MEASUREMENT OF THE WORLD CITY NETWORK

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This measurement exercise uses a specification of the world city network as an 'interlocking network' described in Taylor (2001). This defines a three-level structure with a sub-nodal level added to the two levels of node and system that normally define a network. The new specification is an unusual network order not least because it is the sub–nodal level, in the form of a myriad of global service firms, that creates the contemporary world city network. Here we describe how this specification is operationalised.

Operationalizing means finding information to convert into data from which measurements can be derived. In this case all three stages are made difficult because of the particular focus upon the activities of large numbers of private firms. Most macro-urban research has relied upon readily accessible public data, notably from censuses, for their large-scale analyses of urban patterns. Unfortunately, the sort of material available from such sources has little or no utility for investigating inter-city relations within a network. New data are required and have to be produced. The specification is clear on these data needs. The starting point for world city network analysis is a matrix \mathbf{V} where v_{ij} is the 'service value' provided by firm j in city i (Taylor, 2001, page 186). Here we describe the production of just such a data set covering 100 firms and 316 cities.

The argument proceeds in two stages. First, the process of gathering the appropriate information is described. The method employed is described as 'scavenging' since any information that can inform the data needs is recorded. Second, the conversion of this multifarious information into comparable data across firms is described. The data is produced by devising a uniform scale of service value that is then applied separately to the specific information gathered on each firm.

Information gathering

Without recourse to reliance on public data, the specific collection of a large quantity of information on private corporations is fraught with difficulty. The most obvious problem is confidentiality since, as a general rule, no corporation wants to reveal its strategies, including location decisions, to its competitors. However, advanced producer service firms are the focus of the information gathering here and they depart from this rule in one crucial respect. These firms provide knowledge-based (expert/profession) services to other corporations to facilitate their business activities. Such corporate service firms have benefited immensely from the technological advances in computing and communications that have allowed them to broaden the geographical distribution of their service provision. For instance, law firms have been traditionally associated with a particular city and its local client base – a 'New York law firm', a 'Boston law firm' and so on – but under conditions of contemporary globalization a few firms

have chosen to pursue a strategy of providing legal services across the world. In such a situation, locational strategy is an integral part of the firm's public marketing and recruitment policies. For instance, new potential clients from around the world will want to know the geographical range of the services on offer. Also, since these are knowledge-based firms, a global scope is very obviously an important advantage in signing up the best of the next generation of key workers. Hence among producer service firms, locational strategy is perforce quite transparent. Typically the web sites of such firms provide an option to select 'location' giving addresses of offices, often with a world map of their distribution to emphasis their global presence. Advantage is taken of this transparency for information gathering.

The starting point is to find basic information on where major service firms are present in order to select those firms pursuing a global strategy. Using experience from previous experiments in this field, a firm is deemed to be pursuing a global locational strategy when it has offices in at least 15 different cities including one or more cities in each of the prime globalization arenas: northern America, western Europe and Pacific Asia (as identified in Beaverstock <u>et al.</u> 1999a and 2000). Having met this condition, selection of firms is quite pragmatic. Starting with rankings showing the top firms in different sectors, firms are selected on the basis of the availability of information on their office network. In addition, since one obvious research interest is comparison across different service sectors, firms are only included in the data in sectors for which at least ten firms can be identified. Using these criteria, 18 accountancy firms, 15 advertising firms, 23 banking/finance firms, 11 insurance firms, 16 law firms, and 17 management consultancy firms have been selected. These constitute the "GaWC 100", the global service firms at the heart of this research exercise.

Although the starting point is firms, the information collected defines networks. Many global service firms exist as 'groups'. For instance, in accountancy there are alliances of medium-sized firms constituted as networks in order to compete globally with the very large firms that lead this sector. In other sectors, take-over activity has led to a corporate structure of core firm plus subsidiaries with the latter providing distinctive services as an additional dimension to the main service provision, for instance, as the investment arm of a mainstream bank. Sometimes the latter structure straddles the sector boundary such as banks owning insurance companies. Such firms are treated here as a single network and allocated to the core company's sector. Basically the networks are defined by the world-wide service contacts provided for clients on a firm's web site. Thus the GaWC 100 constitutes a large sample of global service networks.

