

Assessing economic activities - an example from central business districts

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ASSESSING ECONOMIC ACTIVITIES IN AN EXAMPLE FROM CENTRAL BUSINESS DISTRICTS

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ASSESSING ECONOMIC ACTIVITIES – AN EXAMPLE FROM CENTRAL BUSINESS DISTRICTS

ABSTRACT

The Central Business District (CBD) is a dynamic part of the city that changes drastically over time, and responds to forces and demands for activities from within and from other countries. However, it is extremely difficult to quantify the various propositions put forward for measuring economic activities in the CBD due to the paucity of statistical data. Planning intervention thus becomes extremely difficult as other forces beyond the control or knowledge of the planner play crucial roles in determining what activities will locate in the CBD and where they will locate.

This study attempts to explore a view of how to measure and assess central business district economic activities for planning purposes. It follows a critical discussion of the nature of the CBD by pointing to empirical studies, including examples from the New York metropolitan region and the city of London. Moreover it discusses indicators could be used to measure and assess economic activities in the CBD by highlighting planning purposes covering the entire issue.

Key Words: Assessing Economic Activities, Central Business Districts

A. INRODUCTION

The CBD has been experiencing drastic changes in its physical structure and the economic activities taking places within it. The two leading cities of London and New York are quite different in the specialization of their CBD economic activities. Common features are that both have experienced considerable structural change away from manufacturing to service growth industries, and dispersal of manufacturing-space activities, along with the simultaneous concentration of financial and service activities within their borders. This process of simultaneous agglomeration and dispersal is a manifestation of the linkage of CBD economic activities to a global economy dominated by New York and London.

It is very difficult to measure or assess CBD economic activities successfully, since they are quite complicated and rely on many factors for which the important data is usually not available. Thus, planners have little chance of predicting the future as well. However, apparent characteristics are useful in directing planners measuring and assessing CBD economic activities for decision-making (Healey, 1997; Lee and Wills, 1997; Dunning, 1971, p.47).

Most available CBD literature is based on the fact that financial services are intangible, hence unproductive compared to manufacturing. As such, data on the CBD is not readily available and the reason given is the difficulty of measuring financial services, and the rapid changes characteristic of the CBD. Thus, the CBD poses a great many difficulties to planners whose knowledge of what is happening in the CBD is very limited. If planning intervention in the CBD is to be effective, then there is a need to know more about the physical distribution of activities and patterns of specialization, and also how these activities are linked.

More than a century ago the CBD was an area of multiple uses, residential,

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2
3
4 commercial, industrial, institutional, and financial. But with the passage of time,
5
6 overcrowding, the need for specialization, and obsolescence led first to a decline in
7
8 residential use and later to declines in manufacturing and wholesaling (Lee and Wills,
9
10 1997; Murphy, 1971). These locational changes have been evident in most cities in
11
12 the developed countries, where the CBD is now devoted to commercial banks,
13
14 insurance companies, securities dealers and brokers, savings institutions, finance
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16 companies, investment companies, clearing houses, and securities exchanges (Bishop,
17
18 2003; Williams *et al.*, 2001; Robins and Terleckyj, 1960). The spatial locations of
19
20 and linkages between these financial services have been and are still changing over
21
22 time.
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27 Contributing to these changes is the fact that CBD activities are heavily
28
29 influenced by the opening-up of economies. National and international forces
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31 shaping both the demand for goods and services and the supply of resources, combine
32
33 to determine economic activities within the CBD. The opening-up of economies
34
35 determines the patterns of physical and economic changes in the CBD.
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39 Given all these problems associated with the changing character of the CBD,
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41 planners are therefore faced with a situation in which they have to plan with scant
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43 information, but must exercise a great deal of flexibility to meet the needs of
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45 developers in the CBD. It has become apparent that the planning regulations and
46
47 standards in general use for the entire city do not particularly apply to the peculiar
48
49 nature of the CBD. The indicators that could be used to measure and assess
50
51 economic activities in the CBD and hence assist planners in decision-making are:
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53

