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**The Location of Civil Service Jobs in Scotland
in relation to the Local Economic Impact of the
Scottish Parliament**

**Dr Ronald W. McQuaid
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Department of Economics
Napier University
Sighthill Court
Edinburgh EH11 4BN
FAX 0131 447 3475

The Location of Civil Service Jobs in Scotland in relation to the Local Economic Impact of the Scottish Parliament

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1. Introduction

The new Scottish Parliament will have potentially significant impacts upon economic, social and political development across Scotland. These issues and others such as the relationship with the UK government and inter-government transfers are discussed in other papers and elsewhere (Newlands and McCarthy, 1998; Midwinter and McVicar, 1996). This paper concerns the impacts upon the local economy of locating a new Parliament in Edinburgh. It also considers ways in which some of these benefits might be spread to other local economies in Scotland.

These impacts include those directly associated with the Parliament (construction of the new Parliament building; the Parliament's operation; other government departments and Quangos; associated private and non-governmental organisations), as well as wider impacts on organisations not directly associated with the Parliament and the wider multiplier and displacement effects. However, only very general information on likely impacts of the Parliament was given in the government's White Paper (HMSO, 1997a). Any estimates of the impacts will be influenced by the temporal and spatial scale decided upon and on the level of sector analysed.

The next section briefly sets the analysis within the context of the current distribution of government and Quango employment and long term population trends, as the location of the Parliament may directly influence these in the future. Section 3 then

discusses the possible direct and indirect impacts of the Parliament and discusses some recent detailed studies. Section 4 considers some of the policies that may help distribute the benefits to other parts of Scotland.

2. The distribution of government and Quango employment and population.

The Distribution of Government Employment

There is currently an uneven geographical spread in the location of central government jobs in favour of Edinburgh. With approximately 9% of the Scottish population, Edinburgh city has a much higher share of civil service posts (the wider Lothian region which includes the city has 15% of the Scottish population). While this largely reflects the role of the city as the central government administration centre, many of these jobs will be transferred to the control of the Parliament. There thus needs to be a debate on whether the Parliament should seek to influence the location of these jobs. It is useful to start by considering the geographical distribution of government related employment in Scotland.

In Scotland as a whole in April 1996 there were about 42,761 permanent civil service posts (FTEs) in government departments, plus a further 3,827 industrial staff (HMSO, 1997b). This compares with some 238,192 local authority employees. Of these civil service FTEs 12826 are in government departments specifically serving Scotland, and who would largely relate to the new Parliament. As shown in Table 1, The Scottish Office, dealing with specifically Scottish policies, employs only 5,054 FTE civil servants (including 356 industrial staff and a small number based in London) which is under 11% of the total civil service in Scotland. These are mostly located in Edinburgh (except for some sections, notably Economic and Industry Affairs in

TABLE 1: CIVIL SERVANT EMPLOYMENT IN SCOTLAND (1996)
(FULL TIME EQUIVALENT)

DEPARTMENT	
283	Agriculture, Fisheries and Food
48	Cabinet Office (Including OPS)
1,509	Customs and Excise
6,168	Defence
3,499	Education and Employment
312	Environment
270	Home Office (including Prison Service)
5,774	Inland Revenue
2	Lord Chancellor's Department
1,913	National Savings
65	Ordnance Survey
4,667	Scottish Office
4,439	Scottish Prison Service
9,050	Social Security
274	Trade and Industry
544	Transport
3,948	Other Departments
42,761	ALL DEPARTMENTS
INDUSTRIAL STAFF	
3,453	Defence
2	Environment
356	Scottish Office
16	Transport
3,827	ALL DEPARTMENTS
TOTAL INDUSTRIAL AND	
46,588	NON-INDUSTRIAL

Source: HMSO (1997b) Mandate and Departmental Returns.

MAP 1: CIVIL SERVANT EMPLOYMENT IN SCOTLAND (1996)
(FULL TIME EQUIVALENT)

Glasgow, some fisheries Research Laboratories in Aberdeen and Pitlochry, the Liaison Office in Dover House in London and some regional HMI Schools offices).

The remaining 7,772 FTE civil servants are largely located throughout Scotland, although largely head-quartered in Edinburgh. These are Scottish Prison Service (4,439), Court Service (826), Record Office (119), General Register Office (213), Registers of Scotland (1073), Lord Advocates' Department (20) and the Crown Office and Procurator Fiscal Service (1,082). The number of civil servants has been declining for a number of years (by around 7.5% since 1991) due to contracting out, privatisation (e.g. the Insurance Services Group in 1991) and efficiencies.

However, the other 72% of FTE civil service posts in Scotland (providing UK-wide services or delivering UK services in Scotland) are more geographically spread across various parts of Scotland. Of particular importance are Social Security (9,050 FTEs) and the Inland Revenue (5,774 FTEs, especially the East Kilbride and Cumbernauld offices), and the Ministry of Defence which employed 6,168 non-industrial and 3,453 industrial FTEs at both military bases and support services such as Contracts and Central Purchasing and some Payroll. Other examples are: the UK wide DTI Oil and Gas Directorate in Aberdeen; the Forestry Commission (Edinburgh); the International Development Department (East Kilbride); and various Scottish sections of services such as the Passport Office, Health and Safety Commission, Equal Opportunities Commission etc. There are also other major government funded bodies, such as the National Health Service, but these largely follow population distribution, as does, to lesser degree funding for Universities and Further Education Colleges etc.

Data from the Cabinet Office (personal correspondence, 1998) show the distribution of civil service posts by District Council areas (pre-1996 local government reform boundaries). These data deal with the civil service Mandate returns and differ from Civil Service Statistics (HMSO, 1997b) which also include Departmental and Agency returns. The largest such omitted Departmental return is the Foreign and Commonwealth Office. The discrepancy between the geographical data presented (total 42,383.5 FTEs) here and the full Civil Service returns is under 1% (377).