A few of the larger firms have branches in many hundreds, even thousands, of cities and towns. The data collection has been restricted to the more important cities for two reasons. The first is analytical: the more cities included the more sparse the final matrix will become with nearly all the GaWC 100 networks not present in the smaller cities and towns. The second is theoretical: the interest is in the more important inter-city relations, ultimately the world city network. Nevertheless, it is also important not to omit any possible significant node in the world city network so that a relatively large number of cities need to be selected. Additionally, it is necessary to ensure that all continents are reasonably represented. The final selection of cities is based upon previous experiments and includes the capital cities of all but the smallest states plus numerous other cities of economic importance. The resulting set consists of 316 cities. It is these cities that are used in recording information on the global service networks of firms.

Selecting firms and cities is relatively straightforward, problems arise when attempts are made to gather information on the importance of a given city to a firm's global service provision. There is no simple, consistent set of information available across firms. The prime sources of information are web sites and everyone is different among the 100 firms. It is necessary to scavenge all possible relevant available information, firm by firm, from these sites supplemented by material from any other sources available such as annual reports. For each firm, two types of information have been gathered. First, information about the size of a firm's presence in a city is obtained. Ideally, information on the number of professional practitioners listed as working in the firm's office in a given city is needed. Such information is widely available for law firms but is relatively uncommon in other sectors. Here other information has to be used such as the number of offices the firm has in a city. Second, the extra-locational functions of a firm's office in a city are recorded. Headquarter functions are the obvious example but other features like subsidiary HQs and regional offices are recorded. Any information that informs these two features of a firm's presence in a city is collected in this scavenger method of information gathering. The end result is that for each of the 100 firms, information is available to create service values in each of 316 cities.

Data production

The problem with the scavenger method is that the type and amount of information varies immensely across the firms. For instance, some firms have geographical jurisdictions of offices that are 'regional' (transnational) in scope, others have 'national offices, or there may be 'area offices' or 'division offices' with wide variation in the geographical meaning of each category. In addition, many firms will have no specified geographical jurisdictions for any of their offices. Some information is quite straightforward as when a hierarchical arrangement is shown through contact with an office being routed through an office in another city. But it is more common to find a confusing range of information indicating the special importance of an office. Here is a list of some such designations: 'key offices', 'main branches', 'global offices', 'international offices', 'hub offices', 'major operation offices', 'competence centres' (for a given function), 'asset management centers', 'global investment service centers', offices with 'international trade contacts' or simply with 'international contacts', offices for 'multinational corporate customers', offices housing 'senior managers' or 'senior partners', and offices of 'core firms' within alliances. This is a rich vein of information but much work is required to convert it into usable data to compare firms across cities.

In conversion from information to data there is always a tension between keeping as much of the original material as possible and creating a credible ordering that accommodates all degrees of information across cases. In this exercise, there is very detailed information for some firms and much less for others. This tension is resolved here by devising a relatively simple scoring system to accommodate the multifarious information gathered. A six-point scale is used where two levels are automatically given: obviously zero is scored where there is no presence of a firm in a city, and 5 is scored for the city that houses a firm's headquarters. Hence decision making on scoring focuses upon allocating the middle four scores (1, 2, 3, and 4) to describe the service value of a

firm in a city. This means that for each firm three boundary lines have to be specified: between 1 and 2, 2 and 3, and 3 and 4.

The basic strategy of allocation is to begin with the assumption that all cities with a non-HQ presence of a firm score 2. This score represents the 'normal' or typical' service level of the given firm in a city. To determine such normality requires inspection of the distribution of information across all cities for that firm. To alter this score there has to be a specific reason. For instance, a city where contact with its office is referred elsewhere will be scored 1 for that firm. In other firms where there is full information on numbers of practitioners, a city with an office showing very few (perhaps none) professional practitioners would also score 1. The point is that the boundary between 1 and 2 will differ across firms depending on information available. The same is true of the other boundaries. Generally, the boundary between 2 and 3 has been based upon size factors, and that between 3 and 4 on extra-territorial factors. For instance, exceptionally large offices with many practitioners will lead to a city scoring 3 while location of regional headquarters will lead to a city scoring 4. In practice, size and extra-territorial information have been mixed where possible in deciding on the boundaries for each firm. The end result is the service value matrix **V**, a 316 x 100 data array with v_{ij} ranging from 0 to 5.