- 54
55 a. Land-use indicators b. Economic indicators
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57 c. Transport surveys d. Communication linkages
58
59 e. Social security or human security
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These are examined in Section 2 of this paper. The third section of the paper

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3
4 places the indicators within the context of the city of London and the New York
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6 Metropolitan Region. This brief historical review of the two CBDs highlights the
7
8 changing nature of the CBD, and some of the factors which, although not quantifiable
9
10 (hence not normally considered by planners), determine locational decisions by most
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12 firms within the CBD. The role of government policy in shaping the CBD, and the
13
14 conflict between market forces and planning intervention are also considered.
15
16
17 Section 4 gives concluding remarks.
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19

20 21 22 **B. MEASURING ECONOMIC ACTIVITIES IN THE CBD**

23 24 **a. Land-use indicators**

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26 The main determinant of locational decisions in the CBD is land price as
27
28 compared to planning intervention. Thus, information on the use of land, territorial
29
30 specialization, and the interactions in space among the various activities is crucial for
31
32 the planner. Unfortunately, such information is usually difficult to capture.
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35 36 *i. Rateable values/rents*

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38 Due to the rising demand in the CBD, the general trend has been that rateable
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40 values in the city center rise faster than those in the rest of the city. High land prices
41
42 determine which users will locate where, and its only those that can afford the high
43
44 costs of land remain in the CBD. This explains why the residential function of the
45
46 CBD has declined rapidly and office activities have taken over. Knowledge of
47
48 rateable value trends enables the planner to assess which activities should be allowed
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50 to locate given their output. Unfortunately, data on output is never available to the
51
52 planner, which makes use of this indicator difficult.
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56 57 *ii. Floor space*

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59 Data on floor space can be captured through land-use surveys. These surveys
60
also assist planners in keeping records on land banks, and changes in floor space

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4 coverage trends by various activities enable planners to determine which uses are
5 dominating which parts of the CBD. The general trend in most CBDs has been that
6 the percentage of floor space occupied by manufacturing and wholesaling has been
7 declining relative to that occupied by financial services. Manufacturing floor space
8 has declined because manufacturing services require larger spaces for their operations
9 than financial services, which explains why the CBD is characterized by skyscrapers
10 that can accommodate as many office activities as possible. The significance of this
11 to planning is in the regulations controlling building heights. Without extending the
12 boundaries of the CBD the only way planners can accommodate the increasing
13 demand for space is by increasing building heights.
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27 Williams *et al.* (2001), O’Sullivan (2000), and Dunning and Morgan (1971, p.31)
28 noted about the city of London that “In 1939, office accommodation accounted for 45
29 percent of the floor space of the city, by 1957, this had risen to 59 percent, and by
30 1968 to 62 percent. By contrast the floor space occupied by warehousing and
31 industry has fallen dramatically, in both absolute and relative terms. In 1939, these
32 activities were spread over an estimated 32 million sq. ft., or 38 percent of the total
33 floor space in the city, and by 1968, this area had more than halved to 15.5 million sq.
34 ft., that is, just over one fifth of the floor space”.

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46 Although land-use surveys are difficult to carry out regularly, they are also useful
47 in assessing the amount of vacant office space as compared to occupied space.
48 Different rates of land utilization can be observed amongst the different areas of
49 specialization, and this reflects on demand conditions and the incidence of use zoning
50 and the application of “change of use” controls. Innovations in technology have
51 however helped enable planners to easily store, update, and analyze data.
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59 *iii. Resident population in the CBD*
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Several studies have examined the population declines in metropolitan cores and

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4 demonstrated their diminishing shares of the totals within urban regions. An
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6 analysis of the trends in population change within the CBD reflects the effect of rising
7
8 land values, planning intervention in the form of redevelopment plans that have
9
10 resulted in the conversion of residential areas to other uses, and lack of housing type
11
12 choices in city centres (Assane & Grammy, 2003; Healey, 1997; Law *et al.*, 1988).
13
14 These population changes bear on transport management, hence planners should keep
15
16 track of these trends to ensure that adequate transport facilities are provided for
17
18 commuters.
19
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21 22 **b. Economic indicators**