Edinburgh has 9589 FTE posts (table 2 and map 1), notably the 4874 in the Scottish Office (including the Pension Agency, Prison Service and Department of Registers) but a further 4715 in over 20 Departments ranging from 1374 in the Inland Revenue to 130 in the Scottish Courts Administration, and 2 in the Defence Dental Agency of the MoD. This is only three more than Glasgow with some 9586 posts, particularly 1769 FTE posts in National Savings, 1149 in the MoD and 2926 in the Benefits Agency.

However, on the basis of jobs per 10,000 people Edinburgh has close to double the concentration of civil service jobs than in Glasgow with 229 and 145 FTE posts respectively. The Scottish average is 85 posts per 10,000 people (map 2). Perhaps surprisingly East Kilbride has the highest per capita share of civil service jobs (294 per 10,000 population), with its 1548 Inland Revenue and 393 Overseas Development Agency jobs in addition to the other usual civil servants such as Benefits Agencies, Job Centres and the Child Support Agency. Dunbarton is not far behind (291) with its 2434 mainly Ministry of Defence jobs based largely at Faslane, although many of these posts are filled by people only staying for relatively short periods. It is expected that many of the industrial civil servants (who are mostly MoD workers) are located at or near bases such as Faslane, but data on their location were not available.

However, many of the civil service jobs will be taken by people living in other local authority areas, but when the wider travel to work areas are considered, then the relative sparsity of civil service jobs in the rest of Lanarkshire means that the per capita civil service post figure for that area is about half that of Edinburgh. At the other end places like Cumnock and Doon (now part of East Ayrshire) have an unemployment rate in their travel-to-work area of double the Scottish average, at 12.5%, but only 20 civil service jobs (5 per 10,000 population) or 2% of the Edinburgh per capita number of jobs. This may not be surprising given its rural nature, but Paisley with 37 per 10,000 population (Renfrew District) has under a fifth the Edinburgh per capita figure and Dundee City (53) a quarter and Aberdeen City (72) a third. Hence there appears to be over-representation of civil service jobs in Edinburgh is particularly in those departments servicing the new Parliament.

TABLE 2: NON-INDUSTRIAL STAFF IN POST BY DEPARTMENT IN SCOTLAND AT 1 APRIL 1997 (FTEs)

Area	Civil Service Jobs	Per 10,000 Population
<i>Borders</i>		<i>23</i>
Berwickshire	10	5
Ettrick & Lauderdale	185	54
Roxburgh	37	11
Tweeddale	3	2
<i>Central</i>		<i>84</i>
Clackmannan	218	46
Falkirk	1465	104
Stirling	576	73
<i>Dumfries and Galloway</i>		<i>33</i>
Annandale & Eskdale	40	11
Nithsdale	352	62
Stewartry	21	9
Wigtown	81	27
<i>Fife</i>		<i>49</i>
Dunfermline	1265	99
Kirkcaldy	262	18
North-east Fife	145	22
<i>Grampian</i>		<i>46</i>
Aberdeen	1481	72
Banff & Buchan	379	44
Gordon	0	0
Kincardine & Deeside	7	1
Moray	458	55
<i>Highland</i>		<i>42</i>
Badenoch & Strathspey	1	1
Caithness	63	23
Inverness	696	112
Lochaber	24	12
Nairn	9	8
Ross & Cromarty	40	8
Skye & Lochalsh	28	24
Sutherland	2	1
<i>Lothian</i>		<i>147</i>
East Lothian	215	26
Edinburgh	9589	229
Midlothian	140	18
West Lothian	710	49

<i>Strathclyde</i>		87
Argyll & Bute	179	28
Bearsden & Milngavie	0	0
Clydebank	55	12
Clydesdale	309	54
Cumbernauld & Kilsyth	1383	222
Cumnock & Doon Valley	20	5
Cunninghame	582	43
Dumbarton	2246	291
East Kilbride	2434	294
Eastwood	0	0
Glasgow	9586	145
Hamilton	212	20
Inverclyde	642	71
Kilmarnock & Loudoun	145	18
Kyle & Carrick	666	59
Monklands	213	21
Motherwell	111	8
Renfrew	729	37
Strathkelvin	65	8
<i>Tayside</i>		46
Angus	252	27
Dundee City	887	53
Perth & Kinross	632	51
<i>Island Councils</i>		
Orkney	65	33
Shetland	102	45
Western Isles	179	60
Scottish Prison Service)	2190	
(Not allocated geographically)		
Total (rounded)	42384	85

Note: excludes 377 in departmental returns and 3,827 industrial staff.
Source: Cabinet Office, personal correspondence, March 1998.

**MAP 2: NON-INDUSTRIAL STAFF IN POST BY DEPARTMENT IN
SCOTLAND AT 1 APRIL 1996 (FTEs)**

Finally, using the former Regional Council areas, Lothian has the highest concentration of FTEs (147 per 10,000 population), with Strathclyde and Central at a little over half this figure (87 and 84 respectively), and the other regions varying from 23 to 60, but mostly around 40. Rural mainland regions have the lowest rates with Borders at only 23 per capita and Dumfries and Galloway at 33. Similar results appear for rural districts as most civil service jobs are concentrated in towns and cities. In the Borders only Ettrick and Lauderdale District has a significant number of civil servants per capita, with 54, compared to a range of only 2 to 11 for the other Districts. Similarly jobs are concentrated in the Regional administrative centre for Dumfries and Galloway (the town of Dumfries in Nithsdale District) and to a lesser extent the main town in the west of the region (Stranraer in Wigtown District). Overall, the data show that civil service employment is widely, but unevenly, dispersed throughout the urban parts of the country.