How credible are these data? They are far from perfect largely dependent as they are on what information is available on web sites. But the key issue is the subjectivity inherent in the process of this data creation: the resulting data do not have the key property of inter-subjectivity. That is to say, two people using the same information will not always decide on the same boundaries. Given the nature of the information this is inevitable. One fundamental question arises. Does this issue lead to so much uncertainty in the data that the exercise is irredeemably flawed? There are two answers to counter this concern. First, the means of scoring has been designed to be as simple as possible, pivoting on '2 as normal' and with decision making limited to just three boundaries. Second, the exercise is carried out over a large number of firms so that particular differences will likely be ironed out in the aggregate analyses that the data are designed for. Ultimately, like all data production, the value of this output is to be found in the credibility of results derived from them.

References

Beaverstock. J. V., Smith, R. G. and Taylor, P. J., 1999, "The long arm of the law: London's law firms in a globalising world economy" <u>Environment and Planning A</u> **31** 1857-76

Beaverstock. J. V., Smith, R. G. and Taylor, P. J., 2000, "Geographies of globalization: United States law firms in world cities" <u>Urban Geography</u> **21** 95-120

Taylor, P. J., 2001, "Specification of the world city network". Geographical Analysis 33 181-94

Principles of city grading

This is the grading of a CITY by its IMPORTANCE in a FIRM's overall GLOBAL strategy

<u>6 –point scale</u>:

 $\mathbf{0}$ = no presence in the city

1 = no office but evidence of some activity (e.g. association, agent for claims)

2 = basic office provision in the city (a firm's 'normal' city provision)

3 = additional office provision (e.g. large size of office, large number of offices)

4 = major office provision (this is usually indicated by extra-locational responsibilities of an office)

5 = outstanding office provision (usually HQ plus very important regional and functional centres).

The <u>GaWC</u> 100

ACCOUNTANCY

1	В	Ernst & Young
2	С	Arthur Andersen
3	D	Macintyre Strater International (MSI)
4	Е	IGAF
5	F	AGN Network
6	G	BDO
7	Η	Grant Thornton International
8	Ι	Horwath International
9	J	KPMG
10	Κ	Summit International + Baker Tilly
11	L	RSMi
12	Μ	Moores Rowland International
13	Ν	HLB International
14	Ο	Moore Stephens International Network
15	Р	Nexia International
16	Q	PKF International Association
17	R	Fudicial International
18	S	PricewaterhouseCoopers

ADVERTISING

- 19 T Impiric
- 20 U TMP
- 21 V Hakuhodo
- 22 W Draft Worldwide
- 23 X Densu Young and Rubicon + Young and Rubicon
- 24 Y D'Arcy
- 25 Z FCB
- 26 AA Satchi and Satchi
- 27 AB Ogilvy
- 28 AC BBDO Network
- 29 AD McCann-Erickson WorldGroup
- 30 AE J Walter Thompson
- 31 AF Euro RSC6
- 32 AG CMG (Carlson Marketing Group)
- 33 AH Asatsu DK

BANKING/FINANCE

- 34 AI WestLB (Westdeutche Landesbank Gironentrale)
- 35 AJ Dresdner Bank
- 36 AK Commerzbank
- 37 AL Deutche Bank
- 38 AM Chase
- 39 AN BNP Paribus
- 40 AO ABN-AMRO
- 41 AP Rabobank International
- 42 AQ UBS
- 43 AR ING
- 44 AS Barclays
- 45 AT Fuji Bank
- 46 AU Bayerische HypoVereinsbank
- 47 AV Bayerische Landesbank Girozentral
- 48 AW Sakura Bank
- 49 AX Sumitomo Bank
- 50 AY Sanwa
- 51 AZ J P Morgan
- 52 BA BTM (Bank of Tokyo-Mitsubishi)
- 53 BB DKB (Dai-Ichi Kangyo Bank)
- 54 BC HSBC
- 55 BD Citibank
- 56 BE Credit Suisse/First Boston

INSURANCE

- 57 BF Allianz Group
- 58 BG Skandia Group
- 59 BH Chubb Group
- 60 BI Prudential
- 61 BJ Reliance Group Holdings
- 62 BK Winterthur
- 63 BL Fortis
- 64 BM CGNU
- 65 BN Liberty Mutual
- 66 BO Royal and SunAlliance
- 67 BP Lloyd's