23 24 *i. Employment – Working population*

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26 The changes in employment location and distribution of employment by sector
27
28 within the CBD and in relation to the rest of the city/country provide vital statistics
29
30 for assessing economic activities within the CBD. Such information is normally
31
32 easily accessible from Population Censuses. Absolute employment figures may
33
34 show declines, but one must look at sectoral changes since cores will have some
35
36 declining industries and also many growing industries.
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40 The case study in Table 1 below shows that all the cities surveyed, except
41
42 Pittsburgh, experienced loses in their core areas and all cities, except Lille and
43
44 Pittsburgh again, had declining job shares in their core areas (United Nations, 2005).
45
46

47
48 It should be noted though that too much significance should not be read into
49
50 differences in the rates of change between cities as this may partly reflect differences
51
52 in definition. A closer look at sectoral employment changes for Baltimore highlights
53
54 the fact referred to above that core areas are losing manufacturing employment but
55
56 gaining service sector employment. Table 2 below, shows the situation in Baltimore
57
58 for private-sector employees during the period 1982 – 2004.
59
60

Employment change data is only useful to planners if its spatial distribution is

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4 also considered. This will reflect on the territorial specialization of the core and
5
6 hence reveal the dominance of particular uses in distinct parts of the CBD. Once
7
8 these clusters have been established, the planner must investigate the linkages
9
10 between them in order to determine which activities gain most by being linked with
11
12 one another, and so, find it most profitable to be located in particular parts of the CBD.
13
14 The issue of linkages is discussed in detail below.
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18 *ii. Productivity - value added*
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20 Another measure of growth besides employment is value added, a dollar figure
21
22 made up principally of firms' payrolls, interest payments, and profits (Hayter,1997,
23
24 Dunning and Morgan, 1971). The problem planners face in using such a measure
25
26 is that it merely gives a firm's growth pattern without linking its growth to space.
27
28 Although it has never been tried by most researchers on this subject, it would be
29
30 useful if output per square meter could be calculated. An avenue yet to be explored
31
32 is attempting to link income tax figures to firms' locations; it is possible that this
33
34 could show the spatial intensity of services, thus enabling planners to know which
35
36 part of the CBD are more productive. Although it is generally believed that the
37
38 productivity of financial services is difficult to measure, a firm's rate of return can
39
40 serve well in determining the productivity of the firm.
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46 **c. Transport surveys**
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48 The decentralization of population, employment, manufacturing and commercial
49
50 services can be viewed as the latest episode in the interaction between transport
51
52 technology and urban form dating from the onset of the Industrial Revolution (Law *et*
53
54 *al.*,1988). The CBD is now characterized by congestion and delays as a result of the
55
56 massive inflow of people to the hub of activity. As a result, planners must devise
57
58 efficient transport management systems for use in the CBD. The basic function of a
59
60 transport system is moving people from suburbs to the CBD, and an insufficient and

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4 costly transportation system raises the cost of labour. Using transport surveys and
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6 traffic counts planners can assess the demand for and supply of public and private
7
8 transport, and hence efficiently manage the traffic system within the CBD.
9

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11 Some governments have attempted to solve congestion problems by relocating
12
13 CBDs, but this has not proven to be the solution. In fact, the result has been to
14
15 spread congestion wider as firms relocate their labour-intensive activities to new
16
17 centers in other sections, while their headquarters remain in the CBD. All these have
18
19 serious implications for the provision of transport thus, planning intervention of this
20
21 nature must take cognizance of transportation systems.
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24 25 **d. Communication linkages**