The Distribution of Non-Departmental Public Bodies (or Quangos)

Also significant is employment in Non-Departmental Public Bodies (or Quangos) which serve the whole of Scotland. Their employment is strongly biased towards Edinburgh, despite some decentralisation in recent years (such as the National Gallery annex in Banff and Buchan, the Scottish Enterprise Network and the Further Education Unit in Stirling). Table 3 shows the number of FTE posts for six of the major centres for such employment (there are relatively few such jobs in other cities such as Paisley, although Scottish National Heritage is head-quartered in Perth).

Some 2641 (33%) of the national total of 8,102 FTE posts were located in Edinburgh). Glasgow only had 1489 (18%) despite its much larger population. Aberdeen had 764 (9%), Dundee 500 (6%), Stirling 255 (3%) and Inverness had 333 (4%). The emphasis on Edinburgh is shown by the number of jobs per 10,000

TABLE 3: EMPLOYMENT IN QUANGOS (NON-DEPARTMENTAL PUBLIC BODIES) IN SCOTLAND EMPLOYING MORE THAN 20 EMPLOYEES

Body	Total	Glasgow	Edinburgh	Aberdeen	Dundee	Stirling	Inverness
Executive NDPBs							
Accounts Commission for Scotland	157	20	77	9			11
Crofters' Commission	76						76
Highlands and Islands Enterprise	350						174
National Board for Nursing, Midwifery and Health Visiting for Scotland	44		44				
National Galleries of Scot.	164		164				
National Library of Scotland	217		217				
National Museum of Scotland	270		270				
Royal Botanic Garden, Edinburgh	202		202				
Royal Commission on the Ancient and Historical Monuments of Scotland	65		65				
Scottish Agricultural and Biological Research Institutes:							
Hannah Research Institute	140						
Macaulay Research Institute	260			260			
Moredun Research Institute	156		156				
Rowett Research Institute	276			276			
Scottish Crop Research Institute	343				343		
Scottish Arts Council	80		80				
Scottish Children's Reporter Administration	327	66	22	17	18	38	16
Scottish Community Education Council	30		30				
Scottish Council for Educational Technology	88	88					
Scottish Enterprise	1,714	694	114	94	91	79	
Scottish Environment Protection Agency	637	12	91	64		101	
Scottish Further Education Unit	28					28	
Scottish Higher Education Funding Council	60		60				
Scottish Homes	837	218	310	8	48		17
Scottish Legal Aid Board	273	3	270				
Scottish Natural Heritage	613		199	36		9	39
Scottish Qualifications Authority	350	350					
Scottish Screen	38	38					
Scottish Sports Council	150		150				
Scottish Tourist Board	157		120				
TOTAL	8102	1489	2641	764	500	255	333

Figures relate to the Highlands and Islands Enterprise and the Scottish Enterprise networks as a whole.

Source: Hansard (1997).

residents. Edinburgh had many more posts per capita than the other cities (table 4), except Inverness, with 63, 22, 37, 30, 32, and 54 respectively (the population based used for Inverness was the old District population rather than Highland Council as the Council area is extremely large and contains Quango jobs not included in the Inverness statistics). The high share of jobs in Inverness' reflects its role as an administrative centre for the Highlands. These figures do, however, ignore the effect commuting into the cities. Also most Quango head-quarters were in Edinburgh probably representing better than average jobs and larger multiplier effects (in terms of wages, suppliers of services etc.). It is worth noting that all of these cities have far above the Scottish average of 16 jobs per 10,000 population.

In addition there are 6,616 employees of the three Water Authorities, although these are spread around the country as many are linked to 'production' with only 714 employees (11% of the national total) of the East of Scotland Water Authority located in Edinburgh, 1,267 located in Glasgow, and 403, 370, 226 and 253 respectively in the other cities. If Water Authority jobs are added, then the numbers of Quango jobs per 10,000 population are 80, 42, 57, 52, 61, and 94 respectively.

In addition to the number of jobs in different locations there may be distinctions between types of jobs or expenditure and between the impacts of the expenditure and jobs upon the local economy. The higher level jobs are concentrated in Edinburgh. Expenditure policies in terms of procurement may be significant (especially with the Ministry of Defence which is the largest customer of British industry). Research suggests that certain expenditure may be heavily geographically biased but also that some of such expenditure may have considerable positive multiplier effects on associated industries, such as the importance of Ministry of Defence expenditure is supporting the growth of 'High Tech' firms in the south east and south west of England (Hallet *al*, 1987).

Even at a smaller level expenditure patterns and policies are important. For instance, Scottish Enterprise National in Glasgow may have greater discretionary expenditure associated with each staff member than other organisations, leading to a greater local

TABLE 4: QUANGO EMPLOYMENT PER 10,000 POPULATION (1996)

	Non-Departmental Executive Agency employment per 10,000 residents	Non-Departmental Executive Agency plus Water Authority employment per 10,000 residents
Glasgow	22	42
Edinburgh	63	80
Aberdeen	37	57
Dundee	30	52
Stirling	32	61
Inverness	54	94
Scotland	16	29

Cities are ranked by size.

Source: see Table 2. Population based upon GRO(S) Census data for local authority areas.

multiplier effect and possibly local expenditure (if there is a distance decay in expenditure patterns). Some forms of expenditure may also have greater impact on the local economy than others. For example, funding for a University, Prison or a LEC may have different wider economic impacts for each pound spent. Career prospects and remuneration also vary by particular job, function and section, which may also show an uneven geographical distribution. Overall then, there appears to be a large bias towards Edinburgh in terms of current government employment, although not as strong as some popular commentators suggest.