LAW

- 68 BQ Latham and Watkins
- 69 BR Morgan Lewis
- 70 BS Baker and McKenzie
- 71 BT Clifford Chance
- 72 BU Jones Day
- 73 BV Freshfields Bruickhaus Deringer
- 74 BW Allen and Overy
- 75 BX Dorsey and Whitney
- 76 BY Linklaters Alliance
- 77 BZ White and Case
- 78 CA Cameron McKenna
- 79 CB Morrison and Foerster
- 80 CC Lovells
- 81 CD Skadden, Arps, Slate, Measher, and Flom
- 82 CE Sidley and Austin
- 83 CF Coudert Brothers

MANAGEMENT CONSULTANCY

- 84 CG Towers Perrin
- 85 CH Logica Consulting
- 86 CI Watson Wyatt
- 87 CJ Sema Group
- 88 CK CSC
- 89 CL Hewitt Associates
- 90 CM IBM Worldwide
- 91 CN Mercer Management Consulting
- 92 CO Boston Consulting Group
- 93 CP Deloitte Touche Tohmatsu
- 94 CQ Booze.Allen & Hamilton
- 95 CR A.T.Kearney
- 96 CS McKinsey
- 97 CT Bain & Company
- 98 CU Compass
- 99 CV Andersen Consulting
- 100 CW Gemini Consulting/Cap Gemini (Ernst & Young)

ACCOUNTANCY/BOUNDARIES

A = Ernst & Young

5 – Global HQ

4 – x

3-3 or more offices OR extra-locational functions

2 – all other offices except those with reference to elsewhere

1 – offices with reference to elsewhere

B = Arthur Andersen

5 - Worldwide HQ
4 - x
3 -more than one office OR extra-locational functions
2 - all other offices
1 - x

C = <u>Macintyre Strater International</u>

5 - HQ 4 - x 3 - more than one office 2 - all other offices1 - x

D = <u>IGAF (International Group of Accounting Firms)</u>

5 - HQ

4 - x

3 - more than one office OR office with named partner/practioner

2 - all other offices

1 - x

E = <u>AGN International</u>

5 – HQ

- 4 more than 15 partners
- 3 North American HQ and 8-14 partners
- 2-other offices with partners
- 1 all other offices (including refer elsewhere and extra offices found on web)

F = <u>BDO International</u>

5 - International office

4 – Regional offices

3 – more than one office OR office with more than one named contact OR extra-locational functions

2 - all other offices except those with references to elsewhere

1 - offices with reference to elsewhere

G = Grant Thornton International

5 - HQ

4 – Divisional offices

3 – more than one office with international contact

2 - one office with international contact offices with

1 - office without international contact

H = <u>Horwath International</u>

5 - HQ

4 – Regional offices

3-3 or more offices OR extra-locational functions

2 – one or two offices

1 - x

I = KPMG

5 – International HQ

4 - Regional HQs OR Global HQs for sections OR offices with more than 50 practioners3 - 3 or more offices OR more than 10 practitioners OR extra-locational functions (including Japanese practice)

2 - all other offices

1 - x

J = <u>Summit International + Baker Tilly</u>

5 – HQ

- 4-over 100 practitioners
- 3 0ver 20 practitioners
- 2 all other offices

 $K = \underline{RSM International}$

5 - HQ4 - 3 or more offices AND core firm 3 - 3 or more offices OR core firm 2 - one or two offices 1 - x

L = <u>Moores Rowland International</u>

5 – HQ

4-20 or more partners

3 - 10-19 partners

2 – other offices with partners

1 – all other offices (including refer elsewhere and extra offices found on web)

M = HLB International

5 - HQ

4 - more than 20 practitioners AND international contact partner

3-3 or more offices OR 10 or more practitioners OR international contact partner OR extra-locational functions

2 - all other offices

1 - x

N = Moore Stephens International

5 - HQ

- 4 Regional offices
- 3 more than one office
- 2 one office

1 - x

O = <u>Nexia International</u>

- 5 HQ
- 4 x
- 3 more than one office
- 2 one office
- 1 x

P = <u>PKF International</u>

5 - HQ 4 - x 3 - more than one office 2 - one office1 - x

Q = <u>Fiducial International</u>

5 – International Central Office 4 – 10 or more offices 3 – 2 – 9 offices 2 - one office

1 - x

R = <u>PricewaterhouseCoopers</u>

5 - HQ

4 - 10 or more offices

3-5-9 offices OR extra-locational functions

2 - all other offices except those with reference to elsewhere

1 – offices with reference to elsewhere

ADVERTIZING/BOUNDARIES

A = Impiric

5 – Worldwide HQ 4 – Regional HQs 3 – 3 or more offices 2 – all other offices 1 - x B = <u>TMP Worldwide</u>

5-Global HQ

- 4 Regional HQs
- 3 -more offices than one office
- $2-one \ office$

1 – x

C = Hakuhodo Inc.

