establish a record of successful action. Targets of action or investigation have included independent schools, consumer–product brands such as Hasbro and cultural icons such as Manchester United. OFT's important role in enforcing consumer protection regulation complements this attention to consumer issues in competition enforcement. The stronger law and penalties have been in place now for several years, yet there has been frustratingly little enforcement activity with regard to pure horizontal price fixing, although there are reportedly dozens of cases being investigated. The ambitious market studies and investigations undertaken by the enforcement bodies, the OFT and the CC, may also have a significant effect on market conduct. These studies, which examine why particular markets may not be functioning well, have delved into areas ranging from banking and pharmacies to taxis and estate agents.

10. In the area of merger control the Enterprise Act has adopted a "substantial lessening of competition" test. This standard is often considered to be better suited for economically sensitive analysis of oligopoly than the EU merger rule, which has until now been based on dominance.[4] The United Kingdom does not require pre–notification, having concluded that the increase in enforcement effectiveness and the avoidance of costly post–merger remedies in a pre–notification system would not justify the burden on reporting businesses. The introduction of criminal penalties for hard–core cartels within the UK is also new. Targeting only horizontal practices, it is an offence for individuals to "dishonestly" agree with other persons that undertakings will engage in price-fixing, market-sharing, production or supply limitations, or bid-rigging. The law appears to create a *per se* rule, but it will have to be tested in court.

Coverage and exemption issues

11. There are few exemptions or exclusions to the competition law. However, special sectoral enforcement arrangements are unusually important in the United Kingdom. For example, while regulated monopoly sectors are not exempted from the law, it is typically enforced by the sectoral regulator. Sector–specific treatment remains for mergers in the water industry. Moreover, narrowly defined "public interest" considerations have been introduced, which can be invoked in merger cases involving national security, newspapers and other media. If these are invoked, then a merger is considered against both competition and the specified public interest grounds.[5] The Enterprise Act has repealed provisions for exclusions for the self–regulatory rules of professional bodies. A handful of special exclusions and exceptions remain, and a consultation was launched in mid-2003 about how to treat them. The most important element is a proposal to align the United Kingdom's treatment of vertical restraints with the corresponding EU exemption regulation, which would simplify compliance for business.

12. With the new competition framework, the government has stepped back from its historic role of deciding on remedies in merger and "monopoly" investigations. Decisions are now made by the CC, including decisions about remedies, and are to be determinative. Although in narrowly defined cases involving a public interest consideration the Secretary of State may reach a different decision based on public interest grounds from that which the CC has reached, this process will be transparent and is subject to rules. In general, the Secretary of State has the power to overrule any enforcement action in UK competition law on the basis of "exceptional public interests" – but only if Parliament has, following a debate, approved the public interest consideration to be used. This power to introduce additional public interest considerations has never been used, although the power to do so remains in the statute book.

Sanctions and enforcement

13. The stated intention by the government to apply criminal penalties aggressively is unusual among competition enforcement agencies in Europe. The introduction of criminal penalties implies that the hardest–core cases could lead to jail time. Whether this threat will improve enforcement and deterrence against price–fixing remains to be seen. Criminal sanctions will only apply to conduct after the effective date of the law, that is, 20 June 2003. The Enterprise Act also introduced a non–penal individual sanction. For any breach of the Competition Act prohibitions or Articles 81 and 82 of the EC Treaty, an individual can be disqualified by the court from serving as a company director for up to 15 years. The level of fines against enterprises, several of them in the range of £20 million, is unprecedented in the United Kingdom. Before the 1998 reforms, a finding of infringement would lead only to an order to desist. OFT cases involving large fines have included resale price maintenance of toys and of sports wear bearing team insignias, and pricing and marketing restraints on the distribution of a patented drug. While no substantial fine has been imposed on a purely horizontal price fixing scheme, the OFT contends that resale price fixing, its principal enforcement target so far, also dampens horizontal competition. The threat of large financial penalties is significant enough that the OFT's leniency programme is producing results. So far, investigations prompted by leniency applications have led to three infringement decisions.

14. Recent reforms cautiously supplement public enforcement with private initiatives. The OFT is committed to respond within 91 days to complaints regarding market problems (but not about the conduct of a particular firm) that are submitted by designated consumer organisations. Although the government supports empowering consumers in enforcement, it appears reluctant to give too much rein to private initiative. It is not clear that this caution is warranted. More private action could act as an important complement to the enforcement agencies. The Competition Appeal Tribunal (CAT) can now award damages after an infringement has been established. And, in a small step towards class actions, the CAT can decide representative claims for damages brought by specified bodies on behalf of groups of named individual consumers. Some private suits have also been brought before the ordinary courts, but mostly under EU competition law.

Market studies and investigations

15. Market studies and investigations enable the enforcement agencies to examine problems in markets that are more complex than simply an infringement of competition law and can potentially have a great impact on competitive conditions in a market or the economy. Perspectives and powers of OFT studies differ somewhat from CC inquiries. OFT studies produce analysis and recommendations, and may often challenge policy makers to take action concerning regulations with anti–competitive effects. Although these are only advisory, the government has committed to responding to those recommendations within 90 days and publishing an action plan where appropriate. Because of OFT's consumer enforcement role, an OFT study might examine an issue about information or redress that is not strictly a competition problem. An OFT study may lead to a CC reference when there are competition problems.

16. The CC has more formal powers to gather information, and the CC's investigations into problems in markets can produce tailored remedies. These "market" investigations, which succeed the "monopolies" investigations under the previous legislation, maintain the Commission's historic role of investigating and making recommendations about market situations referred to it by Ministers. Under the previous legislation the Commission recommended what ought to be done if it found that conditions were not consistent with the public interest and it was up to the Minister to decide whether any remedy, such as regulation, was needed. Now, the Commission is concerned only with competition issues and not the public interest in general, unless there is an intervention by Ministers, in which case the CC will report on public interest issues, but its recommendations are not binding. In

addition, it will be able to decide and implement remedies that do not depend on ministerial discretion. The Commission's findings on competition tests and remedies are determinative, although the Secretary of State retains power over remedies for the limited number of cases involving specific "public interest" considerations. The Commission also has powers to make recommendations about remedies that it does not itself have power to implement, usually involving action by government or some other third party, and the government has undertaken to consider and respond to such recommendations within 90 days. The government's response to OFT and CC recommendations will test its tolerance for independent advice and action.

Regulatory policies

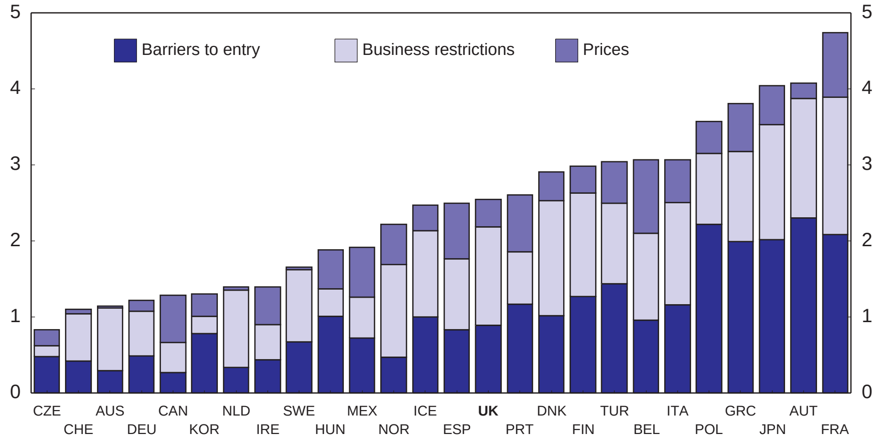
17. While the United Kingdom has one of the least restrictive regulatory environments, this does not mean there is no scope for improvement. This section examines developments and outstanding problems in several service sectors, including inherently competitive service sectors such as retail distribution and the professions and a set of network industries where parts of the industry are inherently non–competitive and require regulatory oversight. In potentially competitive service industries such as retail distribution, the recent tightening of planning restrictions is most likely partially responsible for the continued gap in performance relative to comparable OECD countries. However, in professional services the OFT has recently tackled the anti–competitive effects of regulations by professional bodies and recent reforms should greatly improve performance in the sector. In network industries, the United Kingdom was an early starter in opening up these industries to competition and in implementing many regulatory reforms and best practices that were then followed by other countries (*e.g.* RPIX price regulation). However, it took over a decade for effective competition to emerge in the telecommunications and energy sectors. In spite of the increased competition in these sectors, market power on the part of incumbent firms is still a concern. The effects of recent trends towards consolidation in the electricity sector will merit close scrutiny by the regulator. Reforms in the rail sector have been far from successful. The sector witnessed the failure of the infrastructure company, Railtrack, at the end of 2000 and has now been replaced by a "not-for-dividend" company.

Retail distribution

18. The distribution sector, which includes the wholesale and retail sectors, is subject to a host of regulatory restrictions. Boylaud and Nicoletti (2001) constructed an indicator of the restrictiveness of regulation in retail distribution in 1998. While overall the United Kingdom had one of the least restrictive regulatory environments in 1998, this was not the case in retail distribution, where the indicators show that the United Kingdom was close to the OECD average (**Figure 5**). While shop opening hours have been deregulated,[6] the sector is still characterised by measures restricting market entry arising from planning restrictions. In general, while land use restrictions may be intended to achieve social objectives (*e.g.* preventing urban sprawl) they can have adverse effects by restricting efficient operation and thus lowering productivity and can protect incumbent firms from competition, thus creating or maintaining rents.