There are other differential multiplier effects of this distribution of functions and related jobs. For instance, the Royal Botanical Gardens and the National Library, Galleries and Museums provide important tourism attractions for Edinburgh. Also there may be a substitution effect whereby the local government can provide a lower level of facilities and services in these areas, as there is no need for a major city library when it is, literally, across the road from the major National Library. Hence local government expenditure on such services can be relatively lower than other cities (and Edinburgh does have a low per capita expenditure on Museums). This difference in local expenditure on such services is exacerbated in the case of other major regional cities where such services support a wider hinterland (such as Dundee serving Tayside and North Fife or Glasgow's Mitchell Library providing specialist services and books etc. for much of the west of Scotland). It is unclear whether government support to local governments fully takes these different spending needs into account.

In summary, when the location of Scottish departments who will be serving the new Parliament is considered there is a current bias of government and Quango employment in favour of Edinburgh. However, when all civil service jobs are considered this geographical bias is considerably reduced. In the case of Quangos, there is a strong concentration in Edinburgh. Hence the distribution and wider impact of expenditure needs to be considered more fully.

Demographic Change

This over concentration of government employment in Edinburgh could be reinforced by the new Parliament, which could reinforce long-term demographic changes. Demographic movements have shown a relative increase in Edinburgh and many surrounding areas compared to the larger populated Glasgow and west of Scotland over a number of decades. From 1971 to 1991 Strathclyde's population (the industrial west of Scotland) fell by 13.8% compared to a fall of 2.9% in the Lothian region covering Edinburgh and its surrounding areas. The Register General for Scotland estimates that Scotland's population of 5 million will fall slightly (by 80,000 between 1996 and 2013). Edinburgh's population is estimated to increase by 2% from the 1996 level of 448,850 with two of the three neighbouring areas also rising (West Lothian by 11% from 150,770, East Lothian by 7% from 88,140 people, and Mid-Lothian to remain virtually unchanged from 80,040).

While the wider Edinburgh area grows in population, other parts are expected to decline, in particular the other major cities (Glasgow is estimated to fall by 10% from 615,430, Dundee by 9% from 150,250 and Aberdeen by 3% from 217,260). Most of the rest of the west of Scotland is expected to fall in population, although rural areas near Dundee and Aberdeen are estimated to grow. The continued concentration of government related jobs in Edinburgh may exacerbate these employment and population trends, although other factors such as the general economy and demographic structure are likely to be much more important. However, it is important to try to understand the political, social and economic pressures reinforcing current and future job and expenditure locations and these will briefly be considered later.

3. Impacts of the parliament on the local economy

The location of the new Parliament will have many direct and indirect impacts upon Edinburgh and other local economies. These include the jobs and expenditure directly associated with the Parliament and linked industries, and wider impacts in terms of the development of the economy and property prices as well as multiplier and displacement effects.

Reports on the full range of likely local impacts of the new Parliament have been written by various agencies (although these were carried out before the exact location of the Parliament within the city was known). The City Council of Edinburgh (1997) estimated that there would be approximately 5500 new jobs in Edinburgh of which 600 would be associated with the Parliament, 4500 with new and relocating businesses and organisations, 200 with business tourism and 200 with construction and refurbishment (table 5). These figures were based upon an assumed 10% growth in employment in Business Services, a 25% growth in industry/employer/professional etc. organisation employment, and 25% growth in media, as a result of the Parliament.

Glasgow City Council (1997) and their consultants (Pieda, 1997) estimated that the impacts would around half of those of Edinburgh City Council. These would be predominantly in Edinburgh itself with 88% of expenditure, 92% of jobs and 88% of construction jobs being located there. Their estimate of the number of direct and indirect jobs at 2700 and 417 construction job years (or 41.7 permanent job equivalents assuming 10 years is equivalent to a permanent job), of which 2500 and 367 respectively would be in Edinburgh).

The variation between the reports reflects different assumptions (e.g. concerning the construction compared to refurbishment) and in particular different estimates of growth in associated businesses. The methodology used by each differed, with Edinburgh assuming a certain percentage growth in broad related industries (see above), while Glasgow considered each specific industry and the likely impact upon it. The multipliers used in each study were similar, although the likely displacement

TABLE 5: APPROXIMATE EMPLOYMENT EFFECTS OF THE SCOTTISH PARLIAMENT ON EDINBURGH

	Edinburgh City Council Estimates	Glasgow City Council Estimates
Employment Associated with the Parliament, MSPs etc.	600* (plus 129 MSPs)	575 (plus 129 MSPs)
New and Relocating Businesses and Organisations	4,500*	c. 1531*
Related Tourism	200	96
Construction and Refurbishment	200	40
ROUNDED TOTAL**	5,500	2,500
Jobs Elsewhere in Scotland	N/A	205

* including multiplier effects.

** Rounded totals quoted in the reports referred to.

Based on: Edinburgh Council (1997); Glasgow Council (1997) and Pidea (1997).

Note that each estimate uses different assumptions and figures are approximate.

effects elsewhere in Scotland (e.g. of industry/employer/professional etc. organisations) is not explicitly considered (perhaps unsurprisingly as the Edinburgh report restricts itself to the impacts upon the city). The timescales for the impacts is important and it is unclear from the reports when the employment figures would be reached, so Edinburgh's figures may reflect a longer timescale to those of Glasgow.

Finally, the assumptions of civil service jobs appears to differ with Pinda suggesting 200 jobs for serving the Parliament (Committee clerks, catering, security etc.), plus 375 new executive civil service staff and the 129 MSPs, while Edinburgh assume 200 staff for serving the Parliament and 258 support staff for MSPs (a secretary and research assistant each). It is unclear from the reports whether the support staff are equivalent to the executive staff although they would appear to be different. It must, however, be remembered that these are working reports and were not intended as in-depth definitive studies.