- 5 Head Office
- 4 x
- 3 more than one office
- 2 one office

1 - x

D = Draft Worldwide

5 – HQ

- 4 x
- 3 more than one office/twin company OR link from elsewhere
- 2 one office
- 1 link to elsewhere

E =<u>Young and Rubicon Inc.</u>

- 5 HQs
- 4 Regional HQs
- 3 more than one office
- 2 one office

F = D'Arcy Masius Benton & Bowles

- 5 HQ
- 4 3 offices
- 3-2 offices
- $2-one \ office$
- 1 x

G = FCB

5 - HQ

- 4 Regional HQ
- 3 designated 'key office' OR designated site for 'major operations'
- 2 all other offices

1 - x

H = Satchi and Satchi

- 5-HQ and 'worldwide regional centre'
- 4 Regional centres
- 3 x
- 2 one office
- 1 x

I = <u>Ogilvy & Mather Worldwide Inc</u>.

- 5 HQ
- 4 x
- 3 more than one office
- 2 one office
- 1 x

J = <u>BBDO Worldwide</u>

- $5 \mathrm{HQ}$
- 4 Regional centres OR more than 10 offices
- 3 3 to 9 offices
- 2 one or two offices
- 1 x
- K = <u>McCann-Erickson WorldGroup</u>
- 5 HQ
- 4 Regional HQs OR more than 5 offices
- 3 Area HQs OR 2, 3 or 4 offices
- $2-one \ office$
- 1 x

L = J Walter Thompson

- 5 HQ
- 4 Regional HQ OR 4 or more offices
- 3-2 or 3 offices
- 2 one office
- 1 x

M = Euro RSC6

5 – HQ 4 – 4 or more offices 3 – 2 or 3 offices OR represents region

2 - one office

1 - x

N = <u>CMG (Carlson Marketing Group)</u>

- 5 World HQ
- 4 x
- 3 more than one office
- 2 one office
- 1 x

O = Asatsu DK

- $5-\mathrm{HQ}$
- 4-4 or more offices/business partners
- 3-2 or 3 office/business partners
- 2 one office/business partner

BANKING/FINANCE - BOUNDARIES

A = <u>WestLB (Westdeutche Landesbank Gironzentrale)</u>

5 - HQ

- 4 competence centres for global structured finance OR Regional HQ
- 3-2 or more branches/subsidiaries OR key contacts for gsf OR 50 or more practitioners
- 2 one branch/subsidiary OR one or more representative offices
- 1 contacts only

 $B = \underline{Dresdner Bank}$

5 - HQ

- 4 asset management centres
- 3 more than one office OR 20 or more branches (Germany)
- 2 one office OR less than 10 branches (Germany)

1 - x

C = Commerzbank

5 - HQ

- 4 other global functions
- 3 more than one office OR 20 or more branches (Germany) OF elf
- 2 one office OR less than 20 branches (Germany)

1 - x

 $D = \underline{Deutche Bank}$

5 – HQ

- 4 Regional HQs or 20 or more offices (100 or more offices for Germany)
- 3-5 or more offices (25 or more offices for Germany)
- 2-all other office locations

1 - x

E = Chase Hambrecht & Quist

- 5 World HQ
- 4 Regional HQ OR Chase Global Investment Services
- 3 two offices
- 2 one office

F = BNP Paribus 5 - HQ4-5 or more offices OR Regional HQ 3-3 or 4 offices OR subsidiary HQ 2 -one or 2offices 1 - x G = ABN-AMRO Holding NV5 - HQ4-20 or more offices 3-5 to 19 offices 2 -one to 4 offices 1 - x H = Credit Suisse First Boston 5 – Worldwide HQs 4 - x3 - x2 - presence1 - xI = <u>Rabobank International</u> 5 – Worldwide HQ 4 – Global research centre 3 -more than one office OR 10 or more contacts 2 - all other offices1 - xJ = UBS AG5 - HQ4 - x3 – more than one office OR Asset Management Contact Office 2 - all other offices1 - x K = ING Bank5 - HQ4 - 10 or more offices 3-5 to 9 offices 2 -one to 4 offices

L = Barclays

- 5 Corporate HQ
- 4 Regional HQs
- 3 offices designated 'global' OR subsidiary HQ
- 2 all other offices
- 1 x

