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Working paper 9
"Real estate investment flows"

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Introduction

Commercial real estate provides the urban office infrastructures through which high-value world city network advanced producer services (APS) operate, generating dynamic knowledge, business and financial flows within and between cities across the world. Furthermore, as argued by Lizieri (2009), the financialization of real estate through the creation of innovative financial investment vehicles stores and locks down value in this physical city infrastructure (see also Knox and Pain, 2010; Pain, 2011; Lizieri and Pain, 2011).

The depth of integration between financial services and city real estate today has blurred the boundaries between these two highly interdependent sectors, as demonstrated by increasing financial services authority regulatory oversight of real estate industry operations. Plotting and monitoring real estate investment flows at different geographical scales is thus of great importance in understanding how Europe is engaging with contemporary economic globalization and to what extent its present positioning in the space of global financial flows is sustainable. This paper therefore informs the *Tiger* study on the place of Europe in global financial flows generated by real estate investments.

As for the study of APS firms and networks (working paper 3), the appropriate analytical scale for consideration of such flows is that of cities because this is where major international office investments occur. Real estate investment flows within and between cities are examined by analysing Real Capital Analytics data on the top 1000 commercial property transactions in each year from 2007 to 2010. Buyer or investor locations and property locations are aggregated for the period 2007-10 in order to reveal the outcome of investment transactions for city flows over the whole four year time period and data are also compared on a time-series year by year basis.

Deals range from office, apartment, hotel and shopping centre sales to acquisitions of development sites however we focus solely on office transactions which constitute 40% of the deals in the data set. This is because of the importance of these transactions in providing the clustered physical work space occupied by international financial and linked advanced producer service firms, in transferring major financial funds between cities, and in fixing international financial capital in territorial space. Information on office property location, price, buyer identity and location allows us to trace all deals geographically, creating a dataset similar to an origin-destination matrix. In order to create a network of financial investment flows, allowing comparison between this dataset with others analysed in the project, we needed not only the location of the sold property but also the location of the buyer. In this way it has been possible to allocate where an investment comes from and where it goes to, for each commercial deal.

In most cases, we were able to identify the location of the purchaser, defined as the headquarters of the beneficial owner. However, we encountered various difficulties in identifying the purchaser main residence because some firms are registered and have notional head offices in tax havens. Where we could identify where real operational headquarters were located, we have used that information instead of the location of the registered office. At the same time, many owners are possible nominee purchasers, masking the location of the underlying owner. Ownership by private individuals also presented challenges as they tend to have multiple residences for tax purposes. In addition, many of the deals consist of joint ventures; where the division was known, we have used that information in order to divide the acquisition price into equal parts albeit this is a strong assumption. Many financial firms act as asset managers for a wide range of investors whose identity is unknown so we have used the principal office of the fund manager as the location. This may differ from the head office

of the parent company, for example, a Swiss bank may run its real estate funds out of London, but this reflects both the flows of capital into the fund and the location of the asset managers.

Finally, it must be acknowledged that RCA data collection relies on the accuracy of reported deals. RCA make every effort to check and triangulate information, but there may be issues with data accuracy in less transparent markets. Nevertheless, the dataset represents a robust view of major real estate deals in the period 2007-2010, encompassing the financial crisis. We were able to complete a dataset comprising 297 cities from 2007 to 2010, world-wide, delineating the global network of financial investments in the commercial office real estate market. In the network, nodes identify cities and links represent the aggregation of commercial deals that took place between every pair of cities (dyads). The analyses examine transactions generating investment flows both between and within cities (city in- and outflows and self-investments) using a country, world region and global scale lens, shedding light on their territorial implications and relevance for European policy.

Network analyses reveal the position of cities in terms of their importance and centrality within the global network of investment flows, where geographical distance is not considered. Network visualizations are obtained by applying a spring embedding algorithm to the data. The algorithm assigns forces to every link, which can be represented by springs, hence the term 'spring embedding'. The effect is that a repelling force is applied when nodes are too close together and an attractive force when nodes are too far apart; furthermore the strength of forces is influenced by the link value. In this way positions of nodes change continuously within the graph, throughout iterations, until an approximate equilibrium is reached. In the outcome, Euclidean distances between nodes are proportional to the graph distances however a variance between specific visualization outcomes associated with this method must be taken into account when making comparisons between them.

The positioning of cities with a prominent role as international financial centres in real estate investment flows is given particular attention in order to investigate centralities involving both financial services networks and real estate office markets. The results help to inform consideration of the contradiction between policy foci on spatial polycentricity at metropolitan, city-region, national and EU territorial scales on the one hand and on the contribution of global city agglomeration to Europe's competitiveness in the world economy on the other. The correlation between financial services network (Working Paper 3) and real estate investment data addresses a key question for European development and spatial planning – are real estate capital flows a proxy for city integration into global financial networks? Changes in the world location and concentration of real estate investment flows are finally considered in order to assess Europe's potential exposure to risk as a consequence of international financial crisis (Lizieri 2009).

1.0 Country level - Aggregated data

Country level data have particular significance for understanding the territorial implications of real estate investment flows because, in general, nation states retain a key role in regulating APS and financial activity within their borders and in determining a wide range of policies which can present barriers to, or levers for, inward and outward city investment flows.

Inflows and outflows: The aggregated data for 2007-10 (Table 1 and Figures 1 and 2) show that European countries - the UK (ranked first), followed by France (ranked second) and Germany (ranked third) - have been ahead of the US (ranked fourth) and China (ranked fifth) in their volume of office inflows for this period. The position of the UK (\$36,17 billion) within Europe has been especially important as it had more than twice the inflows of France (\$15,11 billion), significantly higher than the volumes of inflows for Germany (ranked third)

and, at a global scale, the US (ranked fourth) and China (ranked fifth). At the same time, Germany's outflows (ranked second / \$25,75 billion) were significantly higher in volume than those of the UK (ranked third / \$12,01 billion).