The figures are not insignificant, as the 5500 estimate represents around 1.6% of the Edinburgh travel to work area workforce (1.9% of the City Council area workforce) and almost half of the registered unemployed in that area (12,786 unemployed claimants in December 1997). Of course, those getting such jobs may often commute and the availability of such jobs may increase in-migration, but the data show the broad scale of the jobs. The lower Glasgow estimates still similarly represent close to 1% of the current workforce.

Jobs and expenditure directly associated with the Parliament

The government's White paper 'Scotland's Parliament' (HMSO, 1997a) provides some general estimates of the employment associated with the Parliament, although new proposals for the Parliament may arise and the actual outcomes may be different. The additional running costs of the Parliament are estimated at £20-30m, including staff, and operating costs. This includes the salaries and allowances of the 129 Members of the Scottish Parliament (MSPs). Although MSP and 'Cabinet Minister' salaries are yet to be set, the figure may be near the £43,000 pa for Westminster MPs.

The multiplier and displacement effects are considered below. Each MSP will require administration/secretarial support and possibly other services such as researchers, so it is likely that there could be around 260 such jobs, mostly based in Edinburgh, but some based in constituencies.

These figures assume that the number of new staff required to service the Parliament was estimated at 200, although further new jobs may result from the transfer of other functions currently carried out by the Treasury or Cabinet Office, or to operate new responsibilities (e.g. possibly in the areas of policy and taxation by the Parliament). The previous 1977 devolution Bill (HMSO, 1977) estimated that a higher number of additional civil servants (750) would be needed as a result of devolution. Since then the number of civil servants has decreased due to outsourcing, transfer to Quangos, growth of some Scottish Office functions, so posts have already been moved to Scotland etc.

The full capital costs of the new building and associated infrastructure, including roads is uncertain, although estimates for the building at the chosen Holyrood site are £50 million (excluding VAT), and a further £3.5-4 million for site purchase (Scottish Office communication, February 1998). Based upon total construction of around £20m Piersa consultants for Glasgow City Council (1997) estimate that there would be 417 worker years of construction jobs created, of which 88% (367 years) would be spent in Edinburgh. Hence the chosen site at Holyrood would likely create from around 770 to 1000 construction job years (assuming the industry average gross output per construction worker) or around an equivalent of 77-100 'permanent' FTEs. In addition other construction jobs would be created in associated developments (see below).

Impacts on associated industries

The new Parliament is likely to attract other organisations which find it advantageous to be nearby. These include those lobbying or seeking to influence the Parliament, consulates, industries associated with the effects of the Parliament such as the media, hotels etc., firms providing services directly to the Parliament, and local government.

Although many organisations seeking to influence the Parliament are already located in Edinburgh, others such as many Trades Unions (e.g. the STUC), employers' and voluntary organisations may seek to strengthen their presence there. An important aspect of this will be the dynamic changes over time, in particular those linked to the function of the offices. If the lobbying part of the organisation moves to Edinburgh then, over time, it is likely that further parts of the organisation such as policy making and other functions may then move to join them (hence displacing jobs elsewhere in Scotland). Similarly private lobbying firms may find it more advantageous to move to Edinburgh. Pidea (1997) estimated some 100 additional lobbying posts may be generated with £3m in salaries and support costs and a capital expenditure of £1.34m on offices.

There are currently 20 Consular offices listed in Edinburgh, and these may be upgraded and new consulates may be set up or moved from other parts of Scotland. This will depend partly on the perceived significance of the Parliament and its expanding role in dealing with the EU and elsewhere, which may be aided by a wider and higher profile of the Scotland Europa office in Brussels.

Other important associated industries likely to show growth are the various parts of the media industry. The number of new media jobs is uncertain and will depend upon the organisation of the firms involved. Some may expand or create new Edinburgh offices, while others may predominantly use existing staff based elsewhere or 'outsource' to independent firms in Edinburgh. The Edinburgh Council report estimated an increase of 25% (75 jobs) in broadcast, media and news agency activity, somewhat higher than the Pidea figure of 50. Also the Parliament may require specialist legal and professional services (e.g. accounting) may be required and these

may be concentrated in Edinburgh. Pidea estimate that there could be up to 500 such jobs supported by the Parliament.

Further impacts will be upon services used by those working in, or with, or visiting the Parliament, especially restaurants, hotels, speciality shops etc. Some 2000 extra hotel rooms are expected to be developed in the next few years, partly linked to the extra business and tourism travel linked to the Parliament and the associated organisations around it. Edinburgh estimated a resulting 200 jobs in Business tourism, although there could be some growth in other tourism due to the city's higher profile. Pidea estimated a more modest 96 jobs and £865,000 expenditure per annum. Improvements to transport (e.g. air travel) may also result from higher travel to the city, although the scale of this effect may be relatively small, at least in the short-run.

Finally, there will be additional expenditure by the local authority, for services such as police security, environmental improvements etc. This may also result in a greater level of central government grant support the local authority in Edinburgh.

Multiplier effects

The employment and expenditure discussed above will have multiplier (indirect and induced effects) and displacement effects. Most studies of the multiplier effects have concentrated upon impacts of private investment with multiplier effects spreading to the public and private sectors (for example, Greig, 1971), although others (such as Ashcroft and Swales, 1982 and Brownrigg, 1973) have also considered the public sector investment or moves. The income and employment multiplier effects include first round effects of additional salary and other income from those not previously resident in Edinburgh or extra income for existing residents and further jobs in public services, such as schools and health services (although some of these may be provided in the private sector). This will be the equivalent of average propensity to consume based upon average post tax income. The first round effects will also include the initial investment injection (e.g. the construction of the Parliament building). Subsequent rounds of the multiplier will be based upon the marginal propensities to

create income in the public sector and the marginal propensities to consume, pay tax, give up state benefit and import (Harris *et al*, 1987). Ashcroft and Swales (1982) estimate that the local employment multiplier of moving civil service jobs (Property Services and Ministry of Defence) from London to West Glamorgan and Cleveland would be 1.09 and 1.14 respectively, while the income multipliers would be 1.71 and 1.66.