Figure 5. Summary indicators of regulation in retail distribution

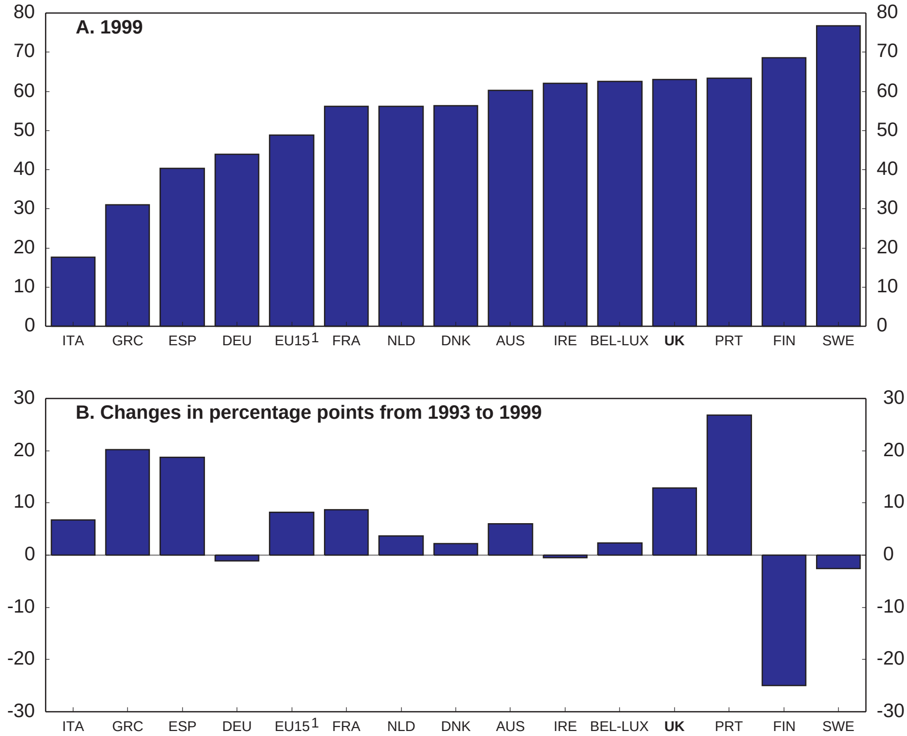
1998[1]



1. The scale of indicators is 0-6 from least to most restrictive.
Source: Boylaud (2000).

19. The retail distribution sector benefits from economies of scale and scope and in many countries, including the United Kingdom, this is manifest in the ongoing process of structural change involving larger retail outlets, consolidation into retail chains and greater concentration and vertical integration. Considerable consolidation has occurred over the last decade and, compared with other OECD countries, the United Kingdom's retail distribution sector is characterised by relatively high concentration. In food retailing, the combined market share of the five largest retailers is 63 per cent, considerably higher than the EU average of around 50 per cent (**Figure 6**).[7] While, productivity growth in the sector compared with other G7 countries has been a relatively good during the past decade, partly reflecting the structural changes that have occurred, it has been half that achieved in the United States (**Table 1**).[8] The sector is also characterised by one of the lowest outlet densities in the EU with an average number of employees per enterprise that is the highest in the EU and more than twice the EU average (**Table 6**). The low outlet density and high number of employees per outlet might be expected to be conducive to high productivity. However, productivity or value added per person employed falls short of the levels in most comparable countries (*e.g.* France and Germany) and is around the EU average.[9] A possible explanation for this is that compared with the United States and other large European countries, the United Kingdom still has a higher proportion of food retailing by smaller stores with a lower level of productivity (MGI, 1998). In addition, even the larger stores are small by international standards.[10]

Figure 6. Five-firm market concentration in food retailing in EU countries



1. Weighted average.

Source: Estimates based on data from Corporate Intelligence on Retailing's European Retail Handbook. Reported in Dobson *et al*. (2001).

Table 6. Key structural features of the retail distribution sector

2000

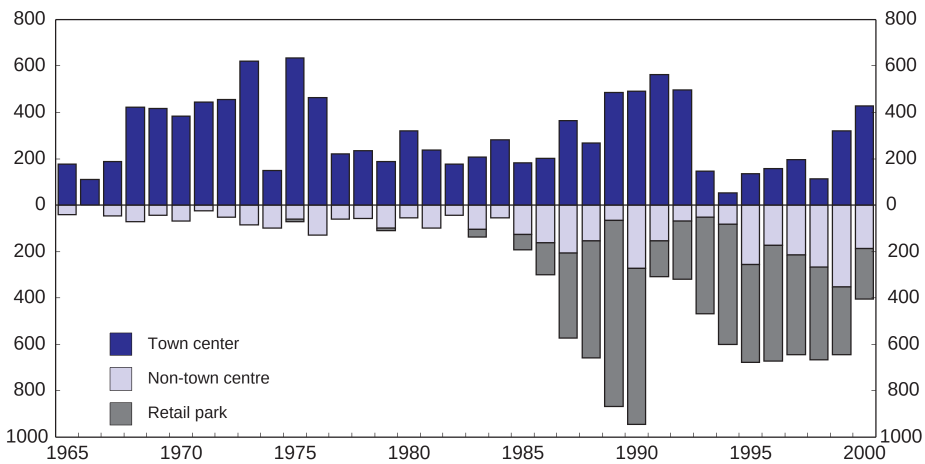
	Outlet density[1]	Employees per enterprise	Value added per employed person[2]	Value added per unit of labour cost[2]
Austria	43	7.7	108	98
Belgium	80	3.5	109	95
Denmark	47	8.1	103	99
Finland	46	5.0	132	110
France	64	4.2	133	104
Germany	35	9.0	113	116
Ireland	36	9.3	95	. .
Italy	130	2.2	81	72
Netherlands	54	8.5	80	117
Portugal	150	2.5	44	81
Spain	133	2.8	73	97
Sweden	65	4.3	130	88
United Kingdom	**36**	**14.2**	**99**	**123**
European Union	71	6.3	100	100
Norway	68	6.0	112	98
Switzerland	56	6.8	201	. .

1. Number of enterprises per 10 000 inhabitants.
2. EU = 100.

Source: Eurostat, New Cronos.

20. In general, the structural changes that have occurred over the past decade have been beneficial for consumers. Larger retail outlets, providing one–stop shop services, offer greater convenience and lower prices arising from improved efficiency and resulting cost savings that are passed on to consumers. Regulatory easing in many countries has reinforced these structural changes, involving the closing down of scale–inefficient outlets and improvements in productivity. Large stores with modern formats are by far the most productive outlets in retailing and over time are likely to displace smaller traditional stores that are less productive. It is often claimed that there is a cost for consumers due to the decline of traditional retailing, offering specialisation or location convenience. In general, the impact of out-of-town developments in the United Kingdom on smaller traditional retailers located in town centres has not materialised (Fernie, 1998; MGI, 1998). Evidence seems to suggest that small shops still survive because consumers are willing to pay a mark–up for their services (Dobson and Waterson, 1999). Yet, there are instances where the impact of out-of-town developments has had a major impact on town centres (*e.g.* the Meadowhall development near Sheffield). In response to these concerns the government significantly tightened planning policy in the mid-1990s in favour of town–centres and against out-of-own "retail parks". The new planning policies have generally been successful in that since the mid-1990s the amount of new retail floor space in town centres has increased, contributing to the regeneration of town centres (**Figure 7**). However, the stricter land use and planning regulations have also made it difficult for large-format operators to develop new sites or expand existing ones.[11] This limits the ability of large operators to compete and to achieve their full productivity potential and new operators are discouraged from entering the market.

Figure 7. New retail floor space in town centres and out of town
New floor-space, gross letable area, thousand square metres, 1965-2000



Source: Experian, Oxford Institute of Retail Management.

21. There are concerns that concentration and consolidation may lead to a lessening of competition. The scope for anti–competitive behaviour however is limited by the threat of entry and by increasingly mobile consumers. However, entry into retailing since the mid-1990s has not been that easy and, even where entry is possible, incumbent firms typically have a strategic advantage due to better location and reputation effects (Dobson and Waterson, 1999). Four out of the five major retailers have invested heavily in building their own retail brands and consumer loyalty through the use of loyalty cards. Own-labels represented almost 40 per cent of the UK grocery market in 1995, which is high compared with other European countries where the share represent anywhere from 7 to 20 per cent of the market (**Table 7**). Concerns have also been expressed about the buying power of retailers in the United Kingdom and its effects on economic welfare.[12]

Table 7. Own-label penetration in European packaged grocery

Percentage of market

	1980	1990	1995
France	7	14	17
West Germany	5	14	20
Italy	5	6	8
Spain	2	6	7
UK	23	31	38

Source: Dobson and Waterson (1999).

22. These developments have had an important economic impact in the distribution sector in the United Kingdom. Dobson *et al.* (1998) find that net margins in food retailing increased from 4 per cent in the early 1980s to 6.5 per cent by the mid-1990s and conclude that the higher margins may reflect the exercise of increased market power, either in squeezing suppliers or in raising prices to consumers. However, another possibility is that the increased margins during this period reflected the efficiency improvements that went hand in hand with the structural changes *i.e.* the development of large retail outlets and increased consolidation. Indeed, since the mid-1990s, and coinciding with the tightening of planning policies that have inhibited the further development of large retail outlets, margins have been falling (**Table 8**). Comparisons with overseas retailers show that UK firms have higher gross margins, possibly reflecting the much higher penetration of own–brand products which carry greater margins for retailers, but that operating margins are similar.[13]

Table 8. Measures of profitability in food retailing[1,2]
Per cent

	1996	1997	1998	1999	2000	1999	
						UK	Overseas
Gross margins	24.7	24.5	24.9	25.1	. .	25.1	22.9
Operating margins	6.1	5.7	5.6	5.6	4.5	5.0	4.7[3]
ROCE[4]	18.5	17.6	17.7	17.0	13.3	15.4	18.5

1. For the UK the measures are a weighted average of five major UK supermarkets (Asda, Morrison, Safeway, Sainsbury and Tesco) and for overseas firms they are a weighted average of Wal-Mart, Safeway Inc., Ahold, Delhaize, Carrefour, Métro and Promodès.
2. International comparisons are restated to reflect differences in depreciation.
3. Figures excluding Metro and Promodès.
4. Return on capital employed.

Source: CC (2000).

23. A number of these issues were addressed in recent OFT and CC inquiries into supermarkets. The CC found that in general the UK market is competitive, and that price differentials between the United Kingdom and the EU could mainly be explained by exchange rates and other factors such as building and land costs. Some of the pricing practices of the major retailers reflected market power, and were found to be against the public interest. However, no remedies were recommended as it was felt that the remedies would require monitoring and a level of intervention that would be disproportionate to the adverse effects they were designed to fix.[14] As regards practices with suppliers, the CC did find that large retailers could dictate trading relations with suppliers which distorted competition in the supplier market and was against the public interest. However, how protection against powerful, opportunistic buyers should be afforded to suppliers remains contentious.[15] The CC recommended that the most effective way to remedy these adverse effects would be through a legally enforceable Code of Practice.[16]

24. The CC inquiry also examined issues concerned with planning and found that both entry into and expansion within one–stop shopping had become more difficult due to the change in planning guidelines in the mid-1990s. The Commission found no reason to suggest changes to the planning regime or the balance of interests with broader social and environmental objectives which the new planning guidelines seek to achieve. The CC noted, however, that the planning system was not designed to safeguard competition and consumer choice in multiple grocery retailing. There are trade-offs between the productivity improvements that come from larger retail outlets and the revitalisation of town centres arising from the new planning guidelines, and these trade-offs may be more difficult in the United Kingdom due to a high population density and overcrowding. Still, the current planning restrictions may be overly biased toward obtaining social objectives. They tend to insulate incumbent firms and limit innovation and competition in retail format strategies to the detriment of productivity improvements and cost savings that could then be passed on to consumers.