US outflows (ranked first / \$34,09 billion) are three times the volume of those of the UK. Comparisons between Figure 3 and Figure 4 show the number of US cities which have contributed to this outflow dominance over inflows for the country level. The UK on the other hand has a dominance of inflows over outflows.

Self-investment: Aggregated data on country 'self-investment' (Table 1 and Figure 9) shows that, after the US (rank 1), European countries, especially Germany (rank 2) and France (rank 3), score high in deals occurring within one country – 12 of the top 22 self-investing countries are also EU member states. However in this case the UK ranks only 7th: it has been a significant target for external investment, but has generated lower volumes of internal investment

Interestingly, East European countries, the Czech Republic, Hungary, Poland and Romania have no self-investment or outflow scores but they rank significantly higher for inflows. This suggests that their internal capital markets have not yet developed sufficiently for their investors to participate in major global real estate transactions.

- Annual data

The non-aggregated, annual, data (Tables 2-5) reveal fluctuations in, inflows outflows and self-investment flows between 2007 and 2010. However, these results should be treated with due caution because single very large deals can distort longer-term results even at country level, particularly for lower ranked markets.

As would be expected from the aggregate results, the UK is the dominant country in the world attracting inflows except in 2007 when France, ranked first, just eclipsing the UK, Spain and Japan. The US dominates overall outflows and also self-investment; however in 2007 Germany ranked first for outflows and in 2009, Japan ranked first and China ranked second for self-investment¹.

Substantial inflows to Poland, and to some extent, to Hungary in 2007, reduced significantly in 2008 as investments focused on West European countries, the UK, France and Germany however the inflows position for most East European countries stabilized and/or improved in 2009 and 2010.

2.0 City level - Aggregated data

City level data reveal the sub-national city structures/systems which are acting as nodes and focal points for real estate investment flows. These flows may occur in one city or in one country (territorial self-investments), or between cities in one country, or cross-border at any distance.

Table 6 shows the aggregated city level data for 2007-10. It can be seen that London dominates as a global node for inflows, New York for outflows and also for self-investment in line with the country level results for the UK and the US.

London inflows for this period (\$33,64 billion) are significantly higher than outflows (\$12,65 billion) while the reverse is the case for New York (inflows \$14,74 billion and outflows

¹ Some caution is necessary here as it is possible that all Chinese deals are not genuine arms length transactions; some may be transfers between government bodies and SOEs. However, this is likely to be a more significant issue with land sales than with office transactions which are the focus here.

\$33,73 billion). Interestingly the top three cities for self-investment flows (i.e. investment concentration) are Sassen's (1996) three 'global cities', New York, Tokyo and London. Some other interesting specific results are Hong Kong's rank of just 43 for inflows compared with a self-investment rank of 7 behind Paris (4), Seoul (5) and Moscow (6), and an outflows rank of 16, possibly reflecting the fact that Hong Kong acts as a conduit for Asian outward investment. By contrast, Paris ranks 4 for self-investment and 27 for outflows but 3 for inflows. Eastern European cities do far less well than West European cities as destinations for global inflows, reflecting the limited size of their prime, Class A, office space markets. The most important East European cities for inflows are Prague (rank 23) and Warsaw (rank 30). In general, major mature international financial centres tend to dominate the higher rankings for inflows, outflows and self-investment flows. The global top three ranked financial centres have significantly higher overall flow levels, suggesting that they are the leading global spaces for international real estate financial through-flows and localized flows; although flows reduced after the financial crisis, they have become still more focused on these developed global city office markets.

At the same time, very many other cities (236 cities including Staines, UK, on the London periphery) are also nodes for inflows; 122 cities are nodes for outflows. By comparison, only 66 cities (including Rochdale, UK) are nodes for self-investment, which may be indicative of less established local office property markets.

- Annual data

As for the country level flow data, fluctuations in city investment flows are evident year by year. As already discussed, such fluctuations must be understood as short-term and these are elsewhere controlled for by data aggregation over the longer 2007-10 time period. Nevertheless annual results can reflect market responses to the financial crisis and perspectives on exposure to risk, not possible when only considering aggregate results. One very large deal in a city can tell us something about market confidence and/or lack of it.

The data on in- and outflows for individual years 2007 to 2010 (for inflows data see Tables 7-10 and Figures 5-8 and for outflows see Tables 11-14 and Figures 10-13) show that financial centres London and New York are not the only foci for major inter-city investment flows. For example Madrid ranked 2 for inflows in 2007 whereas London ranked 4. Shanghai ranked 2 in 2009, well above New York, and 3 in 2010 above Paris.

Yet, despite the crisis, major financial centre New York ranked 1 in 2010 and London ranked 2, in stark contrast to the emergent Dubai office market for example, which had lost all inflows by 2010. In contrast, London inflows even showed a dramatic increase in 2008 in spite of, or because of, global markets recognition of the emergent crisis. That the major financial centres retained this level of activity even though capital values fell sharply indicates that their scale provides liquidity for global investors who thus have confidence in their ability to exit from these office markets should the need arise².

Outflow data (Tables 11-14) show where investment inflows originate. Intriguingly, Boston takes precedence over New York for US outflows in 2007 and Singapore outflows slightly exceed those of New York in 2010. Figures 10-13 show the geographical dimension of outflows which become the inflows to other cities. So we can see Dubai investing in Europe in pre-crisis 2007, for example.

Between 2007 and 2010, we also see outflows disappearing altogether in some cases, for example Sao Paulo, and more generally thinning out at a global scale. The geographical

² Further corroborating evidence for this in the context of London can be found in Lizieri *et al.* (2011).

impact of the crisis could be described as resulting in more intensive flows within and between traditional world financial centres and at the same time, the development of flows between these centres and globalizing cities in emerging economies such as China.