The studies of the Scottish Parliament did not estimate new specific multipliers for the studies but used generally accepted estimates of likely multiplier effects. Using a multiplier figure of 1.32 Pidea (1997) estimated the income multiplier effects to be 861 FTEs, plus 96 FTEs in tourism and 40 FTEs in construction. Edinburgh Council (1997) used an income multiplier of 1.2 and supplier multiplier of 1.1. These figures appear to be for the multiplier effects within Edinburgh, although it is important to distinguish these from the wider multiplier effects on the rest of Scotland and beyond. For some expenditure it may differ (e.g. Mackay [1995] use a multiplier of 1.75 for the media industry in Scotland). These broad figures seem reasonable, although detailed study would be required to estimate more precise figures. However, the geographical distribution of this multiplier effect within Scotland is less certain, but the effects would be concentrated in Edinburgh. This will depend on issues such as the level of commuting by MSPs and additional workers linked to the Parliament (or existing government staff who choose to stop commuting and move to Edinburgh to live). Also the purchasing policies of the Parliament and other (e.g. the construction firms) will affect the distribution of the multipliers.

Wider impacts

In the longer term the Parliament (particularly if it is seen as a constructive forward looking body) may improve the perception of Edinburgh as a major European city and an attractive location for industry and living. This may be important for certain industries such, as the financial industry to a very limited degree if the Parliament is seen as having high integrity and prudence, or electronics. Some, but not necessarily all of these impacts may be captured in the multiplier effects, as they relate to future

potential rather than existing economic relationships covered by usual multiplier estimates. In California's Silicon Valley some 40% of the staff are non-US (in a wide range of jobs) and relatively few of the rest were born in the greater central California, so the attractiveness of the location to potential workers can be important (although obviously many other factors are more fundamental to the development of electronics, see for instance, Hall *et al*, 1987). It is not possible to accurately estimate these effects, particularly as so many other factors are more influential including future policies of the Parliament, but the effects should be positive (unless the Parliament is perceived by decision makers and others in a negative light). A key policy will, no doubt, be to use the new Parliament to support development across Scotland and not just around Edinburgh.

Commercial and residential property prices will increase, although it is uncertain by how much. This will lead to some displacement as firms move or perhaps even close, but should conversely also increase pressure for new developments. Some estimates of the impact on property prices immediately beside the location of the new Parliament have been that prices will rise by 30% over what would reasonably have been expected immediately before the site of the Parliament was announced, particularly for offices, restaurants etc. (Scotland on Sunday, 1998). The Edinburgh study estimated an increase in office space demand of 63,000 sq.m. while the Glasgow study estimated around 30,000 sq.m., (reflecting the lower overall employment impact estimates) but both estimates were made before the government's choice of the Holyrood site.

However, the geographical distribution of these impacts within Edinburgh will vary and in the long run the impacts on the city as a whole will depend upon many other factors, such as the general economic health of the local and national economies and, of course the availability of existing space (such as the city centre offices recently released after local government reorganisation). The existence of the Parliament may help create opportunities for specialist property areas, such as a 'media district', although these would need to be based on more than just work associated with the Parliament.

Displacement and other potentially negative impacts

There will, of course, be some negative impacts of the Parliament upon Edinburgh and the rest of Scotland, such as displacement effects and the impacts of rising commercial property prices. For Edinburgh, the additional traffic congestion and pollution (especially due to cars) will adversely affect the city as a whole and especially around the Holyrood site chosen for the Parliament (although any city centre site would have similar problems).

Already residential prices in the city are amongst the highest in Scotland and the increased incomes and employment, plus some increase in 'weekday' accommodation for Parliamentarians etc. should raise prices further. The impacts near the Parliament and in the city centre are likely to be greatest and this may result in many low income residents (including the large student population) having to move from these areas, but also more generally higher property prices may lead to labour market pressures (in terms of difficulties in attracting people to the area and higher wage demands). However, other factors affecting property prices are likely to be much more important. Also Edinburgh is by no means a 'closed economy' and it is likely that higher prices may result in greater commuting.

As with the multiplier effects, displacement effects will be dynamic and change over time. However, within Edinburgh there may also be displacement as some organisations move out due to higher rents, congestion, difficulty or expense in staffing - which may benefit some other areas unless the organisations contract or close. Harris *et al.* (1987) found that the growth of the oil sector in Aberdeen led to displacement (of jobs in other sectors) and deterrence (i.e. firms not coming to the city due to the impacts of the oil company growth on labour and property prices etc.) effects of 8 jobs lost in the non-oil sectors for every 100 jobs created in the oil sector. These effects will depend upon the demands and characteristics of the relevant industries and the characteristics and responses of the local economy. In the case of the Parliament, the opening of development opportunities (near the Parliament but

also in the wider city and surrounding areas) by the City Council, the responses of the labour market (e.g. through training schemes for lower skilled jobs and the attraction of new workers or retention of graduates for higher skilled jobs) will influence the impacts.

Displacement effects are particularly important for the rest of Scotland. Expenditure on the Parliament and any additional support for local authorities may result in lower government expenditure in other parts of Scotland. Indeed if the Parliament is funded from areas employing staff with a high propensity to spend (e.g. low paid NHS workers) then the multiplier effects could be lower than for these alternatives. In such a case if expenditure on the Parliament is substituted totally for expenditure elsewhere (as it will be if the promises of the tax raising powers are not used during the first Parliament as promised by the main political parties and debt is not increased) there could be a decline in total jobs (as higher paid MSPs and officials replace lower paid workers elsewhere, who also have a higher propensity to spend).