Professional services

25. Professional services are usually subject to pervasive regulation, including the exclusive exercise of certain functions, entry and access requirements, recommended or fixed prices, and restrictions on advertising and business structure and nationality or residency requirements. Such intervention is often explained by the need to correct market failures, which are mostly due to information and transactions costs. However, this is not borne out by recent empirical evidence. Restrictions on competitive practices such as price competition and advertising or nationality requirements do not explicitly address the issue of quality, and there is little empirical evidence to suggest that these restrictions improve consumer welfare (Nguyen-Hong, 2000; OFT, 2001a; Paterson, *et al*., 2003). In practice these restrictions have been correlated with higher prices and less innovation, without improving quality and it appears that the principal beneficiary of such restrictions is the profession itself. Nguyen-Hong (2000) examined the effects of regulations on price–cost margins in engineering services and found that regulations led to an increase in prices on the order of 10 to 15 per cent in countries with the most restrictive practices. Paterson *et al.* (2003) found a negative correlation between productivity and the degree of regulation, and no evidence that less restrictive regulation led to a lower quality of services. The authors also found that countries with a high degree of regulation tend to have relatively higher turnover from fees, indicating higher mark-ups.[17] These results support the view that restrictive regulatory frameworks and self–regulation by professional bodies, rather than supporting the needs and interests of consumers, are often used by the professions to obtain economic rents.

26. In comparison with other EU countries the United Kingdom has a low or moderate degree of regulation in the accountancy, legal, architectural, engineering and pharmaceutical professions. The only other countries with such a profile are Ireland and the Netherlands (**Table 9**).[18] In spite of such a low regulatory index, a moderate level of restrictions still exists in the legal and pharmaceutical sectors. In addition, competition in the professional services sector in the United Kingdom remains rather weak due to self–regulation by professional bodies. In light of these competition concerns the OFT recently conducted an investigation of the professional services sector in England and Wales (OFT, 2001a). The aim of the review, which focused on law, accountancy and architecture, was to identify restrictions which had the effect of preventing, restricting or distorting competition in the professions. The report recommended that:

- Restrictions on price competition by fee guidance and, in particular, recommended fee scales published by the Royal Institute of British Architects and by the Law Society should be abolished.
- Restrictions on advertising, particularly comparative fee advertising and direct marketing to potential clients by telephone (cold calling) should be eased or removed. For example, barristers and accountants are prohibited from making direct fee comparison with other members of their profession and barristers are prohibited from referring to their success rate.
- Indirect restrictions on entry including restricted consumer access (*e.g.* most clients cannot see a barrister without a solicitor) and restrictions on permitted business structures where professional rules and government regulation prevent multi–disciplinary partnerships (*e.g.* solicitors and barristers are prevented from practicing in partnership with one another and with other professionals such as accountants and financial advisers) should be lifted.
- The entitlement to request that professional rules be excluded from the Competition Act prohibitions on anti–competitive agreements should be removed.
- That the distinction between Queen's Counsel (QC) and junior barristers be reviewed by the government as there are questions as regards the operation of the system as a mark of quality and its value to consumers.

Table 9. Regulation indices for professional services[1]

	Accountants	Legal	Architects	Engineers	Pharmacists
Austria	6.2	7.3	5.1	5.0	7.3
Belgium	6.3	4.6	3.9	1.2	5.4
Denmark	2.8	3.0	0.0	0.0	5.9
Finland	3.5	0.3	1.4	1.3	7.0
France	5.8	6.6	3.1	0.0	7.3
Germany	6.1	6.5	4.5	7.4	5.7
Greece	5.1	9.5	n.a.	n.a.	8.9
Ireland	3.0	4.5	0.0	0.0	2.7
Italy	5.1	6.4	6.2	6.4	8.4
Luxembourg	5.0	6.6	5.3	5.3	7.9
Netherlands	4.5	3.9	0.0	1.5	3.0
Portugal	n.a.	5.7	2.8	n.a.	8.0
Spain	3.4	6.5	4.0	3.2	7.5
Sweden	3.3	2.4	0.0	0.0	12.0
United Kingdom	**3.0**	**4.0**[2]	**0.0**	**0.0**	**4.1**

1. The higher the degree of regulation (intensity), the higher the respective figure (within a range from 0 to 12). All the regulation indices with a value of 5 or higher are shown in dark grey boxes, indices between 2.5 and 4.9 are in light grey boxes, and, those below 2.5 have a white background.
2. This figure only measures England and Wales.

Source: Paterson *et al.* (2003).

27. Some of these recommendations have been implemented (OFT, 2002). The entitlement to request exclusion form the Competition Act has been removed and professional bodies have undertaken a number of actions towards removing unjustified restrictions, or, in some cases, have justified the existing restrictions.[19] In particular, within both the legal and the accounting profession, the restrictions on comparative advertising of fees have been removed and there has been substantial easing of restrictions on direct marketing to potential clients by telephone.[20] While much progress has been made, areas where serious restrictions to competition remain in place include continued restrictions on multi–disciplinary practises, especially in the legal profession. Legislation should permit a wide range of organisational solutions and ease the rigid rules on the incompatibility between professions. The government has launched a regulatory review of legal services which is expected to be completed by end 2004.[21]

28. The OFT also recently concluded an investigation into entry control regulation in retail pharmacy services (OFT, 2003). The OFT found that entry control regulations were unduly impeding the way that the market works and concluded that these regulations should be lifted. The OFT's analysis concentrated on the effects on competition, the costs of administration, and the potential benefits of freedom of entry in terms of better service and lower prices. The report found that entry restrictions inhibited price competition, stifled efficiency improvement and innovation, and limited the availability of pharmacy services. In particular:

- Since entry regulation was introduced in 1987, there has been very little entry into the sector. The regulations have acted to impede entry and expansion by pharmacies that offer lower prices or more convenient opening hours.[22]

- While the structure of the market has changed somewhat since 1987 (*e.g.* existing national chains and supermarkets have increased their market share), the effect of entry regulations has been to constrain such change and has impeded efficiency improvements.

- The OFT estimated that deregulation could lead to substantial administrative cost savings on the order of £26 million and to annual customer savings on the order of £25-30 million.[23]

- Over the long term, improvements in efficiency could also be expected to reduce the overall cost of National Health Service (NHS) prescription drugs to the taxpayer.

29. In responding to the OFT report the government raised concerns over rural and poorer areas and the current shortage of pharmacists. Although agreeing with the goals of lower prices, better service, and wider access, the government's initial statement stressed the importance of a "balanced" package. However, the OFT considered that a shortage of pharmacists need not constrain entry over the longer term as new people enter the profession. Its report found that, by international comparisons, the United Kingdom has a slightly above average number of pharmacies per person and that consumers are currently well served geographically.[24] The situation was complicated further by the fact that the OFT report appeared when the terms of the NHS contract were under review and that much of the power in this area has been devolved. Thus, the formal response, delivered as promised within 90 days, preserves most of the status quo. The local bodies that control entry will be able to consider consumer choice and the benefits of increased competition in deciding whether a new or relocated pharmacy is necessary. Pharmacies in large shopping areas, at primary care centres, or opening much longer hours would be favoured.[25] But the structure of entry control, based more on controlling competition than promoting it, remains in place.

Network industries

30. Network sectors in the United Kingdom (*i.e.* electricity, gas, water, transport and communications) account for about 12 per cent of value-added and 6.5 per cent of employment, and for a large share of intermediate inputs. Performance in these sectors is therefore important and can impact overall economic performance. There is now a solid body of cross–country evidence that liberalisation policies in network industries have led to higher productivity, better quality and, often, lower prices.[26] However, capturing these benefits is not straightforward and close attention needs to be paid to the design of reforms (Gonenc *et al.*, 2001). The United Kingdom has been at the forefront of many of these reforms, an example of which is RPIX price regulation which is now being applied by most OECD countries. A report by the National Audit Office (NAO) found that the way the regulators had applied the RPIX price controls in the United Kingdom had brought considerable benefits to both consumers and companies. Companies had become more efficient, and these efficiencies had not come at the expense of any reduction in quality of service (NAO, 2002).

31. The sectoral regulators all share an essential remit to protect consumers against potential abuses of monopoly power, to promote or facilitate competition and to regulate prices where necessary. Competition legislation as regards anti–competitive agreements or abuses of a dominant position is typically enforced by the sectoral regulator whereas the OFT exercises competition powers with respect to mergers or market investigation. There are coordination agreements between the OFT and the sector-specific regulators with concurrent competition powers (OFT, 2001b). A Concurrency Working Party, chaired by the OFT with members from the sectoral regulators, meets on a regular basis and before the formal powers under the Competition Act are used, the OFT and the regulator agree which one of them will use the powers.[27] The regulators have the power to impose financial penalties but must take account of the statutory guidance on penalties issued by the OFT. Funding of the regulators generally comes from a mixture of fees and charges levied on the industries they regulate.

Telecommunications

32. In the telecommunications sector, an independent regulator (Ofcom) is charged with promoting competition and the interests of consumers and with regulating the sector, including interconnection, price regulation and universal service. Ofcom was created by the Communications Act 2003 bringing together the former telecoms regulator, Oftel, with four other regulators for the broadcasting industry. Regulation is primarily effected through the General Conditions of Entitlement under which all operators provide service. These replace the former licensing–based framework. The new regulator reflects issues of convergence between broadcasting and telecommunications, and is the UK's means of implementing the provisions of a raft of new EU Directives modernising the regulatory framework for electronic communications which needed to be implemented by 25 July 2003.