Within Europe, East European cities Prague (ranked 13) and Warsaw (ranked 20) fared well for inflows in 2007 but lost out in 2008 (when Prague ranked 42 and Warsaw ranked 82) as investment flows focused on established markets in cities in North West Europe and Southern Europe. Meanwhile, Chinese cities Shanghai, Beijing and Guangzhou all significantly increased their inflow rankings between 2007 and 2010.

Unaggregated self-investment data (Tables 15-18) also shed light on sub-national investment flows occurring *within* cities. For example Tokyo has significant self-investment levels, above those of London or New York, for the years 2007, 2009 and 2010. The number of cities in the EU and the US contributing to self-investment in each of the four years draws attention to the strong urban agglomeration in both of these territories. However the general fall in the overall number of cities self-investing between 2007 and 2008, including for example Brussels, illustrates the impact of the crisis even in North West Europe.

3.0 City dyad relations of major financial services centres

Analysing aggregated data for the years 2007-10 on the value of office real estate investment deals for city pairs or 'dyads' (Table 19) reveals the financial capital passing between any two cities. The data also allows us to see which specific cities are the originators and the recipients of outbound and inward city investments.

In this analysis, particular attention is paid to the roles of mature international financial centres in articulating investment in- and out-flows at different geographical scales - global, world region and local – addressing hypotheses posed in the literature as to world city dominance (Friedmann 1986) and potential exposure to global contagion and risk (Lizieri 2009).

2000-08 GaWC data for banking/financial services analysed in Working Paper 3 are referred to in order to identify the six world financial centres which have had a consistent top-ranking for world city network connectivity during the past decade - London, New York, Tokyo, Hong Kong, Singapore, and Paris. The changing position of these cities in international real estate investment flows is therefore considered. From a territorial perspective, considering dyad flows sheds light on cross-border network-flow spatial relations and the way in which particular cities and their business functions are connecting Europe and its Member States to real estate global financial flows.

- Worldwide Links

Figures 5-8 and 10-13 show that, at a world-wide scale, overall inter-city investment links have diminished but also thickened between a number of centres since the 2008 financial crisis. Significantly, the global cities dominating Friedmann's world city hierarchy have been joined by cities in some emergent markets. The major cities are the focus of fund and wealth management activity that is coordinating global real estate investment flows. There has been a shift toward an investment focus on a London/New York/Shanghai city (three node) 'triad' even though the value of flows has decreased. The crisis has apparently locked flows to 'old' and 'new' world financial centres in the context of world financial crisis, yet Hong Kong is surprisingly lowly ranked in this process, not playing a dominant role.

Figures 14-16 are derived from an 'Ego-network' analysis examining the direct nodal links of selected cities in global real estate investment flows. New York has extensive dyad outflows and is investing in office property in 48 cities (Figure 14). New York's top three international dyads are London, Paris and Frankfurt however only 22 cities are investing in New York.

Boston is the second biggest outward investor after New York. Its main targets are US cities; top dyads are New York, London, Seattle, Washington and Paris. London is third for outflows, investing half the money of New York (Figure 15). London's top three dyads are Madrid, Paris and Brussels, with New York its fourth dyad. In contrast to the position of New York, 34 cities are investing in London whereas London is only investing in 27 cities.

- European Links

Munich is 4th city for outflows within Germany (Table 6) and has cross border links to multiple other European cities, as well as having extensive dyad relations across the world. Frankfurt is Europe's 5th outward investor followed by Dublin (6th), Hamburg, (7th) and Madrid (8th). Frankfurt dyads are Paris, London, Prague, Warsaw and Shanghai and then a European/global mix of cities including Bucharest and Wroclaw in Eastern Europe.

Inflows to Eastern Europe are coming through Prague (from Frankfurt, Munich, Trieste and Vienna); Warsaw (from Frankfurt, Hamburg, London, Stockholm and Wiesbaden); Bucharest (from Frankfurt, Paris and Vienna); and Budapest (from Hamburg, Munich and Vienna).

Investments in Brussels (Figure 16) all come from European cities – Amsterdam, Charleroi, Dublin, Frankfurt, Innsbruck, London, Madrid, Munich, New York and Zurich respectively.

4.0 Real estate investments and international financial centres

The data for financial services (Table 20) and real estate (Table 6) reveal that, in the global real estate network, cities that have high investment inflows generally also have high financial services network connectivity, as shown in Figure 17. There is thus a strong suggestion that global city centralities involve an interrelationship between financial services networks and real estate office markets. Figure 18 depicts financial services nodes in the real estate investment flow network geographically, drawing attention also to the number of cities that are interconnected through these two sectors. 141 cities are present in both global networks, albeit city network connectivity rankings differ substantially.

London and New York are the best connected world cities for financial services connectivity (as measured by GaWC's metrics³) and for real estate inflows (Table 6 and Table 20). London has nearly three times the real estate inflows of New York, reflecting its role as top global international financial services centre. Madrid is 4th for real estate inflows but only 10th for financial services connectivity. Berlin is surprise 12th for real estate but only ranks 66th for financial services, possibly reflecting the relatively recent political economy change and unification of Germany. In China, Shanghai has far larger real estate inflows than Beijing which may reflect the difference in their financial services connectivity (Shanghai 7th in financial services connectivity and Beijing 12th). Washington is ranked 45th in financial services connectivity but 7th (i.e. in the second tier) for real estate inflows. Chicago (financial services connectivity rank 21st) has approximately half the real estate inflows of Washington. Two methods have been chosen to compare the GaWC network data for global financial services and the real estate investment network data: Pearson and Spearman correlation tests were used to compare the rankings of centrality measures for the two datasets and the Quadratic Assignment Procedure (QAP) test was used to compare their network structures (Krackhardt, 1988). There were some limitations of using these methods. In order to be able to compare the two networks we needed to create new network data with the same number of nodes. Only a subset of 141 cities is present in both of them, so we extracted a sub-network of 141 nodes from both networks then we recalculated all connectivity measures and created

³ The GaWC financial service connectivity measure correlates strongly with other measures of the strength of cities' financial services, such as Z/Yen's Global Financial Centres Index.

new rankings for both financial services and real estate investment networks. The resulting datasets are smaller but perfectly comparable.