M = <u>Fuji Bank</u>

5 – HQ

- 4 more than one 'functional' centre
- 3-two or more offices OR one functional centres
- 2 one office

1 - x

N = <u>Bayerische HypoVereinsbank</u>

5 - HQ4 - 50 or more offices 3 - 10 to 49 offices

2 -under 10 offices

1 - x

O = <u>Bayerische Landesbank Girozentral</u>

- 5 HQ
- 4 x
- 3 more than one office
- 2 -one office
- 1 x

P = SDI (Sakura + Dellsher Bank)

- 5 HQ
- 4 x
- 3 more than one office
- 2 one office
- 1 x

Q = <u>Sumitomo Bank</u>

5 – HQs

- 4 Regional HQs
- 3 designated main branches and main representative offices
- 2 all other offices

R = Sanwa

- 5 HQ
- 4-5 or more offices
- 3 3 or 4 offices
- 2 one or two offices
- 1 x

S = J P Morgan

5 - HQ

- 4 divisional centres OR 7 or more firms represented
- 3-3 to 6 firms represented
- $2-all \ other \ offices$
- 1 x

T = <u>Bank of Tokyo-Mitsubishi</u>

5 – HQ

- 4 US HQ OR 4 or more offices
- 3-2 or 3 offices
- $2-all \ other \ offices$
- 1 x

U = <u>Dai-Ichi Kangyo Bank</u>

5 – HQ

- 4-2 or more international offices
- 3 one international branch
- $2-all \ other \ offices$
- 1 x

V = HSBC

- 5 HQ
- 4-8 or more branches/contacts
- 3-2 to 7 branches/contacts
- $2-all \ other \ offices$
- 1 x

W = <u>Citigroup (Citibank + SSBCiti Asset Management)</u>

- 5 –HQ
- 4 CitiSSB Corporate Banking Regional Contacts
- 3 all offices with elfs (including Travellor's 'hubs') OR 10 or more offices/contacts
- 2 all other offices

INSURANCE/BOUNDARIES

A = <u>Allianz Group</u>

 $5 - \mathrm{HQ}$

- 4 group HQ OR Regional offices
- 3-3 or more offices
- 2 -one or 2offices

1 - x

B = <u>Skandia Group</u>

5 - HQ

- 4 Subsidiary/regional HQs 3 – 3 or more offices
- 2 -one or 2offices

1 – x

C = Chubb Group

5 – HQ 4 – regional offices 3 – more than one office 2 – one office 1 - x

D = Prudential

5 - HQ 4 - x 3 - more than one office 2 - one office1 - x

E = <u>Reliance Group Holdings</u>

5 - HQ

- 4 Regional offices OR 5 or more named contacts
- 3-all other named contacts
- 2- offices without named contact

F = Winterthur

- 5 HQ
- 4 Regional office
- 3 office for multinational corporate customers
- 2- other offices
- 1 claims agent only

G = Fortis

- 5 HQ4 - six or more offices
- 3 3 to 5 offices
- 2 -one or 2offices
- 1 x

 $H = \underline{CGNU}$

- 5 HQ
- 4 Subsidiary HQs OR US Corporate HQ
- 3-5 or more offices/named or contacts OR elf
- 2 all other offices
- 1 x

I = <u>Liberty Mutual</u>

- 5 HQ
- 4 subsidiary HQs or 15 or more offices
- 3 more than one office
- 2 one office
- 1 x

J = <u>Royal and SunAlliance</u>

- 5 Worldwide Group Offices
- 4 Regional offices OR US HQ
- 3 -more than one office
- 2 one office
- 1 x

K = Lloyd's

- 5 HQ
- 4 x
- 3 office
- 2-representative

LAW/BOUNDARIES

A = Latham and Watkins

5 - foundation and largest office

- 4 100 and over plus extra-locational functions
- 3-100 and over OR 25 and over plus extra-locational functions
- 2-all other offices

1 - x

B = Morgan Lewis

- $5-foundation \ office$
- 4-200 and over
- 3 extra-locational functionss
- $2-all \ other \ offices$

1 - x

- C = Baker and McKenzie
- 5 foundation office plus 200 and over
- 4-100 and over
- 3-50 and over
- 2-all other offices
- 1 x

D = <u>Clifford Chance</u>

- 5- foundation office and largest
- 4-200 and over OR 50 partners or more
- 3-100 and over OR international trade contact
- 2 all other offices
- 1 x