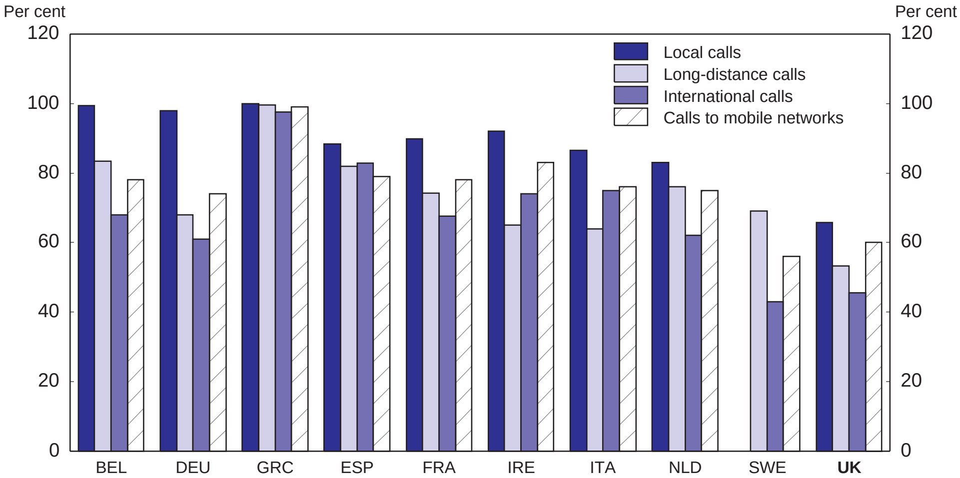
33. The regulatory regime in the United Kingdom has been characterised by structural measures that aim at improving competitive conditions. These include the use of long–run incremental costs (LRIC) and RPIX for determining regulated charges; carrier pre–selection (which has been available to British Telecom (BT) customers since 1986); number portability for both fixed and mobile numbers (implemented in the United Kingdom in advance of EU legislation); and recently, local loop unbundling (OECD, 2002b). While the United Kingdom's regulatory regime in telecommunications is one of the most pro-competitive in OECD countries, competition has been slow to take off. In part this may be due to the fact that BT was privatised as a vertically integrated monopolist and that until the early 1990s the industry operated under a duopoly policy, with Mercury Communications being the only firm to compete with BT in the fixed network. It wasn't until the early 1990s that competition began to take off with the opening up of the market. In 2001, new entrants in the United Kingdom had the highest share of access lines among OECD countries and among the highest market shares in

national long-distance and international markets (OECD, 2003b). The market is very dynamic and labour productivity growth over the 1990s has been one of the highest amongst the G7 countries.

34. Although the United Kingdom now has one of the most competitive telecoms markets in the OECD with new entrants having a higher share of the market relative to entrants in other countries, BT has still managed to maintain a dominant position in almost all markets (**Figure 8**). While the pro-competitive regulatory framework has resulted in important benefits for consumers in some areas (*e.g.* residential telephone and internet access charges are amongst the lowest in the EU), prices to business consumers are the highest in the EU and mobile telephony prices remain comparatively high (**Figures 9 and 10**). The relatively high mobile telephony prices reflect the fact that interconnection charges for call termination from fixed to mobile are amongst the highest in the European Union (EC, 2002b). A recent Competition Commission enquiry found that the mobile network operators (MNOs) have a monopoly on call termination on their own networks; that competitive pressures at the retail level did not constrain termination charges; and that charges were 30 to 40 per cent in excess of a "fair" charge (CC, 2002).[28] Oftel has also taken significant action to ensure competitive access to BT's local loop via local loop unbundling (LLU).[29] However, progress in rolling out LLU in the United Kingdom has been comparatively slow. In large part this may be due to the fact that the United Kingdom has some of the highest prices in the EU for both full unbundling and shared access (**Table 10**). Based on the disappointing results with regard to unbundling, Oftel will need to remain vigilant and ensure that tariffs are transparent and cost–oriented and that access is non-discriminatory.

Figure 8. Estimates of incumbent operators' market share

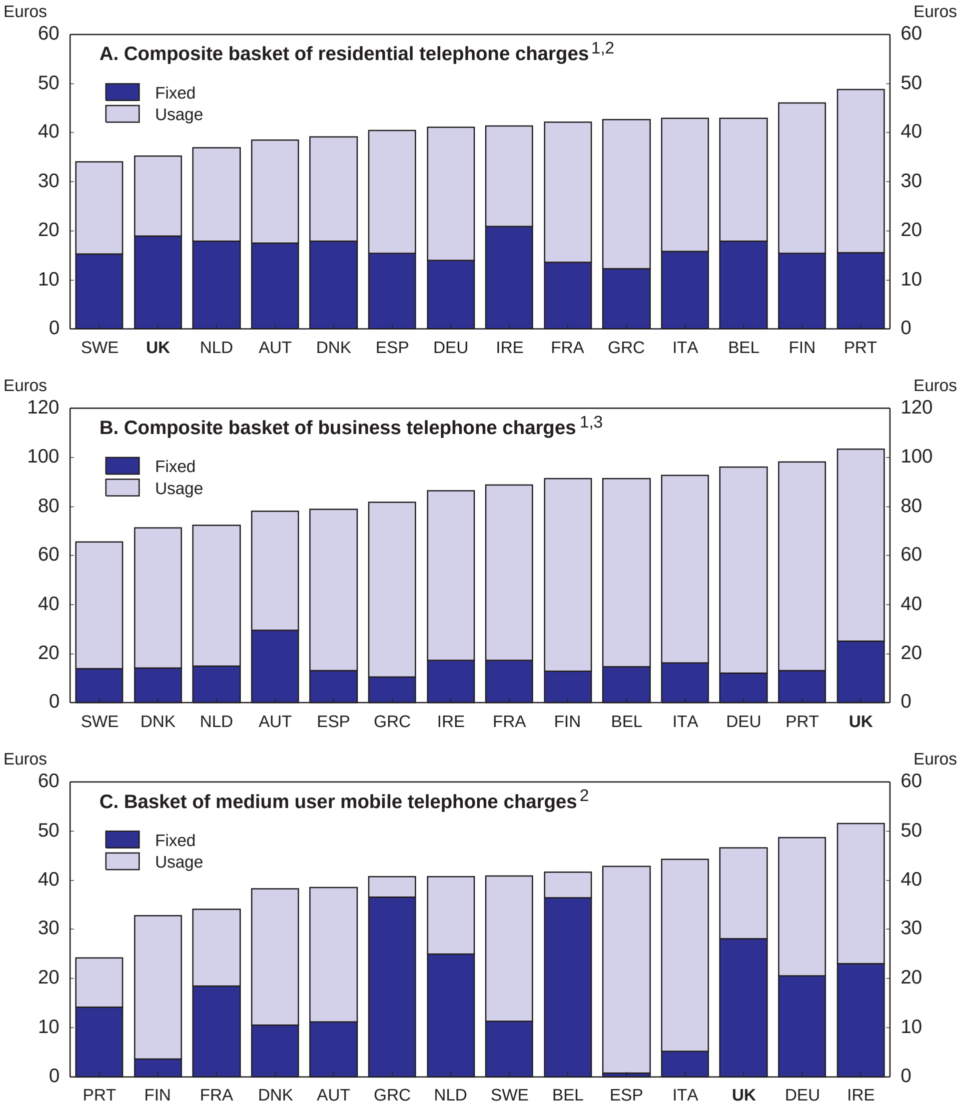
Retail revenue, 2001



Source: EC (2002b), Eighth Report on the Implementation of the Telecommunications Regulatory Package.

Figure 9. Average monthly telephone charges

August 2002

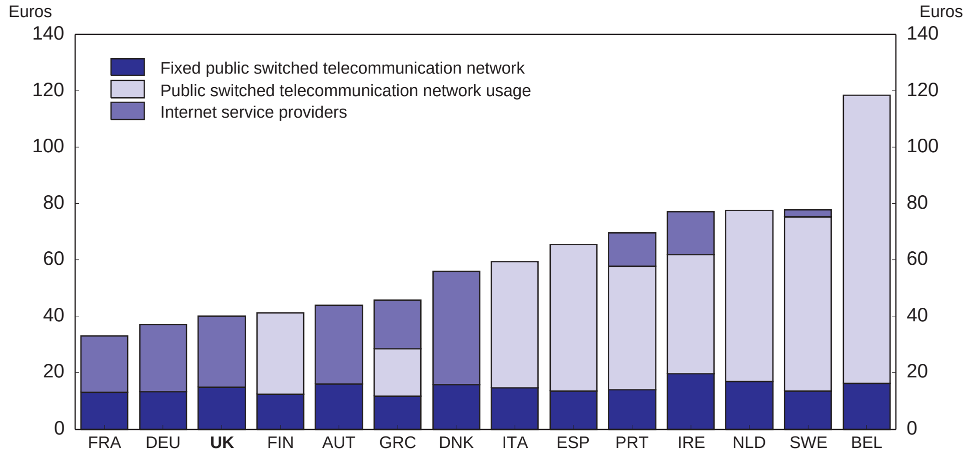


1. Composite basket includes international calls and calls to mobile networks.
2. Including tax.
3. Excluding VAT.

Source: OECD, Communications Outlook 2003.

Figure 10. Costs of internet access[1]

September 2002



1. For 40 hours at day-time discounted Public switched telecommunication network rates, including VAT.

Source: OECD (2003b), Communications Outlook, Paris.

Table 10. Prices for unbundled local loop

EUR, 2002

	Full unbundling		Shared access	
	Monthly rental	Connection	Monthly rental	Connection
Belgium	13.3	79.9	3.2	86.5
Denmark	8.3	45.4	4.1	178.4
Germany	12.5	70.6	4.8	74.9
Greece	11.5	123.4	6.9	141.9
Spain	12.6	20.0	4.8	27.0
France	10.5	78.7	2.9	78.7
Ireland	16.8	121.5	9.0	123.4
Italy	11.1	91.4	2.8	81.0
Luxembourg	15.8	185.6	7.5	196.2
Netherlands	13.5	79.0	5.6	89.2
Austria	10.9	54.5	5.5	109.0
Portugal	13.8	82.9	7.9	173.8
Finland	14.7	216.0	7.0	160.0
Sweden	11.3	165.2	5.4	118.0
United Kingdom	**16.2**	**140.3**	**7.0**	**186.5**
EU average	12.8	103.6	5.6	121.6

Source: EC (2002b), Eighth Report on the Implementation of the Telecommunication Regulatory Package, Annex 5.A1.

Energy sector

35. Reforms in the electricity and gas sectors in the United Kingdom started earlier than in most countries (over a decade ago) and have gone further in introducing competition and structural separation and winding back price regulation. Achieving vertical separation has been crucial in facilitating the establishment of competition in these sectors (EC, 2002c). The potentially competitive segments of the industry contain a large number of private sector operators while the non–competitive network component is privately held and regulated by an independent sector regulator, the Office of Gas and Electricity Markets, Ofgem. Reforms in this sector have contributed to the extremely rapid labour productivity growth rates over the 1990s (**Table 1**). Ofgem's regulatory powers include the setting of network access tariffs, service quality standards and conditions governing access and interconnections to the network. It is funded through annual contributions paid by the service providers and has the highest staff levels and budget compared with other energy regulators in EU countries, raising the question as to why it takes such a large staff to regulate the market (**Table 11**).