The outcomes of the Spearman's RHO correlation test shows that the correlation between the two connectivity rankings is 0.646 (Table 22) and the Pearson correlation confirms this with a value of 0.611 (Table 23). The difference between the two tests relates to the fact that the Spearman correlation considers only the order/position of the rank, while the Pearson test focuses on the value of each observation, which is the reason for the difference in values.

The QAP test uses random permutations to compare the similarity of networks (Krackhardt, 1988). Using the QAP we can test the extent to which networks are similar, through correlation, or whether one network structure can be explained by other network structures, through regression. The outcomes show that both financial services and real estate networks are correlated by almost 30% (Table 24). This value is much smaller than the previous tests on ranks since the entire network structure is taken into account, not only connectivity indices. The results demonstrate the significance of the interrelationship between geographies of real estate investment flows and office locations in global financial networks, suggesting that real estate capital flows proxy for city integration into global financial networks.

It is not easy to pick out causal relationships here, as there is insufficient time series data to permit formal causality testing to see the extent to which changes in the status of financial cities are reflected in changes in capital flows. Further, if global financial services businesses generate higher business profits and gain agglomeration economies from clustering in international financial services centres, this will be reflected in higher rents per square metre which, in turn, will be capitalised in the transaction prices paid (and reflected in the presence of the transactions on the RCA database. Nonetheless, this still has real impacts in that capital flows to the higher value locations and locks investors spatially in a small number of centres that are functionally linked together, as evidenced in the correlation between the GaWC financial connectivity scores and the aggregated flow volumes.

Before and After the Global Financial Crisis

Given this important interdependence between real estate markets and city financial services connectivity, the question is raised as to what extent the concentration of financial flows through international financial services networks and real estate markets in the world's major global cities represents a risk of contagion in financial crises.

The volume of investment flows and the average price per transaction in 2008 (the year when the crisis went viral across cities and countries) was nearly double that in 2007. However, it is not possible to show the distribution of flows and average transaction prices across the year as the market impacts of the crisis unfolded. Furthermore, although the number of cities in the world involved in these flows during the four year period has fallen progressively from 189 cities in 2007 to 108 cities in 2010, the largest fall occurred between 2007 and 2008 (from 189 to 138 cities). This means that the largest investment flows for the period were focused on a far smaller number of the world's cities during the year the crisis hit. After a large fall in average transaction prices between 2008 (0,33 \$billion) and 2009 (0,20 \$billion), there has been a modest rise between 2009 and 2010 (0,22 \$billion) (see Table 21).

Counter-intuitively, the EU, which has a strong representation of international financial centres, looks stronger by comparison with the US. Comparing European to US city investment flows over the time period, separately for inflows and outflows (Figures 19 and 20), there is a clear drop in the amount of investments in aggregate in the immediate aftermath of the crisis (Figure 21). Nevertheless, the European territory, and London in particular, were *more* attractive for real estate investment than in 2010, whereas US cities seem to have suffered more severely from the impacts of the crisis. The most exceptional

year however stands out as 2008 as noted above. The surprising feature of the crisis years is that the dominance of the leading international financial centres, both globally and within Europe, has increased rather than decreased, despite those centres' exposure to the global capital market volatility and the sharp capital value falls experienced. In the real estate industry there has been much discussion of a "flight to quality" – but in practice, this seems to translate as a flight to liquidity, as global investors favour the largest markets with higher unit prices and greater transaction volume at the expense of middle ranking and emerging financial cities.

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TABLES APPENDIXSource for all following tables: Authors, data supplied by Real Capital Analytics Inc: <http://www.rcanalytics.com>Authors, data supplied by the Globalization & World Cities (GaWC) Research Network: <http://www.lboro.ac.uk/gawc/>**Table 1. Country level - Investment flows (in \$billion) over the 4-year period 2007-2010**

rank	country	Inflows	rank	country	Outflows	rank	country	Self inv
1	United Kingdom	36.1742	1	United States	34.0923	1	United States	51.5744
2	France	15.1192	2	Germany	25.7519	2	Germany	4.3323
3	Germany	9.6602	3	United Kingdom	12.0147	3	France	3.4901
4	United States	9.0026	4	Ireland	6.9091	4	Japan	3.2629
5	China	8.0629	5	Spain	5.3856	5	China	3.0399
6	Spain	7.1487	6	Sweden	4.3698	6	Australia	2.1170
7	Singapore	6.6454	7	Singapore	4.2938	7	United Kingdom	1.8487
8	Japan	4.6731	8	Israel	4.0565	8	Brazil	1.3253
9	Australia	3.4745	9	Hong Kong	3.1783	9	Canada	0.9075
10	Netherlands	2.3263	10	South Korea	3.1067	10	Italy	0.6848
11	Belgium	2.3215	11	Australia	3.0474	11	Spain	0.5828
12	South Korea	1.9280	12	Switzerland	2.2888	12	South Korea	0.3883
13	Russia	1.9140	13	Japan	2.2492	13	Austria	0.2822
14	Poland	1.7036	14	Canada	1.7267	14	Malaysia	0.2684
15	Italy	1.6869	15	Netherlands	1.6537	15	Denmark	0.2548
16	Brazil	1.5785	16	Austria	1.2881	16	Switzerland	0.2262
17	Czech Republic	1.5260	17	United Arab Emirates	1.0148	17	Belgium	0.1587
18	Luxembourg	1.3695	18	France	0.9074	18	Russia	0.1407
19	Canada	1.2732	19	Malaysia	0.8519	19	New Zealand	0.1286
20	Sweden	1.0186	20	Qatar	0.8474	20	Sweden	0.1153
21	Hong Kong	0.9446	21	Lebanon	0.7090	21	Finland	0.0999
22	Malaysia	0.8705	22	Luxembourg	0.6599	22	Norway	0.0945
23	Austria	0.8555	23	Oman	0.6574			
24	Norway	0.6603	24	Kuwait	0.6412			
25	Taiwan	0.5510	25	Italy	0.5880			
26	Chile	0.5315	26	China	0.5146			
27	Romania	0.4510	27	Libya	0.4277			
28	Finland	0.3977	28	Norway	0.3766			
29	Hungary	0.3871	29	Channel Islands	0.3699			
30	Switzerland	0.3862	30	Cayman Islands	0.3493			
31	India	0.3500	31	Bermuda	0.3418			
32	Denmark	0.1904	32	Belgium	0.2725			
33	Portugal	0.1795	33	Finland	0.1850			
34	Philippines	0.1490	34	Taiwan	0.1779			
35	Mexico	0.0973	35	Iceland	0.1681			
36	Macao	0.0769	36	Mexico	0.1400			
			37	Denmark	0.0720			