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27 It was mentioned above that measuring economic activities within the CBD
28
29 without establishing how these activities are linked does not help planners make
30
31 valuable assessments of these activities. Financial services are characterized by
32
33 uncertainty, so they need to cluster in order to operate with maximum efficiency.
34
35 “Uncertainty aggravates the need for fast and frequent communication, both in
36
37 negotiating for transactions and in keeping abreast of developments affecting the
38
39 market” (Carter & Li, 2004; Price, 1996; Robbins and Terlecky, 1960, p.33).
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43
44 Communication linkages can be determined by analyzing information flows
45
46 between the various firms in the CBD. Information flows can be measured according
47
48 to type and associated communication channels, for example, paper flows, personal
49
50 contacts involving travel, and electronic communication like the telephone and telex
51
52 (Williams *et al.*, 2001, p. 86; Goddard, 1975, p.24).
53
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55
56 A survey was done in Central London in 1970 in order to determine the pattern of
57
58 information flows between various office sectors. A sample of 72 office
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60 establishments recorded details of their telephone calls and meetings with other firms
with similar patterns of functional linkages, and pairs of sectors that received

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4 information from similar types of establishments. “Information was obtained in the
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6 analysis of number of indicators on which a policy of selective decentralization could
7
8 be based” (Goddard, 1975, p.28). Such data can also be used to suggest how
9
10 complexes of related office activities can be established in alternative centers outside
11
12 the capital through the relocation of groups with interlinked functions.
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15
16 It has been argued that improvements in technology reduce the cost and delays of
17
18 communicating over long distances, and it is believed that technological advancement
19
20 is a threat to existing financial centers since it will promote decentralization.
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22 However, Brealey (1992) states that “the popular vision that improved
23
24 communications will permit decentralization with personal contacts being replaced by
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26 video-conferencing and traders operating from home terminals is, we believe, to
27
28 misunderstand the effect of improved communication” (Brealey,1992, p.32).
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31 32 **e. Social security and human security**

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34 Implications for social security and human security in the CBD, which has
35
36 experienced transition from a manufacturing-based economy to a services-led
37
38 economy oriented toward the global market have come to be known as the “Dual
39
40 City” theory (Castells, 1989). The rise of the dual city is a result of economic
41
42 restructuring fuelled by technological innovation that spurred the growth of producer
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44 services, which led in turn led to growth in the production of information technology.
45
46 What impact has this had on the urban social security and human security? Castells
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48 (1989, p.203) notes that,
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51
52 “...processes of sectoral growth and decline, and the reallocation of jobs and
53
54 labour are taking place...in a complex pattern that combines the creation of new,
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56 highly paid jobs in advanced services (producer services) and high technology
57
58 sectors, the destruction of middle level jobs in old manufacturing, the gradual
59
60 shrinkage of protected jobs in the public sector, and the proliferation of new,
low-paid jobs both in services and in downgraded manufacturing”.

On the spatial level the dual city is manifested in the coexistence of a large

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4 professional and managerial middle-class and a growing urban underclass, and
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6 epitomizes the contradictory development of the new information-based economy,
7
8 and the conflictual appropriation of the inner city social groups who share the same
9
10 space while being worlds apart in terms of lifestyle and structural position within the
11
12 city (Castells, 1989)
13

14
15 Developments in the casualisation of employment, as in the cases of London and
16
17 New York, point to the institutionalization of casual labour markets. In New York,
18
19 the informal economy has the overall effect of cheapening production costs for firms,
20
21 while also increasing the flexibility of the production organization. The presence of
22
23 many “informal” business (especially, traditional sweatshop garment production)
24
25 activities in densely populated areas with high immigrant populations also
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27 substantially reduces the costs of reproduction for inner city workers. In London,
28
29 the casualisation of employment has resulted in the privatization of services once
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31 provided by the state. Jobs that were once full-time with a full array of benefits have
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33 been transformed into part-time subcontracted work at lower wages.
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39 However there was a substantial increase in job creation in general in the inner
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41 areas of global cities, particularly during the 1980s (Carter & Li , 2004; Castells,
42
43 1989). Interestingly, in New York and London, the increasing employment rate
44
45 continues to grow despite the influx of hundreds of thousands of immigrants into
46
47 these rapidly growing economies. With growth occurring in the formal as well as
48
49 informal segments of the economy, there follows a highly differentiated social
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51 structure, both polarized and fragmented, with segments divided on the basis of class,
52
53 gender, race, and national origin (Sassen, 1993). Fingleton (2005), Li (1996) and
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55 Sassen (1993) suggest that in both cities, apart from migrations that may have taken
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57 place in these cities, what we observed in recent times is a process that requires
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59 specific conditions: the internationalization of the economies of these countries,
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4 particularly centered in the major cities, and the casualisation of the employment
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6 relation.
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9 Therefore, restructuring is often a painful process that may result in whole
10 sections of the old work force becoming redundant as in the case of middle-level
11 manufacturing workers in the UK. The swing to producer services has made up for
12 these losses in economies in more stable developed countries. However, cities like
13 Bombay, which has massive potential, and Indian cities in general face a far more
14 serious problem in that their political conditions are far less stable, and the problems
15 created by the liberalising of the economy of the CBD in the short term may well
16 cause serious social disturbances and threaten the power of the Indian government.
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29 **C. THE CHANGING NATURE OF THE CBD, NEW YORK METROPOLITAN** 30 **REGION AND THE CITY OF LONDON** 31