Table 11. Competencies and resources of energy sector regulators

	Network access conditions	Dispute settlement	Staff number	Annual budget 2002 EUR million
Austria	R(elec)/R (gas)	R/R	45	9
Belgium	R/R	R/R	68	15
Denmark	R/R	R/R	30	3
Finland	R/R	R/R	15	1
France	R/R	R/n.a.	80	9
Germany	N/N	C/C	n.a.	n.a.
Greece	M/n.a.	R/n.a.	43	4
Ireland	R/R	R/R	31	6
Italy	R/R	R/R	86	18
Luxembourg	M and R	R/R	2	n.a.
Netherlands	R/H	C/C	55	6
Portugal	R/n.a.	R/n.a.	52	7
Spain	M/M	R/R	153	19
Sweden	R/R	R/R	33	3
United Kingdom	**R/R**	**R/R**	**330**	**58**

Notes: R - regulator responsible, M - ministry responsible, C - competition authority, N - not regulated, H - hybrid, n.a. - no regulator.
Source: EC (2002c).

36. Electricity generation, transmission and distribution were split into vertically separate privatised companies in 1990, and gas transmission and distribution are also vertically separated. As a result of these early reforms, concentration in electricity generation and concentration in gas are the lowest in the European Union (**Table 12 and Table 13**). Competitive markets now exist in both gas and electricity wholesale market. The benefits from increased efficiency have been shared amongst consumers in terms of lower prices and improved and more innovative services. Energy prices, for both electricity and gas, are below the EU average with the exception of electricity for household consumers, where prices are slightly above the EU average (**Table 14**). The introduction of competition in both electricity and gas markets has led to a large number of consumers switching suppliers in order to capture the benefits associated with competition.[30] As a result of increased retail competition, price controls in retail markets in gas and electricity were lifted in April 2002.

Table 12. Electricity market indicators and implementation of the EU Electricity Directive

2002[1]

	Date of full opening of demand	Unbundling		Large users switching suppliers	Concentration (CR3)		Concentration	Potential competition from imports[4]	Network access charge[5]	
		Transmission[2]	Distribution[2]	Per cent	Generation	Retail sales	HHI[3]		Medium voltage	Low voltage
Austria	2001	L	A	20-30	45	67	2 028	21	20	65
Belgium	2003	L	L	2-5	96	53	6 118	25	15	n.a.
Denmark	2003	L	L	n.a.	78	38	4 018	39	15	25
Finland	1997	O	M	n.a.	45	33	2 472	22	15	35
France	-	M	A	10-20	92	90	9 606	12	15	50
Germany	1999	L	A	20-30	64	50	1 756	11	25	55
Greece	-	L	A	0	97	100	10 000	12	15	n.a.
Ireland	2005	L	M	10-20	97	90	9 418	7	10	40
Italy[6]	2004	L	L	>50	69	72	5 560	14	10	n.a.
Luxembourg	-	M	A	10-20	n.a.	100	8 158	100	20	n.a.
Netherlands	2003	O	M	20-30	59	48	1 814	19	10	35
Portugal	2003	L	A	5-10	82	99	4 008	30	15	n.a.
Spain	2003	O	L	10-20	83	94	2 466	4	15	45
Sweden	1998	O	L	n.a.	90	47	2 538	29	10	40
United Kingdom	**1998**	**O**	**L**	**>50**	**36**	**42**	**1 044**	**3**	**n.a.**	**40**

1. Information for 2002, except for concentration measures which are for 2000.
2. Unbundling concerning operators. A = Accounting, L = Legal, M = Management and O = Ownership.
3. Hirshman-Herfindahl Index (HHI) in electricity generation. A market is generally considered competitive with a HHI<1000; moderately concentrated with 1000 < HHI <1800; and highly concentrated with a HHI > 1800.
4. Per cent of domestic generating capacity.
5. Estimated average charge, EUR/MWh.
6. The market opening in 2004 concerns non-household customers only.

Source: EC (2002c), AEEG (2002).

Table 13. Gas market indicators and implementation of the EU Gas Directive

2002[1]

	Date of full opening of demand	Unbundling		Large users switching suppliers	Concentration of available gas	HHI[3]	Gas release programme	Network access charges
		Transmission[2]	Distribution[2]	Per cent	Per cent			Large users (EUR/MWh)[4]
Austria	2002	L	L	<2	80	7 598	No	n.a.
Belgium	2003	L	L	n.a	n.a.	10 000	No	1.0 - 2.0
Denmark	2004	L	L	2-5	90	2 841	No	2.5
France	-	A	A	20-30	90	5 932	No	2.0 - 5.0
Germany	2000	A	A	<2	54	2 405	Planned	2.0 - 7.5
Ireland	2005	M	M	20-30	n.a.	5 883	No	1.5 - 2.5
Italy	2003	L	L	10-20	75	4 916	Yes	2.0 - 4.0
Luxembourg	-	A	A	5-10	100	10 000	No	1.0 - 1.0
Netherlands	2003	M	A	30-50	80	2 634	No	0.5 - 1.0
Spain	2003	O	L	20-30	57	9 761	Yes	2.0 - 2.5
Sweden	2006	A	A	<2	100	10 000	No	3.5
United Kingdom	**1998**	**O**	**O**	**>50**	**50**	**894**	**Yes**	**1.5 -3.0**

1. Information for 2002, except for the concentration measures (2000).
2. Unbundling concerning operators. A = Accounting, L = Legal, M = Management and O = Ownership.
3. A market is generally considered competitive with a HHI<1000; moderately concentrated with 1000 < HHI <1800; and highly concentrated with a HHI > 1800.
4. Estimated range, rounded to the nearest EUR 0.5/MWh.
Source: EC (2002c), AEEG (2002).

Table 14. Electricity and gas retail prices

Second half of 2002

	Electricity (euros/MWh)			Gas (euros/GJ)		
	Households	Industry		Households	Industry	
		Large industrial users[1]	Small commercial enterprises[2]		Large industrial users[3]	Small commercial enterprises[4]
Austria	93.1	59.8[5]	96.5	11.6	4.8	8.1
Belgium	111.1	58.1	129.9	13.8	4.3	7.4
Denmark	84.4	43.3	66.6	8.1	4.3	8.1
Finland	70.2	36.5	56.6	. .	4.4	. .
France	92.3	48.7	86.1	13.5	3.7	7.5
Germany	124.9	51.7	128.6	13.6	5.1	7.5
Greece	58.0	50.0	87.0	. .	. .	. .
Ireland	88.3	64.8	127.4	14.4	4.6	7.1
Italy	141.8	73.5	100.6	10.6	4.6	9.3
Luxembourg	115.1	38.3	121.7	11.6	5.4	6.5
Netherlands	98.2	48.5[6]	106.4[7]	9.9	2.8[8]	6.1[7]
Portugal	122.3	55.6	99.9	15.0	4.4	9.6
Spain	85.9	46.6	98.6	12.8	4.0	7.8
Sweden	68.8	25.8	35.7	11.6	3.5	7.1
United Kingdom	**97.4**	**47.0**	**86.1**	**9.6**	**4.1**	**6.0**
European Union[9]	96.8	49.9	95.2	12.0	4.3	7.5

1. Eurostat category Ig (Annual consumption: 24000 MWh).
2. Eurostat category Ib (Annual consumption: 50 MWh).
3. Eurostat category I4-1 (Annual consumption: 418600 GJ).
4. Eurostat category I1 (Annual consumption: 418.6 GJ).
5. First half of 1999.
6. Second half of 1999.
7. Second half of 2001.
8. First half of 2000.
9. Unweighted average.
Source: Eurostat.

37. However, benefits to consumers did not flow quickly as inadequate levels of competition in electricity in the early years allowed the generating companies in particular to retain most of the efficiency savings that they made. The industry was privatised with two dominant generators and their market power allowed them to raise prices well above marginal costs. Market structure, market rules, and regulatory oversight shape the performance of the industry. While pro–active regulation may offset the impact of an uncompetitive market structure or poorly–designed rules, regulatory intervention is almost always a second best to a competitive market structure and well–designed rules. It took a decade of regulatory pressure to achieve an adequately competitive market structure in generation and the governance of the wholesale market was such that the regulator and the government established a new set of rules in 2001 (Green, 2003a).

38. A feature of the privatised electricity sector in England and Wales was the establishment of an electricity exchange market through which the vast majority of electricity was bought and sold. The Pool provided a mechanism for setting a single wholesale price and for centrally despatching generation to meet demand. A capacity payment, intended to reward capacity availability in the short–term and to provide longer–term investment signals, was then calculated and added to the price. However, there were many problems with the Pool. Price setting was complex; capacity payments were not working as intended as they did not respond to short–term changes in capacity margin and provided poor signals and long–term incentives. Bids and Pool prices were not a good signal of marginal costs and had not reflected falling input costs and increasing diversification of plant ownership. The arrangements for price setting in the Pool had also facilitated the exercise of market power.[31]

39. Because of long–running concerns about the potential for market manipulation, new electricity trading arrangements (NETA) were developed by the government and the regulator over a period of around three years and implemented in March 2001. NETA has replaced the Pool's centralised market with as much freedom as possible. There is no centralised wholesale market until shortly before real time, and most electricity is being traded via bilateral contracts. The grid company (NGC) also runs a balancing mechanism, keeping the system stable by accepting bids and offers to raise or reduce generation and consumption (Green, 2003b).[32] Wholesale prices did fall by up to 40 per cent since 1998 when the NETA reforms were first proposed. It is not clear whether these price reductions were due to increasing competition in generation over this period or to NETA (Bower, 2002; Evans and Green, 2003). However, wholesale prices have recovered to some extent and, at the time of writing, the market is showing signs of responding, for example, by companies de–mothballing plant and recent acquisitions and investments in power stations. The UK Parliament is currently considering legislation to bring in the British Electricity Trading and Transmission Arrangements (BETTA), which will create a GB–wide wholesale electricity market and a GB System Operator, independent of generation and supply interests. BETTA should bring the benefits of greater competition in the electricity market to Scotland and is expected to start in April 2005.