Table 2. Country level - Investment flows (in \$billion) over 2007

rank	country	inflows	rank	country	Outflows	rank	country	self inv
1	France	3.1989	1	Germany	9.5661	1	United States	18.5596
2	United Kingdom	3.1720	2	United States	7.0757	2	Japan	6.7768
3	Spain	3.1392	3	United Kingdom	4.5342	3	United Kingdom	5.2148
4	Japan	3.0136	4	Spain	1.1364	4	Canada	1.6049
5	Singapore	2.3517	5	Switzerland	1.1076	5	Germany	1.3306
6	Germany	2.0713	6	Hong Kong	1.0852	6	South Korea	1.0064
7	United States	1.9525	7	Israel	0.7027	7	France	0.9974
8	China	1.6592	8	Japan	0.6839	8	Australia	0.7729
9	Russia	1.1300	9	Kuwait	0.6412	9	China	0.6617
10	Czech Republic	0.9051	10	Malaysia	0.6121	10	Norway	0.4236
11	Brazil	0.9029	11	Sweden	0.5784	11	Italy	0.3633
12	Netherlands	0.8875	12	Cayman Islands	0.3493	12	Denmark	0.3602
13	Malaysia	0.8705	13	Ireland	0.3235	13	Sweden	0.3436
14	Belgium	0.8671	14	United Arab Emirates	0.3229	14	Taiwan	0.2868
15	Poland	0.8169	15	Netherlands	0.2532	15	Spain	0.2787
16	Australia	0.4451	16	Finland	0.1850	16	Russia	0.2070
17	Chile	0.4328	17	Lebanon	0.1826	17	Singapore	0.1813
18	India	0.3500	18	Taiwan	0.1779	18	Belgium	0.1295
19	Hong Kong	0.3006	19	Libya	0.1763	19	Finland	0.0999
20	Austria	0.2697	20	France	0.1751	20	Hong Kong	0.0898
21	Italy	0.2503	21	Qatar	0.1355	21	Israel	0.0613
22	Hungary	0.2428	22	Canada	0.1227	22	New Zealand	0.0598
23	South Korea	0.2119	23	Italy	0.1212			
24	Luxembourg	0.2024	24	Luxembourg	0.1039			
25	Norway	0.1827	25	Denmark	0.0720			
26	Canada	0.1277	26	Austria	0.0702			
27	Switzerland	0.1168						
28	Denmark	0.0996						
29	Mexico	0.0973						
30	Macao	0.0769						
31	Finland	0.0752						
32	Portugal	0.0744						

Table 3. Country level - Investment flows (in \$billion) over 2008

rank	country	Inflows	rank	country	Outflows	rank	country	Self inv.
1	United Kingdom	21.3654	1	United States	19.0830	1	United States	47.0737
2	France	8.5070	2	Germany	8.5440	2	United Kingdom	6.3408
3	Germany	6.3083	3	Ireland	6.1868	3	Japan	3.7545
4	Singapore	4.1483	4	United Kingdom	6.1482	4	France	3.1013
5	United States	3.8878	5	Spain	3.9832	5	Spain	1.9788
6	Spain	3.5713	6	Australia	3.0474	6	South Korea	1.3735
7	China	2.7374	7	Israel	2.7117	7	Australia	1.2538
8	Belgium	1.3540	8	Sweden	2.0767	8	Norway	1.0094
9	Italy	1.2810	9	Singapore	1.7485	9	United Arab Emirates	0.7081
10	South Korea	1.1764	10	Japan	1.5653	10	Russia	0.6500
11	Japan	1.0867	11	Netherlands	1.4005	11	Sweden	0.5801
12	Luxembourg	1.0470	12	Austria	1.0132	12	China	0.5353
13	Australia	0.9205	13	Switzerland	0.9546	13	Canada	0.3979
14	Canada	0.8991	14	Canada	0.9456	14	Hong Kong	0.3221
15	Sweden	0.8620	15	United Arab Emirates	0.6918	15	Ireland	0.2722
16	Netherlands	0.6869	16	Luxembourg	0.5559	16	Singapore	0.1776
17	Czech Republic	0.3627	17	France	0.4746	17	Netherlands	0.1664
18	Hong Kong	0.3552	18	Hong Kong	0.4459	18	Taiwan	0.1649
19	Taiwan	0.3167	19	Channel Islands	0.2626	19	Germany	0.1458
20	Romania	0.3005	20	Norway	0.2200			
21	Austria	0.2831	21	Italy	0.1864			
22	Norway	0.1747	22	Iceland	0.1681			
23	Brazil	0.1724						
24	Poland	0.1635						
25	Finland	0.1527						
26	Philippines	0.1490						
27	Hungary	0.1442						