32 **a. The New York Metropolitan Region** 33

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35 The New York Metropolitan Region, whose locational advantage was originally
36 its natural harbour, is now the financial center not only of the United States, but of the
37 rest of the world. Initially, it had an enormous amount of rentable space, an
38 amazingly varied supply of industrial materials and services, an extremely diversified
39 labour force, and extensive transportation facilities (Hayter, 1997; Vernon, 1972).
40 By the early 1970s these advantages no longer applied, as the region was beginning to
41 specialize in services including commercial banks, insurance companies, securities
42 dealers and brokers, savings institutions, finance companies, investment companies,
43 clearing houses and securities exchanges (Robins and Terleckyj, 1960). By 2000,
44 finance and insurance employed 460,000 people and accounted directly for 11 percent
45 of employment (Knox *et al*, 2003).
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The main reasons given for financial activities concentrating in the CBD have

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4 been the presence of external factors which, among others, include:

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6 i. access to trained labour ii. range of supporting services
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8 iii. the value of face-to-face contact iv. the centre's reputation
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10
11 v. low search costs

12
13 The combination of these holds firms in the financial district as long as there are
14 no strong reasons for them to go elsewhere. The pressure to move out of the region
15 has meant the rapid economic growth of other areas. "Over time, factors such as
16 nearness to customers, the cost of office space, the cost of labour, and the supply of
17 manpower can be expected to bear increasingly upon locational decisions" (Hayter,
18 1997, p.30; Robins and Terleckyj, 1960, p.45).
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27 **b. City of London**

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29 Up to the end of the 19th Century the City of London did not have complete
30 specialization. The city started to witness a shift from manufacturing to financial
31 services by the beginning of the 20th Century. Over the years the city has not only
32 become specialized in the services it provides but also in the functions supplied by its
33 firms. The city developed into an international financial center for more or less the
34 same reasons given for the New York Metropolitan Region.
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45 *The Impact of Government Policy on City Development*

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48 There have been central government controls on office development in the City
49 since 1964, yet few objective criteria have been formulated to assess the
50 appropriateness of one type of office activity over another in central locations. "The
51 Greater London Development Plan has declared "the opportunity to develop" as a key
52 objective (Lee and Wills, 1997; GLC, 1988; GLC, 1985), but whether it recognizes a
53 need for selective appropriateness in the center has yet to be assessed" (Goddard,
54 1975, p.23).
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4 As a result Dunning (1971) notes, although the influence of local and central
5 government policy on the pace and pattern of development has been increasing, it has
6 been restraining development by merely concerning itself with safeguarding buildings
7 and accommodation standards without considering the market forces in play. A
8 Redevelopment Plan produced after the First World War, had as its main objective,
9 maintaining a good balance between the amount of accommodation space and the
10 amount of circulation space in the city. Thus, emphasis was on controlling the
11 growth of the city.
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22 The 1943 Abercrombie Plan proposed the dispersal of a million people from
23 Greater London. The idea was to reduce residential floor space and increase office
24 floor space. Although this was a step in the right direction in terms of promoting
25 economic activities in the CBD, the issuing of Industrial Development Certificates at
26 the Central Government level for firms wishing to develop 5000 sq. ft. or more was a
27 drawback for most firms. Again, the issuing of Office Development Permits (ODP),
28 which was aimed at reducing congestion and employment in the City of London, had
29 shortcomings as well. The policy initially took too much stock of vacant open space
30 and hence refused any applications for new developments, and took too little stock of
31 increases in demand. As a result, demand eventually overtook supply. Planners
32 were then compelled to exercise flexibility in order to cope with the rising demand for
33 office space in the city. As Dunning puts it, "Even though they know more than the
34 market about the best distribution of land use in the city. Indeed, we strongly
35 suspect the ODPs have introduced an element of rigidity into the market in that supply
36 has not been allowed to adjust itself to demand in the way that would best utilize
37 scarce resources"(Dunning and Morgan, 1971, p.227).
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Operating hand in hand with the ODPs, were the Location of Office Bureau (1963), which encouraged decentralization of office activity from Central London.