40. An outstanding problem in the industry is that of consolidation, including horizontal consolidation at the retail level and vertical integration between generation and retailing. At the time of privatisation, three large firms dominated generation, while retailing was rather fragmented with each of the twelve regional markets being dominated by the local regional electricity company (RECs). Given the limited extent of competition, the government imposed a number of measures to limit vertical integration. As competition has grown, both within retailing and generation, the barriers to vertical integration have gradually been lowered and have now effectively been abandoned. In generation, there is now a fairly competitive market structure with ten large firms plus a fringe of smaller companies. Retailing has witnessed considerable consolidation with the number of major retailers having fallen to six. All the major retailers also own generation, but almost all of them are net buyers in the wholesale market with incentives to keep prices down (Green, 2003a). Overall, the industry has performed reasonably well since restructuring, reducing costs and (eventually) passing on most of the gain to consumers in terms of lower

prices. One key question, however, is whether consumers will gain from any future cost reductions, given the current trend toward vertical integration in the industry. While extensive vertical integration into generation protects incumbents from price risk it also makes markets less liquid and creates additional barriers to entry (Newbery, 2002).

Rail sector

41. There is a clear legacy of railway infrastructure under–investment in Britain. In comparison with other European countries, the United Kingdom's spending on railway infrastructure is relatively low. Over the 1987-95 period, average railway infrastructure spending as a percentage of GDP was just below 0.3 per cent and well below investment spending found in Austria, France, Germany and Sweden. And in terms of per capita infrastructure investment, only Denmark, Italy, Ireland, Portugal and Greece spent less than the United Kingdom (**Table 15**). One of the aims of rail privatisation was to attract private capital to fund investment that previously was not forthcoming from public sources.

Table 15. Rail infrastructure investment in EU countries

	Average 1987-95 Percentage of GDP	Average 1990-95 Euro per capita[1]
Austria	0.505	1 118
France	0.397	1 423
Germany	0.381	1 631
Sweden	0.378	1 253
Portugal	0.332	494
Luxembourg	0.329	2 492
Spain	0.319	1 050
Denmark	0.309	916
United Kingdom	**0.298**	**966**
Belgium	0.297	1 176
Italy	0.266	879
Greece	0.236	341
Finland	0.204	1 400
Netherlands	0.197	1 026
Ireland	0.060	656

1. In 1995 prices.
Source: Rail Passenger Council (2002).

42. The 1993 Railways Act separated the ownership and operation of the infrastructure (track, stations, signalling) from the operation of train services. The ownership and operation of passenger rolling-stock was also separated. The structure which resulted is unique for a rail system anywhere in the world (Nash, 2002). The vertically integrated state–owned monopoly was privatised and separated into around a hundred different companies including a monopoly track company, Railtrack, three monopolistic owners of rolling-stock, 25 passenger-operating companies, a freight operating company, and a large number of suppliers of services. This structure reflected the view that the track is a natural monopoly while the operation of train services and maintenance are potentially competitive activities.

43. The privatised regulated structure was complex. The 1993 Act created an independent regulator, the Office of the Rail Regulator (ORR), responsible for setting track access charges and regulating Railtrack, and a franchising authority accountable to ministers, the Office of the Passenger Rail Franchising (OPRAF), responsible for franchising out the operation of the passenger network. Unlike other regulated utilities, railways could not be expected to become self–financing. The OPRAF therefore administered the public subsidy, specifying the minimum level of service required of the train operating companies (TOCs) and channelled payments between the Treasury and Railtrack via the TOCs (Glaister, 2002).[33] The OPRAF also regulated passenger fares. Safety regulation was separate from the ORR and OPRAF with overall responsibility in the hands of the Railways Inspectorate of the Health and Safety Executive.

44. Some of the problems with this structure included its complexity and the incentives (or lack of) for investment and maintenance. The Office of the Rail Regulator has spent enormous effort in creating a rule–based system to govern the relations between the infrastructure owner, Railtrack, and the train service providers. In addition, since virtually all available rolling–stock was allocated to the rolling stock companies (ROSCOs), who then leased rolling stock to the franchise companies on long-term contracts, the ROSCOs were in a dominant position, with the potential for abuse. Competition in supply was restricted by the availability of rolling–stock, and it was not in the interests of the owners to invest in new rolling stock and thus undermine their own dominant position. Since the franchises did not own the rolling-stock, there was also little incentive for them to make investments in rolling-stock, especially since initially franchises were for relatively short periods. Short franchises make it difficult for the train operators to fund provisions for new rolling-stock not specified in the franchise and long-term efficiency investments. While track, signalling and other infrastructure facilities were owned by Railtrack, the associated maintenance, renewal and design work was undertaken by suppliers under contract with Railtrack. It was hoped that competition in the supply of services, many of which are fairly labour intensive, would lead to significant reductions in costs. However, Bradshaw (1997) pointed out that this was unlikely as far as work on the track was concerned.

45. Further changes were made to the regulatory regime with the Transport Act 2000 which led to the formation of the Strategic Rail Authority (SRA) at the beginning of 2001, replacing the OPRAF and the remnants of the British Railways Board. Like its predecessor, the SRA is not an independent regulator but a government body. Responsibility for consumer protection matters has been moved from the ORR to the SRA, removing an overlap in responsibilities and allowing the ORR to concentrate on economic regulation.[34] The ORR continues to regulate track access charges and the terms of access and the SRA regulates everything else including investment and the letting out of franchises. One of the weaknesses of the Railways Act 1993 was the lack of an effective body to take the lead in developing schemes to increase capacity and to improve the poor state of British rail infrastructure (Glaister, 2002). The creation of the SRA should correct this weakness if it provides the needed guidance. Railtrack went bankrupt at the end of 2000 and has been replaced by Network Rail.[35] This is a not for dividend company with a board representing the industry, the public, and the SRA.[36] The income of Network Rail comes from track access charges set by the ORR and grants for infrastructure from the SRA (**Box 2**).

Box 2. The rail industry – key players and relationships

Department for Transport – Sets overall railway policy within the context of the wider transport agenda.

Strategic Rail Authority (SRA) – Operates under the directions and guidance of the Secretary of State for transport and is responsible for strategic specification of rail services; planning and overseeing the rail system; promoting passenger and freight transport; and awarding passenger franchises.

Health and Safety Executive – Regulates and enforces health and safety on the railways.

Rail Regulator – Responsible for the independent economic regulation of the rail industry. Determines the charges levied by the infrastructure operator (Network Rail) and regulates its stewardship of the national rail network.

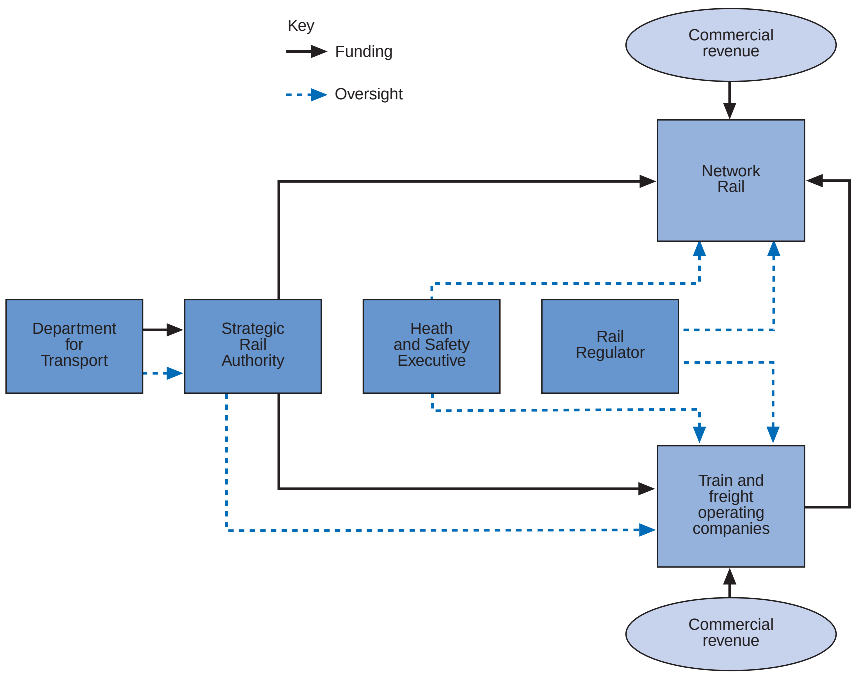
Network Rail – The private, not-for-dividend Network Operator responsible for operating, maintaining and renewing the national rail network comprising the track, signalling, bridges, tunnels, stations and depots.

Train Operating Companies – Private sector providers of franchised passenger services.

Freight Operating Companies – Private sector providers of freight services.

Rolling Stock Operating Companies – Private sector providers of rolling stock to the train and freight operating companies.

Figure 11. Funding and oversight of the rail industry



46. Competitive pressure from alternative modes of transport (*e.g.* road and air transport) is intense and as a consequence rail traffic has been in almost continual decline for over 50 years. However, since its reorganisation and subsequent transfer to the private sector, the rail industry's outputs have grown rapidly (**Table 16**). Between 1992-93 and 2000-01, passenger miles and freight tonne–miles grew by 22 per cent and 17 per cent respectively, reversing decades of decline. The increase in passenger traffic in the United Kingdom over the 1990s however is in line with developments elsewhere.[37] Pollitt and Smith (2002) show that post–privatisation, but prior to the Hatfield accident, major efficiencies had been achieved and consumers benefited through lower prices, whilst the increased government subsidy had been largely recouped through privatisation proceeds. They find that a privatised structure, where shareholders demand a return on their investment, led to significant improvements in operating efficiency.

Table 16. Rail traffic on the British national rail network
1992-93 to 2000-01

	Total passenger kilometres	Total freight tonne kilometres
1992-93	31.7	15.5
1993-94	30.4	13.8
1994-95	28.7	13.0
1995-96	30.0	13.3
1996-97	32.1	15.1
1997-98	34.7	16.9
1998-99	36.3	17.3
1999-00	38.5	18.2
2000-01	38.7	18.1

Source: SRA (2001).

47. While the privatised railway achieved expanding traffic and increases in efficiency, at the same time it faced a number of problems relating to service quality, investment, profitability and safety. A deterioration of services and major safety problems have been blamed on the fragmentation of the system, coupled with prolonged periods of under–investment (Productivity Commission, 2000). Problems essentially are:

- Quality of service is a cause of concern as punctuality and reliability have declined (**Table 17**) and there were problems in achieving well–integrated timetables and fares in a system with many different train operators.[38] Overcrowding, another major problem, is the manifestation of many underlying problems: lack of track capacity, a flawed franchising structure, a substandard and unreliable network, a lack of vehicles or the choice of inappropriate train formations (House of Commons, 2003). Complaints, reflecting poor service quality, particularly since the Hatfield accident, have also increased (SRA, 2003).

- The level of investment, particularly in infrastructure, has remained inadequate and has not provided sufficient capacity for a growing industry.[39] In addition, major new investment plans had to be negotiated between all the parties involved which led to serious delays.[40] Investment is rolling stock is also inadequate and much of the stock in Britain is unsuitable and old (**Box 3**), although the average age of the stock has dropped by about 3 per cent per year since 2001.