Table 4. Country level - Investment flows (in \$billion) over 2009

rank	country	Inflows	rank	country	Outflows	rank	country	Self inv.
1	United Kingdom	8.7417	1	United States	4.9825	1	Japan	7.9766
2	France	1.9879	2	Germany	4.7418	2	China	4.6966
3	United States	1.4363	3	South Korea	2.0149	3	United States	4.5661
4	Australia	1.3483	4	United Kingdom	1.3323	4	United Kingdom	2.4725
5	China	0.8606	5	Sweden	1.0336	5	South Korea	2.2243
6	Russia	0.4231	6	Hong Kong	0.9120	6	Germany	1.8571
7	Netherlands	0.3910	7	Oman	0.6574	7	Austria	1.8455
8	Japan	0.3667	8	Qatar	0.3500	8	France	1.8370
9	Poland	0.3644	9	Bermuda	0.3418	9	Russia	1.1891
10	South Korea	0.3077	10	Israel	0.3121	10	Taiwan	0.8057
11	Norway	0.3029	11	Belgium	0.2725	11	Brazil	0.6401
12	Switzerland	0.2693	12	Spain	0.2661	12	Hong Kong	0.5699
13	Canada	0.2465	13	Libya	0.2514	13	Italy	0.4351
14	Taiwan	0.2343	14	Lebanon	0.2473	14	Australia	0.4324
15	Germany	0.2147	15	Switzerland	0.2266	15	Switzerland	0.3564
16	Finland	0.1697	16	Ireland	0.2216	16	Belgium	0.3041
17	Czech Republic	0.1628	17	Austria	0.2048	17	Netherlands	0.2911
18	Italy	0.1555	18	China	0.1536	18	Spain	0.2901
19	Romania	0.1504	19	France	0.1311	19	Canada	0.2708
20	Luxembourg	0.1201	20	Channel Islands	0.1073	20	Malaysia	0.2684
21	Spain	0.1054				21	Singapore	0.1623
22	Austria	0.1051				22	Hungary	0.1284
23	Portugal	0.1051				23	Denmark	0.1193
24	Belgium	0.1005				24	Sweden	0.1067
25	Denmark	0.0908				25	Israel	0.0977

Table 5. Country level - Investment flows (in \$billion) over 2010

rank	country	inflows	rank	country	Outflows	rank	country	self inv
1	United Kingdom	2.8951	1	United States	2.9511	1	United States	9.8200
2	China	2.8058	2	Germany	2.9001	2	Japan	6.7977
3	United States	1.7260	3	Singapore	2.5453	3	United Kingdom	2.2932
4	France	1.4254	4	South Korea	1.0918	4	Australia	2.1603
5	Germany	1.0659	5	Hong Kong	0.7353	5	Germany	2.0021
6	Australia	0.7606	6	Sweden	0.6812	6	Hong Kong	1.5375
7	Brazil	0.5032	7	Canada	0.6585	7	France	1.1259
8	Russia	0.3609	8	Qatar	0.3619	8	Singapore	1.0260
9	Netherlands	0.3608	9	China	0.3609	9	Brazil	0.9621
10	Poland	0.3588	10	Israel	0.3300	10	Russia	0.8410
11	Spain	0.3328	11	Italy	0.2804	11	Canada	0.8254
12	Hong Kong	0.2888	12	Lebanon	0.2792	12	China	0.8175
13	South Korea	0.2320	13	Malaysia	0.2398	13	Sweden	0.6355
14	Japan	0.2061	14	Ireland	0.1771	14	India	0.5637
15	Austria	0.1975	15	Norway	0.1566	15	South Korea	0.3950
16	Sweden	0.1566	16	Mexico	0.1400	16	Austria	0.3756
17	Singapore	0.1454	17	France	0.1266	17	Spain	0.3641
18	Chile	0.0987				18	Norway	0.3409
19	Czech Republic	0.0954				19	United Arab Emirates	0.1947
						20	Denmark	0.1668
						21	Taiwan	0.1505
						22	New Zealand	0.1286
						23	Italy	0.1073

Table 6. City level – Top 100 Investment flows (in \$billion) over the 4-year period 2007-2010