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4 After all this effort to decentralize office activity from the CBD, it was realized that a
5
6 majority of firms still found the advantages of locating in Central London outweighed
7
8 the extra labour costs and rents, and the advantages of decentralizing.
9

10 11 12 13 **D. CONCLUSION**

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15 The CBD is a dynamic part of the city that changes drastically over time, and
16
17 responds to forces and demands for activities from within and from other countries.
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19 The globalization of economies has meant that the city no longer serves only the
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21 interests of its inhabitants, it also serves other international business interests. The
22
23 CBD has changed from accommodating activities like manufacturing to being
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25 predominantly a services area.
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29 It is extremely difficult to quantify the various propositions for measuring
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31 economic activities in the CBD put forward in this study due to the paucity of
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33 statistical data as well as the constraint of trying to assess economic activities that
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35 reside in the uncertainty surrounding financial services. Planning intervention thus
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37 becomes extremely difficult as other forces beyond the control or knowledge of the
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39 planner play crucial roles in determining what activities will locate in the CBD and
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41 where exactly they will locate.
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45 Land-use regulations are also crude and do not allow planners to see the
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47 activities' micro-disaggregated interactions. This makes it difficult for planners to
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49 use such regulations in assessing and planning for the CBD. Planners have had to
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51 introduce certain criteria in assessing applications planned for the CBD such as use of
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53 the Special Consent Criteria and Change of Use Regulations, which allow certain
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55 buildings or activities that would not normally be allowed by existing use zones and
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57 plans, to be considered. Restrictions on building heights and coverages have had to
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59 be adjusted to suit the increasing demand for space in the CBD. Planning within the
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CBD must be more innovative and accommodating if it is to meet the needs of the business community.

Table 1: Employment Change in Metropolitan Cores

	Employment (000)				Change%	Share Of Area %			
Baltimore	1990	436	2003	401	-8.0	1990	36.7	2003	32.8
Pittsburgh	1990	361	2003	372	+3.0	1990	42.8	2003	48.9
Birmingham	1990	381	2003	306	-19.7	1990	30.9	2003	28.6
Glasgow	1990	354	2003	356	-13.0	1990	54.2	2003	50.7
Manchester	1990	274	2003	220	-19.7	1990	24.8	2003	24.9
Lille	1990	51	2003	46	-29.4	1990	36.8	2003	39.4
Lyon	1990	236	2003	218	-5.9	1990	57.3	2003	57.7

Source: Adapted from United Nations (2005) and Law *et al*, (1988, p.20).

**Table 2: Baltimore: Private Sector Employment in the Central City
1982-2004**

	1982	1992	2004	Change (%)
Total	285,460	312,138	320,377	-21.7
Manufacturing	59,691	44,982	28,142	-52.3
Transport	30,093	26,419	18,994	-36.9
Wholesale	19,292	17,149	12,194	-36.8
Retail	44,279	33,498	25,014	-43.5
Fire*	31,528	30,097	34,989	+11
Services	92,201	108,341	132,572	+43.8
Health	35,469	48,652	68,472	+93

Note: *Finance, Insurance and real Estate

Source: Adapted from United Nations (2005) and Law *et al* (1988, p.121)

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