- Some of the TOCs also experienced financial difficulties, particularly those which had built their franchise bids in the hope of realising large reductions in operating costs. In response, the SRA moved a number of regional franchises to annually renegotiated "cost–plus" type contracts.

- Safety is a concern. Cracking in rails was found all over the system following the Hatfield rail accident in 2000. In response, Railtrack imposed severe speed restrictions, which greatly increased journey times and led to reduced frequencies and poor reliability. The lack of an adequate asset register led Railtrack to close down large parts of the network.

Table 17. Percentage of trains arriving on time
1997-98 to 2002-03

	Long distance operators	London and SE operators	Regional operators	All operators	London & SE peak services
1997-98	81.7	89.6	90.6	89.7	86.9
1998-99	80.6	87.9	88.6	87.9	85.3
1999-00	83.8	87.1	89.1	87.8	85.1
2000-01	69.1	77.6	81.7	79.1	73.7
2001-02	70.2	77.8	79.1	78.0	73.6
2002-03	70.6	79.0	80.5	79.2	75.7

Source: SRA (2003), National Rail Trends.

Box 3. Rolling stock

A House of Commons inquiry into Railways in the North of England found a lack of available rolling stock and that too much of the rolling stock on the railways in Britain is unsuitable and old. More importantly, the inquiry found a lack of responsibility for ensuring that adequate stock is provided.

The SRA has been reluctant to interfere too much in the market since they are in the business of specifying outputs, not the inputs required to deliver them. The position of the SRA is that the TOCs know what kind of rolling stock they need and it is appropriate that they are the ones that manage the process, carry out the procurement and arrange the contracts. However, in some cases the rolling stock ordered by the TOCs cannot run on the tracks until the power supply is upgraded. The problem is being temporarily contained by delaying the delivery of trains but in the longer term it is possible that the rolling stock companies will be obliged to accept trains which cannot run.

The inquiry found that responsibility partly lies with Railtrack in that it was their duty to provide infrastructure on which the new trains could run, but the TOCs are also responsible for the procurement and failed to specify their needs correctly or ensure that the new trains could run on the track available. The SRA is hoping to overcome many of these problems by taking a more active role in train procurement.

Source: House of Commons, Select Committee on Transport, Fourth Report, 11 June 2003.

48. A substantial period of underinvestment is at the crux of the problems in the British rail sector and reversing this is the major challenge. Other problems that need to be dealt with include improving regulation and incentives, particularly for investment in infrastructure and in rolling stock and extending the length of franchises. While the government sought to overcome many of these problems with the creation of the SRA, in the past the SRA seemed unwilling to provide direction and lacked an emphasis on strategic planning (Nash, 2002). The intention now is for the SRA to take the lead in developing longer term strategies and investment plans and for the government to invest in infrastructure via grants through the SRA to Network Rail. While the SRA originally considered awarding new franchises of up to 20 years, new guidance from the Secretary of State emphasised achievement of rapid gains of performance rather than longer term re–franchising. In November 2002, the SRA issued a new franchising policy statement: franchises would be far shorter and performance standards would be tightly specified and monitored. In these circumstances, TOCs are unlikely to be willing to bear the risk associated with investment in rolling

stock. The SRA is also playing a temporary role in assuring the operation of trains pending the award of competitive franchises.[41] Network Rail has also been reintegrating the rail maintenance business, a move that is expected to be completed by summer 2004.[42] Whether all of this will work to overcome past problems depends on the quality of planning and direction the SRA brings to the system. While the reforms do overcome the most serious weaknesses of the privatised rail system, considerable problems regarding appropriate incentives and ensuring value for money remain.

49. An important function of the Regulator is to ensure that private investors receive a reasonable rate of return provided that the company behaves in an efficient manner. The independence of the Regulator is important in reassuring the private sector that it will not be subject to arbitrary political interference thereby encouraging private investment. It is difficult to see what role the Regulator can play in this new setting. Without shareholders, it is hard for the Regulator to discipline a company that simply passes bills on to passengers or the Treasury. Hopes of leveraging in large amounts of private capital have been greatly diminished by recent events as the framework is too vulnerable to political interference.[43] If the government hopes to raise substantial amounts of money from the private sector, it needs to be clear as to how this can be achieved in the current setting. On the other hand, the case for an independent regulator that sets the outputs expected for a given level of funding and protects legitimate third party interests is even stronger. The government should clearly define the lines of responsibility and reinforce and ensure the regulator's independence.

Summary and recommendations

50. Competitive pressures appear to be relatively strong in the United Kingdom and for this reason this paper has not sought to quantify the potential gains to GDP that could possibly arise from further reforms.[44] In manufacturing, mark–ups are lower than average and the United Kingdom is a relatively open market with few restrictions to trade and FDI, so competition does not seem to be a problem overall. In service sectors (telecoms, electricity and wholesale and retail trade), the United Kingdom has been a good performer and a large part of this is due to the introduction of competition. Even though economic and administrative regulations inhibiting competition and barriers to trade are amongst the lowest in the OECD, this does not mean that there is no room for improvement. In particular, restrictions on planning inhibiting competition in retail and the problems in rail need to be resolved. Market power on the part of incumbent firms in telecoms and in electricity is also a concern.

Competition legislation

51. The overhaul in competition legislation was long overdue. Active enforcement along with the market studies and investigations, which help to identify competition and consumer problems in markets that are not due to infringements of the competition law, will help to ensure that markets are competitive. But in order for this to come about the government needs to limit the use of "public interest" intervention and ensure that the enforcement agencies are independent.

- More emphasis is needed on enforcement of horizontal price fixing and the OFT has already started numerous investigations. To underpin the credibility of the enforcement programme the OFT must concentrate, as appropriate, on applying the stronger sanctions that are now available against horizontal price fixing.

- Attention needs to be paid to potential overlap between the OFT and the CC. As the OFT's range and capacity expand, the extent of the CC's distinct contribution may need to be reconsidered.

Retail

52. The recent CC enquiry concluded that price differentials between the United Kingdom and the EU could mainly be explained by exchange rates. However, market power, both buying and selling power on the part of large retailers remains a problem. Retailers have used their market (buyer) power to the detriment of suppliers and competitors. In light of this, the OFT negotiated a code of practice to govern buyer–supplier relationships in this sector. As regards entry into the sector, the government's recent approach to planning has made new large scale entry difficult (if not impossible). Given the high levels of industry concentration, these entry restrictions only act to further impede competition in the market and reinforce the market power of existing large scale retailers.

- It is not clear that the code of practice to govern buyer–supplier relations will resolve the market power problems that exist. The OFT and CC will need to remain vigilant in enforcing the Enterprise Act in this sector.

- The government should re–examine the appropriateness of planning restrictions and their impact on competition.

Professions

53. The United Kingdom has introduced many reforms in this area in recent years. An important step is that the regulations of self–regulatory bodies are no longer exempt from competition legislation. In the recent enquiry into pharmacies the OFT found that consumers in the United Kingdom are well served geographically and called for open entry in the sector. But the formal response of the government, citing concerns over rural and poorer areas, has left much of the status quo in place. In particular it left in place entry restrictions that inhibit the development of competition.

- The government should follow the recommendations of the OFT and allow open entry into pharmacies (subject to demonstrated professional qualifications). The Government will review this area in 2006.

Network industries

54. The opening up of the electricity, gas and telecoms sectors has led to increased productivity, but there is still scope for prices to fall, particularly in telecoms. Reforms in electricity have led to benefits for large industrial and small commercial enterprises where prices are below the EU average but they remain comparatively high for households. Prices for mobile and business telephone charges also remain comparatively high in spite of competition (business telephone charges are amongst the highest in the EU), most likely due to market power on the part of the incumbent.

- Market power on the part of dominant telecoms operators remains a problem and has meant that potential benefits from competition are not being realised. The new regulator Ofcom will need to remain vigilant in curbing abuses of dominant position.

- Ofgem needs to be particularly vigilant as concerns the consequences of industry consolidation in electricity.

- While retail price controls in electricity have been abolished, households have not benefited to the same extent as industrial consumers. Ofgem needs to ensure that households also reap the benefits from liberalisation.

55. Problems in the rail sector need to be resolved. The SRA is taking the lead in providing longer term guidance and investment planning and has also taken on a temporary role in assuring the operation of trains pending the award of competitive franchises, and Network Rail is re–integrating the rail maintenance business. While these recent steps do overcome the most serious weaknesses of the privatised rail system, problems regarding incentives and responsibilities remain to be resolved.

- There is a need for independent regulation, and the government should clearly define the lines of responsibility and reinforce and ensure the regulator's independence.

- The SRA should consider granting longer term franchises, as the current policy of short franchises with tightly specified performance criteria is unlikely to provide incentives for necessary long term investments.

NOTES

1. A limitation for current cross-country comparisons is that the data in Figure 1 stop in 1998. The OECD Secretariat is now in the process of updating these indicators.

2. These reforms were some of the most sweeping in the OECD area and include the privatisation and liberalisation of the electricity, gas, telecommunications and rail sectors discussed in the Regulatory Policies section of this paper.

3. The import penetration rates are unadjusted for structural factors such as country size, GDP per capita or transportation costs. These factors, particularly transportation costs, may explain some of the difference in the lower penetration rates for Japan and the United States.

4. Using a different legal test will only make a difference in a small number of cases, however, as occasions where the standards might diverge are rare.

5. For newspapers, the public interest considerations cover accurate news presentation, free expression of opinion and plurality of views; broadcasting mergers (which can include newspaper enterprises) are subject to “public interest” considerations covering a plurality of control of media enterprises serving a particular audience, the availability of a wide range of broadcasting of high quality and a commitment to standards objectives on the part of media owners.

6. The *Sunday Trading Act* of 1994 extensively deregulated shop opening hours and late-night opening (with a few stores having 24-hour opening) and Sunday trading has become the rule for large retailers.

7. In addition, the UK market structure is characterised as an asymmetric oligopoly with the market shares of Asda (10.2 per cent), Safeway (9.6 per cent) and Somerfield (6.8 per cent), being considerably less than the market shares of the top two firms, Tesco (21.1 per cent) and Sainsbury (15.3 per cent), see Dobson *et al.*(2001).

8. The retail sector in the United States has been one of the most important sectors in driving up aggregate productivity growth, partly by virtue of its size and partly due to the application of ITC.

9. However, value added per unit of labour costs is the highest in the EU, possibly reflecting comparatively low unit labour costs arising from a more flexible labour market.