E =<u>Jones Day</u>

- 5 first office and largest
- 4-150 or over OR 100 or over plus extra-locational functions
- 3-50 or over
- 2-all other offices

F = Freshfields Bruickhaus Deringer

5 – HQ

- 4 international offices (inc. part-executive office) OR 100 or over OR 50 partners or more
- 3-50 or over OR 15 partners or more
- $2-all \ other \ offices$

1 - x

G = Allen and Overy

5 - HQ

- 4-25 partners or over
- 3-15 partners or over
- 2 other offices with partners
- 1 contacts

H = Dorsey and Whitney

5 - HQ

- 4-50 or over
- 3-25 or over
- $2-all \ other \ offices$
- 1 x

I = Linklaters - Alliance

- 5 HQ
- 4-200 and over OR extra-locational functions
- 3-50 and over
- 2-all other offices
- 1 x

J = White and Case

- $5 \mathrm{HQ}$
- 4-75 and over
- 3-50 and over OR extra-locational functions
- 2-all other offices without links to elsewhere
- 1 offices with link to elsewhere

K = <u>Cameron McKenna</u>

- 5 HQ
- 4-10 partners or more
- 3-5 partners or more
- 2 all other offices except those with links to elsewhere
- 1 offices with links to elsewhere

L = Morrison and Foerster LLP 5 - HQ4 - 100 and over 3-50 and over 2 - all other offices1 - xM = Lovells Boesebeck Droste 5 - HQ4-20 or more partners 3 - 10 or more partners 2 - all other offices1 - x N = Skadden, Arps, Slate, Measher, and Flom LLP 5 - HQ4-50 partners or more 3-25 partners or more 2 - all other offices 1 - x O = Sidley and Austin5 – first office 4 - 100 or over 3 - 20 or over 2 - all other offices1 - xP = <u>Coudert Brothers</u> 5 - HQ4 - 20 or more 3 - 10 or more 2 - all other offices 1 - x

MANAGEMENT CONSULTANCY/BOUNDARIES

$A = \underline{Towers Perrin}$

5 - HQ

- 4 Regional HQ or 4 or more offices
- 3-2 or 3 offices
- 2 one office
- 1 x

B = Logica Consulting

5 - HQ

- 4 x
- 3 more than one office
- 2 one office

1 - x

C = <u>Watson Wyatt Worldwide</u>

- 5 Corporate Office
- 4 x
- 3 more than one office
- 2 one office (not corresponding)
- 1 corresponding office only

D = <u>Sema Group</u>

- 5 Head Office
- 4 4 or more offices AND on Annual Report list
- 3 2 or 3 offices AND on Annual Report list OR local HQ
- $2-all \ other \ offices$
- 1 x

E = CSC

- 5 Global HQ
- 4 more than one Senior Manager OR latter with regional contact
- 3 one Senior Partner OR more than one office
- 2 -one office

F = Hewitt Associates 5 - HQ4 - x3 - more than one office 2 - one office1 - x G = IBM5 - HQ4 - x3 – more than one office OR regional team contact 2 – one office (not partner office) 1 – partner office only H = <u>Mercer Management Consulting</u> 5 - HQ4 - x3 -more than one office 2 - one office1 – x I = <u>Boston Consulting Group</u> 5 - HQ4 - x3 - x2 - one office1 - x J = <u>Deloitte Touche Tohmatsu</u> 5 – International HQ 4 - x3 -more than one office 2 - one office1 – associated firm K = <u>Booze</u>.Allen & Hamilton 5 – Corporate HQ 4 – Worldwide Technology HQ 3 - x2 - one office1 - x

L = A.T. Kearney 5 – Corporate HQ/World HQ 4 - x3 - x2 -one office 1 - x M = McKinsey5 - HQ4 – designated 'global office' (Business technology) 3 -more than one office 2 - one office1 - x N = Bain & Company5 - HQ4-8 or more contacts 3-5, 6 or 7 contacts2 - all other offices 1 - shared officeO = Compass5 - x (Rochester MN, not in city list) 4 - US HQ3 – more than one office OR Canada HQ 2 -one office P = Andersen Consulting 5 - HQ4 - x

- A = X
- 3 -more than one office
- 2 -one office
- 1 x

Q = Cap Gemini Consulting

5 – Head Office 4 – Regional HQ 3 – x 2 – one office 1 - x