rank	city	Inflows	rank	city	Outflows	rank	city	Self inv
1	London	33.6441	1	New York	33.7325	1	New York	22.2903
2	New York	14.7474	2	Boston	15.4580	2	Tokyo	21.3493
3	Paris	13.3343	3	London	12.6589	3	London	14.2848
4	Madrid	6.6844	4	Munich	9.4384	4	Paris	4.6141
5	Singapore	6.6454	5	Frankfurt	8.6942	5	Seoul	4.6110
6	Shanghai	6.5696	6	Dublin	6.4510	6	Moscow	2.7464
7	Washington	6.2610	7	Hamburg	5.3565	7	Hong Kong	2.5193
8	San Francisco	5.8413	8	Madrid	5.1677	8	Beijing	2.2566
9	Frankfurt	4.9840	9	Tokyo	4.3657	9	Sydney	2.1333
10	Tokyo	4.9329	10	Singapore	4.2938	10	Toronto	1.9468
11	Chicago	3.7706	11	Stockholm	4.2703	11	Vienna	1.9389
12	Berlin	2.7794	12	Los Angeles	4.2178	12	Madrid	1.8356
13	Beijing	2.4959	13	Sydney	4.0796	13	Oslo	1.6794
14	Brussels	2.3856	14	Houston	3.9907	14	Stockholm	1.5506
15	Moscow	2.0548	15	Seoul	3.4950	15	Singapore	1.5471
16	Seattle	2.0330	16	Hong Kong	3.1783	16	Taipei	1.4079
17	Munich	1.9672	17	Wiesbaden	3.0867	17	Shanghai	1.0962
18	Los Angeles	1.8010	18	Newport Beach, Ca	2.7602	18	Boston	1.0130
19	San Diego	1.7993	19	Newark	2.7476	19	Washington	1.0029
20	Milan	1.7953	20	Tel Aviv	2.5845	20	Dubai	0.9027
21	Bellevue	1.6618	21	Beijing	2.5557	21	Osaka	0.6935
22	Seoul	1.6146	22	Zurich	2.5150	22	Atlanta	0.6609
23	Prague	1.5260	23	Toronto	2.4789	23	Copenhagen	0.6464
24	Amsterdam	1.5184	24	Norwalk, CT	2.3059	24	Detroit	0.6260
25	Melbourne	1.4667	25	Washington	2.1698	25	Mumbai	0.5637
26	Brisbane	1.4377	26	Bonn	2.1454	26	Barcelona	0.4933
27	Hamburg	1.4332	27	Paris	1.9771	27	Munich	0.4665
28	Sydney	1.4162	28	Chicago	1.9288	28	Denver	0.4050
29	Atlanta	1.4001	29	Atlanta	1.8559	29	Houston	0.3901
30	Warsaw	1.3807	30	Mountain View, CA	1.7700	30	Guangzhou	0.3184
31	Rio De Janeiro	1.3560	31	Lyon	1.3779	31	Dusseldorf	0.2795
32	Miami	1.2676	32	Amsterdam	1.2818	32	Sao Paulo	0.2768
33	Boston	1.2091	33	Sao Paulo	1.2199	33	Brussels	0.2748
34	Issy Les Moulineaux	1.2086	34	Osaka	1.1464	34	Dublin	0.2722
35	Luxembourg	1.1939	35	San Francisco	1.1031	35	Los Angeles	0.2690
36	Kuala Lumpur	1.1389	36	Sacramento	1.0030	36	Fort Worth	0.2380
37	Vienna	1.1377	37	Shenzhen	0.9988	37	Redwood City	0.2330
38	Stockholm	1.1338	38	Trieste	0.9316	38	Rome	0.2210
39	Calgary	1.0414	39	Dallas	0.8966	39	San Diego	0.1779

40	Osaka	1.0000	40	Vienna	0.8586	40	The Hague	0.1723
41	Houston	0.9858	41	Kuala Lumpur	0.8519	41	Amsterdam	0.1664
42	Canberra	0.9726	42	Doha	0.8474	42	Brisbane	0.1658
43	Hong Kong	0.9446	43	Fort Myers	0.8339	43	Tel Aviv	0.1590
44	Sao Paulo	0.9436	44	San Antonio	0.7830	44	Santa Clara	0.1494
45	Denver	0.9161	45	Petah Tikva	0.7470	45	Giessen	0.1492
46	Guangzhou	0.8681	46	Yahud	0.7250	46	Newark	0.1458
47	Crawley	0.8110	47	Innsbruck	0.7117	47	San Mateo	0.1375
48	Barcelona	0.7499	48	Beirut	0.7090	48	Stamford	0.1344
49	Dusseldorf	0.7318	49	San Mateo	0.6970	49	Edinburgh	0.1323
50	Manchester	0.7178	50	Melbourne	0.6712	50	Zurich	0.1302
51	Bethesda	0.7057	51	Luxembourg	0.6599	51	Philadelphia	0.1290
52	Stuttgart	0.6841	52	Muscat	0.6574	52	Budapest	0.1284
53	Stamford	0.6510	53	Kuwait City	0.6412	53	Melbourne	0.1224
54	Sunnyvale	0.6070	54	Abu Dhabi	0.6290	54	Utrecht	0.1188
55	Reston	0.5588	55	Dusseldorf	0.6162	55	Baltimore	0.1151
56	Irvine	0.5544	56	Redwood City	0.5866	56	Winnipeg	0.1089
57	Kawasaki	0.5511	57	Des Moines	0.5827	57	Hamburg	0.1082
58	Taipei	0.5510	58	San Diego	0.5518	58	Ann Arbor	0.1080
59	Nanjing	0.5418	59	Pittsburgh	0.5350	59	Irvine	0.0982
60	Santiago	0.5315	60	Stuttgart	0.5137	60	Perth	0.0810
61	Rotterdam	0.5168	61	Oslo	0.4711	61	Montreal	0.0744
62	Montreal	0.5166	62	Cork	0.4581	62	Princeton, NJ	0.0625
63	Cologne	0.5133	63	Edinburgh	0.4480	63	Vancouver	0.0614
64	Oakland	0.5108	64	Tripoli	0.4277	64	Wellington	0.0598
65	Greenwich, CT	0.5092	65	Milwaukee	0.4200	65	Riverside	0.0590
66	Brasilia	0.5032	66	Denver	0.4188	66	Rochdale	0.0554
67	Lyon	0.4924	67	Brisbane	0.4135			
68	Charlotte	0.4865	68	La Coruna	0.4127			
69	Portland	0.4785	69	Barcelona	0.3880			
70	McLean	0.4764	70	Dubai	0.3857			
71	Birmingham	0.4729	71	The Hague	0.3718			
72	Glasgow	0.4657	72	Guernsey	0.3699			
73	Phoenix	0.4622	73	Brussels	0.3672			
74	Yokohama	0.4557	74	Oakland	0.3598			
75	Bucharest	0.4510	75	Cayman Islands	0.3493			
76	Rome	0.4340	76	Hamilton	0.3418			
77	Seongnam	0.4237	77	Charlotte	0.3350			
78	Dallas	0.4225	78	Bentonville, AK	0.3331			
79	Budapest	0.3871	79	Philadelphia	0.3245			
80	Clichy	0.3759	80	Seattle	0.3100			
81	Levallois Perret	0.3716	81	Phoenix	0.3100			
82	Arlington	0.3713	82	Irvine	0.2665			