To illustrate the scale, a senior official or MSP on a salary of £43,000 is equivalent to three fully qualified Grade D registered nurses near the top of their pay scale. Of course countering this, the Parliament may increase overall economic growth and GDP but that is a different issue from that discussed in this paper. Also the transfer of some lobbying, media etc. jobs based elsewhere in Scotland represent displacement.

This is not to argue that MSPs or staff at the Parliament should be poorly paid. Their costs are a legitimate cost of democracy. It does, however, indicate that there will be real costs to the whole of the country and that the Parliament should seek to redistribute the benefits of the Parliament across the country where possible and practical (see below), and it should seek to improve the development of the country beyond that which would occur without its existence. Of course, efficiencies that could be gained even without the Parliament could not reasonably be counted as 'covering' the costs of the Parliament and any associated displacement effects.

In summary, a range of industries will be significantly affected directly or indirectly, although the impacts will depend upon the time and spatial scales chosen for analysis, and the policies of the Parliament, local government and firms.

4. Ways to spread the benefits

In the context of this paper, the employment and expenditure benefits of the Parliament could potentially be spread by: ensuring easy access to information and dialogue with the Parliament for all parts of Scotland (where possible without having to travel to the Parliament); easing access for those from other parts of Scotland who need to visit or work at or near the Parliament; decentralising civil servant posts; and supporting the potential development of wider economy.

Why develop policies to spread the benefits beyond Edinburgh?

Before discussing ways of spreading the impact of the Parliament to other parts of Scotland, it is worth asking why this should be considered. The first reason is that Edinburgh is one of the most prosperous local economies in Scotland, and has a per capita GDP 10% above the UK average. Although there are difficulties with the definitions of unemployment in official statistics, the percentage unemployed (unadjusted claimant count, January 1998) in the Edinburgh TTWA was only 4.1% of the workforce, well below the 6.2% figure for Scotland as a whole and 6.8% in Glasgow. So on equity grounds other parts of the country should benefit where possible. On efficiency grounds the Edinburgh local economy may 'overheat' leading to difficulties getting suitable employees for all organisations in or near the city, congestion and inflationary pressures etc.

The scope for those outside Edinburgh and its contiguous areas to take up the new employment opportunities by commuting are limited, unless there are improvements in infrastructure and services. Edinburgh has a high level of commuting with a third (69,400) of all employees (215,470) commuting into Edinburgh (1991 Census - table

6). However, the vast majority of these (32,190) come from the three surrounding Council areas in the former Lothian Region and a further 7,390 from neighbouring Fife (note that their boundaries did not change during local government re-organisation in the 1990s). So only 12,050 of Edinburgh employees (5.6% of the total) came from elsewhere in Scotland, including 1,110 from Glasgow. Hence the great majority of new employment opportunities resulting from the new Parliament are likely to remain in Edinburgh and contiguous areas.

Some of the jobs resulting from the Parliament will be for self-employed people. There are even fewer (490 or 4.8%) of the 10,230 self-employed currently commuting from outside Edinburgh and its contiguous areas, with 80% of the total living and working in the city. So again the benefits are unlikely to be spread widely.

However, there are a number of barriers to spreading the benefits of the Parliament beyond Edinburgh City and its travel-to-work area. In the case of decentralising more government employment, potential barriers include the implications for efficiency of administration and difficulties of interactions between the networks of public bodies and government departments and others. Also the equity arguments are not all 'one-sided' as there are parts of Edinburgh and surrounding areas with significant unemployment and it is important to integration disadvantaged groups in these areas who are sometimes on the margins of the economy. There is also a danger of reducing the wider agglomeration effects on the economy if there are major relocations of civil servants from Edinburgh.

The debate over benefits should not be seen as 'Edinburgh' versus the rest of Scotland fight for 'zero sum game' of expenditure or jobs. The impact of the Parliament should be seen as a means of expanding the economy of the entire region, so policies to spread the impacts reinforce other policies to promote the development of Scotland as a whole. Indeed, a parochial parliament more concerned with one geographical area or group fighting against another could be greatly damaging to the whole of Scotland.

TABLE 6: TRAVEL TO WORK OF ALL EMPLOYEES - EDINBURGH 1991

ORIGIN:	Employees	Self- employed	Total
Edinburgh	146,070	8,140	154,210
East Lothian	13,480	440	13,920
Mid Lothian	16,890	430	17,320
West Lothian	18,220	440	18,660
Fife	7,390	240	7,630
Central	3,980	120	4,100
Borders	1,990	120	2,110
Glasgow	1,110	60	1,170
Rest of Strathclyde	3,250	110	3,360
Rest of Scotland	1,720	80	1,800
England and Wales	950	40	990
Outside UK/Offshore	420	10	430
TOTAL	215,470	10,230	225,700

Source: Census of Population, 1991. Areas are based upon local authority boundaries.

Figures have been grossed up from the 10% sample.

How to spread the benefits.

The first issue in spreading the benefits of the Parliament is how to reduce the 'drag of distance', whereby those located outside the city may be at a disadvantage. Questions of physical infrastructure, organisational structures and public policies need to be dealt with. This may be done through improved communications (both physical such as rail and bus links and information technology) from the Parliament and civil service to businesses, households and others throughout Scotland. The choice of a site relatively close to the city centre and the main rail station should aid this to some degree, although the transportation links for the specific Holyrood site chosen will need major improvement both in local terms and in access to the rest of the country.