10. For example, the average size of large format food retailers in the United States is twice the size of such retailers in the United Kingdom while in France they are 50 per cent larger (MGI, 1998).

11. Large factory outlets in particular have been impeded by the lack of development opportunities arising from planning difficulties in the United Kingdom. IKEA is a recent example where planning permission to develop large out-of-town outlets has been denied.

12. However, recent research indicates that the link between concentration and competitive pressure is complex in retail distribution and differs from other industries. For example, Dobson *et al.* (2001) argue that greater concentration may benefit consumers through lower retail prices owing to increased buying power on the part of retailers *vis-à-vis* manufacturing producers with (otherwise) dominant positions.

13. The substantially higher gross margins and similar operating margins suggest that UK firms are less profitable than overseas firms, possibly due to inefficiencies or higher costs due to land costs.

14. An example is the practice of below-cost selling, where the CC found that prohibitions in other countries against this practice had not been very effective and that prohibition often resulted in higher prices overall, a decrease in competition and an increase in margins.

15. In general Competition Authorities appear unwilling to prohibit retailer practices that potentially offer both efficiency benefits and anti-competitive effects even if they serve to reinforce buyer power (Dobson *et al.*, 2003).

16. A voluntary code was not thought to be sufficient to remedy the behaviour of retailers. The code requires firms meeting a market share test to offer standard, non-discriminatory terms to all suppliers and to make commitments to “reasonable” dealing with regard to payment delays, price reductions and marketing costs.

17. In the absence of specific profit data, the higher volume of turnover per professional associated with more restrictive regulatory regimes can be indirectly taken as an indicator of excess profit.

18. The index for the degree of regulation includes both entry and conduct regulations that may be determined by government or by professional bodies. Entry regulations include qualification requirements, membership in a professional body, and rules on reserved areas of practice. Conduct regulations include regulations on prices or fees, advertising, location and diversification restrictions and restriction on forms of business practice.

19. For example, the Bar argued that it is impossible to relate success and failure to winning or losing cases. Therefore, the prohibition on advertising success rates in the legal profession was justified on the grounds that it would discourage barristers from taking difficult cases.

20. The Royal Institute of British Architects has withdrawn its recommended fee scales after the OFT rejected their arguments that tried to justify the scales. The Law Society has agreed to remove a similar fee recommendation to solicitors. The OFT is pressing the Law Society for progress on this, as well as on the prohibition on payment of referral fees by solicitors. The Bar has submitted proposed amendments to its rules that would allow clients, in some areas of law, to instruct barristers directly rather than through the intermediary of a solicitor.

21. It is worth noting that the Enterprise Act has provided OFT with an ex-ante role in commenting upon the competition implications of proposed regulation. Where government maintains a role in regulating the provision of professional services, this provision is likely to provide a useful mechanism to ensure that competition concerns are addressed.

22. The report found that local access to pharmacies would likely improve following deregulation. If localised problems do occur, other support mechanisms exist – such as the Essential Small Pharmacies Scheme – and are much better at targeting the problem than are universal entry control regulations.

23. A large part of the consumer price savings could be expected to come from over the counter medicines since national supermarket pharmacy chains offer these medicines at prices of up to 30 per cent less than other pharmacies. The entry controls have meant that access to such low priced pharmacies is limited.

24. Almost 80 per cent of people have a community pharmacy within one kilometre of their home and 47 per cent have a pharmacy within 500 meters. In addition, 9 out of 10 people consider it easy to get to a pharmacy from their home and 86 per cent consider access easy from their doctor’s office.

25. Only pharmacies wishing to locate in shopping developments over 15 000 square meters will be exempt from the control of entry requirements and must provide a full and prescribed range of services. Similar arrangements and conditions will apply to pharmacies that are open for more than 100 hours per week (which is almost twice the average number of opening hours of pharmacies in general).

26. See OECD (2001b), *Economic Studies: Special Issue on Regulatory Reform,* No. 32, which thoroughly reviews the literature and adds more evidence on the relationship between regulation and performance in these sectors. The OECD Reviews of Regulatory Reform also constitute a rich source of information on the effects of industry-specific reforms on performance.

27. Generally, it is the sectoral regulator who will take a case within its sectoral brief.

28. The Commission recommended a price cap based on long-run incremental costs (LRIC) on the call termination service of MNOs with a 20 per cent market share. The new price caps on all four MNOs will ensure that consumers reap the benefits of competition in the market. Oftel estimated that consumers would save £190 million each year to 2006 in calls from fixed to mobile phones as a result of the new price caps.

29. The UK provisions have been overlaid by EU regulation which set a deadline of January 2001 for the provision of LLU. Under EU legislation, operators identified with significant market power (SMP) must offer fully unbundled access and must publish a reference unbundling offer (RUO).

30. Between 1990 and 2000 electricity prices have fallen by 22 per cent for domestic customers and by 32 per cent for industrial customers (OECD, 2002b). The NAO (2001) estimated that by June 2000 electricity consumers had saved £750 million since competition began, of which some £140 is on account of competition and the rest is due to regulatory price controls. The NAO (1999) reported that the introduction of competition in the gas market had also benefited consumers and found that those consumers that had switched suppliers had saved an average of £78 a year compared to prices in 1996, and those who had not switched had also benefited, saving an average £48 a year.

31. The fact that all stations received the price set by the marginal bidder made the Pool more vulnerable to the exercise of market power. An early example was PowerGen’s strategy of declaring plant unavailable one day in advance, thus reducing the apparent capacity margin and raising the level of capacity payment, and subsequently re-declaring it to be available. The capacity payment was not recalculated, and so the company received the higher payment for the plant whose “absence” had raised the price in the first place (Green, 2001). The pool rules were soon changed to close this particular loophole.

32. Traders have to notify Elexon of the volumes of their electricity contracts, which are compared with their metered demand or output. Companies needing to buy power have to pay the System Buy Price (SBP), the average of the prices that NGC paid to buy power in the Balancing Mechanism. Companies needing to sell power get the System Sell Price (SSP), the average of the prices that NGC received for selling power in the Balancing Mechanism. The intention is to give companies a strong incentive to contract accurately in advance, for the SBP is expected to be greater than the cost of power bought in advance, while the SSP is expected to be lower.

33. TOCs competed to require the least amount of subsidy.

34. The ORR is effectively the competition authority for the sector and SRA is the consumer protection authority.

35. Railtrack’s failure was, in part, due to the way in which access charges had been set. The first review of access charges revealed that the charging structure gave no incentive for increasing capacity and did not even adequately charge for wear and tear (Nash, 2002). Subsequently, Railtrack ran into financial difficulties both due to inadequate information regarding the condition of the track and seriously underestimating the costs of upgrading the West Coast mainline.

36. Network Rail is a not-for-dividend company limited by guarantee (a form of private company without shareholders), which is accountable to its members. In the unlikely event of a “fundamental financial failure,” the government (through SRA) would take control.

37. The vast majority of EU countries also experienced increases in passenger rail traffic over the 1990s (ECMT, 2003).

38. The Hatfield accident in 2000 led to major disruptions in passenger service accounting for the sharp decline in performance.

39. Railtrack claimed that the system of charges did not give sufficient incentives to increase capacity. The Regulator, concerned that the network was not being maintained, warned that the number of broken rails was increasing unacceptably, but very little action was taken (Glaister, 2002). This is attributable in part to poor incentives and blurred lines of responsibility.

40. For example, a major investment plan would typically involve Railtrack, a number of TOCs, freight operators, Railtrack's suppliers, the Regulator and the Director of Franchising. Such plans were expensive and slow to negotiate and the biggest of them, the West Coast Central Line, had been subject to massive cost increases as well as severe delays.

41. For example, the SRA will, under a management contract, also operate the Connex South-eastern franchise from the new year (*Financial Times*, 11 October 2003).

42. While rail maintenance work is being brought back in-house, the rail renewals business will remain with private sector contractors.

43. The risk of political interference is not new. The compromising of the Regulator's independence would be of considerable significance, not only for the future of railways, but also for the other privatised utilities.

44. The quantification of benefits arising from reforms typically entails simulating the potential gains in output if a country were to move towards the regulatory stance of the best performing country. It is difficult to quantify the gains in this case since the United Kingdom is, with respect to many indicators, the benchmark country.

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GLOSSARY OF ACRONYMS

BETTA	British Electricity Trading and Transmission Arrangements
BHPS	British Household Panel Survey
BSP	Basic State Pension
CAT	Competition Appeal Tribunal
CC	Competition Committee
CCAs	Climate Change Agreements
CCL	Climate Change Levy
CHP	Combined Heat and Power
CPI	Consumer price index
DFID	Department for International Development
DTI	Department of Trade and Industry
EC	European Commission
EMU	Economic and Monetary Union
EU	European Union
FDI	Foreign direct investment
FRS17	Financial Reporting Standard #17
FSA	Financial Services Authority
FTSE	Financial Times Stock Exchange Index
GAD	Government Actuary Department
GAP	Output gap
GDP	Gross domestic product
GHG	Greenhouse gases
GNI	Gross national income
G7	Group of seven countries (France, Germany, Italy, Japan, United Kingdom, United States, Canada)
HICP	Harmonised index of consumer prices
H.M. Treasury	Her Majesty’s Treasury
ICT	Information and communication technology
LLU	Local loop unbundling
MDGs	Millennium development goals
MIG	Minimum income guarantee
MNOs	Mobile network operators
MPC	Monetary Policy Committee
NAO	National Audit Office
NDDP	New Deal for disabled people
NDLP	New Deal for lone parents
NDYP	New Deal for young people
NETA	New Electricity Trading Arrangements
NGC	National Grid Company
NHS	National Health Service
ODA	Official Development Assistance
Ofcom	Office of Communications
Oftel	Office of Telecommunications

OFT	Office of Fair Trading
OPRAF	Office of the Passenger Rail Franchising
ORR	Office of the Rail Regulator
PC	Pension credit
PISA	Programme for International Student Assessment
PPP	Purchasing power parity
QC	Queen's Council
R&D	Research and Development
RECs	Regional Electricity Company
RIA	Regulatory Impact Assessments
ROSOCs	Rolling stock companies
RPIX	Retail Price Index excluding mortgage interest payments
RUO	Reference unbundling offer
SBP	System buy price
SFO	Serious Fraud Office
SGP	Stability and Growth Pact
SRA	Strategic Rail Authority
SSP	System sell price
TOCs	Train Operating Companies
TR	Tax rate
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Control
US	United States
USD	United States dollar
WFTC	Working Families Tax Credit

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