Information technology presents considerable scope for improvement. To indicate the scale of improvements required, the internet capability from houses and offices in most of Scotland is limited. Even in small US States such as West Virginia new infrastructure investment is rapidly increasing the capacity and characteristics of information technology links. There the speed of downloading a 17 volume encyclopaedia is expected to fall from around 28 hours to 13 seconds based upon new infrastructure. Such technological networks need to be supplemented by other institutional and policy support so that the benefits are reaped by all parts of society and the economy. For instance the growth of networks of small firms can be aided by such policies and support from economic development agencies such as Local Enterprise Companies and others.

Organisational issues may also be important. For example the Parliament could hold some meetings (e.g. Committee meetings) outside Edinburgh and could organise the Parliamentary day and week to suit those having to travel to the city and to restrict the number of visits and amount of time having to be spent there. Also Committees could be held in other cities, or even permanently based there.

The second issue is whether many more civil servants can be decentralised from Edinburgh. As noted above there are a number of large UK civil service jobs carried

out throughout Scotland, but those most directly related to (and controlled by) the Scottish Parliament and also many Quangos are concentrated in Edinburgh. The Hardman Report (1973) considered decentralising civil service jobs from London and some of the issues remain similar. The potential benefits include reduced congestion (although clearly the congestion etc. costs in London cited by Hardman may have been greater), easier access to labour and lower labour costs such as labour turnover, property cost savings, greater effectiveness by being close to the issues they are dealing with, etc. There are the usual problems of decentralisation in terms of communications, travel costs (especially time), shared facilities with other departments, the need to be close to decision makers etc. and the possibility of losing economies of scale in services (see McQuaid, 1993, for a discussion relating to economies of scale).

However, most of the Scottish population are roughly an hour and a half's travel from the Parliament (particularly as it is relatively close to the main rail station), so there should be scope for dispersal of more jobs at all levels (and not just support or clerical jobs). Suitable planning of working days by the Parliament (for the benefit of MSPs) should also help this process as attendance in Edinburgh by officials can be more effectively planned. This may also mean a network organisational structure for the civil service, at least in location and communication terms. This may include sub-regional centres outside Edinburgh, possibly based upon more appropriate locations for the specific functions (e.g. in terms of precedence, the former government Industry Department was located in the main industrial city of Glasgow).

Third, purchasing policies of the new Parliament should also seek to ensure that there is no local geographical bias. This requires mechanisms for firms throughout Scotland to have equal access to tender information and not to be put at a disadvantage due to geography. Even the European Commission can be parochial and has been accused of geographical bias when seeking tenders in 1996 for MEP offices with 22 of 46 'invited' firms being based in Belgium. However, procurement of all government departments, not just the Parliament, should seek to support the long term competitiveness of regional or UK firms (e.g. Porter, 1990 considered how the national health service in Denmark supported innovative products and treatments through support for testing).

The first major contracts will be the construction of the new Parliament buildings and firms gaining this and the location of their workforces will be important. In the longer term great efforts must be made to ensure that suppliers of goods and services, including specialist legal or financial advice etc., from throughout Scotland are given equal opportunities. This should involve the monitoring of the location of firms and the workforce carrying out contracts and ensuring that formal and informal information on tendering is equally available to all.

Finally, it is crucial that the many impacts upon the wider economy are spread throughout Scotland through firms, support agencies etc. seeking to grasp the opportunities presented. Greater tourism and media interest in Edinburgh will present opportunities for other areas to build upon. The Parliament may raise Edinburgh's (and Scotland's) profile as an attractive European city for new firms and workers, in addition to helping the retention of existing workers (partly through reducing out-migration) and the development of existing firms. It is strongly in the interest of all of Scotland for these wider economic impacts to be developed, even if most were located in or near the city, as these in themselves will increase the market for other Scottish firms. Edinburgh needs to be seen as a part of the wider Scottish (or at least Central Scotland) economy, rather than as a self-contained entity. Hence, reducing development opportunities in Edinburgh may reduce overall development in Scotland as a whole. The higher international profile of Scotland and Edinburgh, and the possible increase in consulates, may further help increase international trade for firms across the country.

At the micro-level, it will also be important for Edinburgh itself to maximise the opportunities to revitalise areas of the town, and to use the increased demand for offices, restaurants etc. to upgrade the quality of development and the environment in different parts of the city. As discussed earlier, effort will also be needed to ensure that all residents in and around the city get access to the new employment opportunities that will arise.

5. Conclusion

This paper has considered the wide range of impacts of the Scottish Parliament upon the local economy in Edinburgh. The positive impacts, particularly direct and indirect employment and expenditure, have been discussed and should be relatively significant to the local area, although more research will need to be carried out to identify the issues more clearly and accurately. There will also be some of the negative issues of congestion, labour market pressure, rising house prices, and displacement of employment elsewhere etc. The current geographical distribution of civil service and Quango employment was analysed and Edinburgh appears to be over represented, although by less than first appears when only Scottish Office jobs are considered. Further analysis will need to be carried out on this issue. The actual impact of the Parliament will also depend on the wider policies of the Parliament itself as different taxes etc. may lead to different growth rates in employment, property prices etc.

Some ways in which the employment and expenditure benefits of the Parliament could potentially be spread across Scotland were considered, particularly by ensuring easy access to information and dialogue with the Parliament from all parts of Scotland, easing access for those from other parts of Scotland who need to visit or work at or near the Parliament, by decentralising civil service and Quango posts (including higher level posts), and supporting the potential development of wider economy. This will require greater transport and information technology infrastructure, organisational change and a responsive organisation of the operation of the Parliamentary and the full costs as well as benefits need to be considered. A positive scenario would be for the Parliament to act as catalyst to increased wider economic and social development across Scotland.

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