83	Trondheim	0.3679	83	Norfolk, VA	0.2597		
84	Florham Park, NJ	0.3624	84	Jackson, MS	0.2366		
85	Mumbai	0.3500	85	Cheshunt	0.2350		
86	San Mateo	0.3317	86	Darmstadt	0.2331		
87	Alexandria	0.3190	87	Santa Monica	0.2310		
88	Novato	0.3120	88	Sundsvall	0.2148		
89	Tianjin	0.3116	89	Helsinki	0.1850		
90	Santa Clara	0.3087	90	Mission Viejo, CA	0.1840		
91	Begues	0.2971	91	Rockville, MD	0.1807		
92	Oslo	0.2925	92	Taipei	0.1779		
93	San Jose	0.2841	93	Reykjavic	0.1681		
94	Marseille	0.2820	94	Haywards Heath	0.1660		
95	Pusan	0.2780	95	Quebec City	0.1553		
96	Edinburgh	0.2734	96	Birmingham, US	0.1476		
97	Marcoussis	0.2639	97	Leninsky	0.1407		
98	Wroclaw	0.2588	98	Petaling Jaya	0.1405		
99	Zurich	0.2550	99	Mexico City	0.1400		
100	Vancouver	0.2465	100	San Jose	0.1390		

Table 7. City level - Top 100 Investment inflows (in \$billion) in 2007

rank	city	Inflows
1	New York	5.3211
2	Madrid	2.9879
3	Tokyo	2.9139
4	London	2.7579
5	Paris	2.3742
6	Singapore	2.3517
7	Moscow	1.1300
8	Berlin	1.1286
9	Miami	1.0157
10	Washington	0.9999
11	Brussels	0.9311
12	Shanghai	0.9193
13	Prague	0.9051
14	Kuala Lumpur	0.8705
15	Osaka	0.8463
16	Chicago	0.8275
17	Beijing	0.8092
18	San Francisco	0.7870
19	Sao Paulo	0.6657
20	Warsaw	0.5880
21	Munich	0.5474

22	Hamburg	0.5204
23	Calgary	0.5185
24	Yokohama	0.4557
25	Santiago	0.4328
26	Los Angeles	0.4230
27	Amsterdam	0.4224
28	Frankfurt	0.4067
29	Florham Park, NJ	0.3624
30	Mumbai	0.3500
31	Boston	0.3348
32	Houston	0.3263
33	San Diego	0.3089
34	Hong Kong	0.3006
35	Denver	0.2973
36	Irvine	0.2912
37	Bethesda	0.2903
38	Canberra	0.2879
39	Stuttgart	0.2833
40	Portland	0.2830
41	Barcelona	0.2776
42	Vienna	0.2697
43	Rotterdam	0.2672
44	Manchester	0.2504
45	Oakland	0.2496
46	Melbourne	0.2449
47	Budapest	0.2428
48	Sydney	0.2389
49	Rio De Janeiro	0.2372
50	Nanjing	0.2307
51	Seongnam	0.2119
52	Cleveland, OH	0.2094
53	Lyon	0.2068
54	Luxembourg	0.2024
55	Poissy	0.1871
56	Oslo	0.1827
57	Edinburgh	0.1809
58	San Mateo	0.1797
59	Brisbane	0.1758
60	Walnut Creek, CA	0.1743
61	Scottsdale, AZ	0.1727
62	Wroclaw	0.1647
63	Dalian, Liaoning	0.1635
64	Kansas City, MO	0.1558

65	Montreal	0.1553
66	McLean	0.1528
67	Milan	0.1503
68	Bagnolet	0.1484
69	Phoenix	0.1479
70	Urayasu	0.1476
71	Clichy	0.1357
72	Dallas	0.1325
73	Arnhem	0.1277
74	Campbell, CA	0.1264
75	Montrouge	0.1243
76	Birmingham	0.1206
77	Nagoya	0.1179
78	Zurich	0.1168
79	San Jose	0.1146
80	Alexandria	0.1070
81	Buena Park, CA	0.1054
82	Maisons Alfort	0.1039
83	Horley	0.1034
84	Aberdeen	0.1023
85	Guyancourt	0.1010
86	Herndon, VA	0.1000
87	Rome	0.1000
88	Kuopio	0.0999
89	Copenhagen	0.0996
90	Culver City, CA	0.0990
91	Eschborn	0.0982
92	Linthicum Heights, MD	0.0976
93	Mexico City	0.0973
94	Owings Mills, MD	0.0958
95	Tempe, AZ	0.0925
96	Toda	0.0924
97	Nashville, TN	0.0880
98	Toyonaka	0.0877
99	Fort Lee, NJ	0.0860
100	Palo Alto, CA	0.0846

Table 8. City level - Top 100 Investment inflows (in \$billion) in 2008

rank	city	InFlows
1	London	19.8455
2	Paris	8.1611
3	New York	5.6513
4	Singapore	4.1483
5	San Francisco	4.0656
6	Frankfurt	3.9888
7	Washington	3.6065
8	Madrid	3.5530
9	Chicago	2.1233
10	Seattle	1.9180
11	Shanghai	1.7577
12	San Diego	1.3748
13	Brussels	1.3540
14	Beijing	1.2033
15	Seoul	1.1764
16	Los Angeles	1.1700
17	Milan	1.1025
18	Atlanta	1.0210
19	Berlin	0.8920
20	Luxembourg	0.8715
21	Stockholm	0.8620
22	Issy Les Moulineaux	0.8546
23	Crawley	0.8110
24	Tokyo	0.8065
25	Brisbane	0.7256
26	Munich	0.7025
27	Amsterdam	0.6869
28	Stamford	0.6510
29	Reston	0.5588
30	Kawasaki	0.5511
31	Bellevue	0.5353
32	Sunnyvale	0.5320
33	Calgary	0.5229
34	Greenwich	0.5092
35	Melbourne	0.5024
36	Charlotte	0.4865
37	Denver	0.4845
38	Bethesda	0.4155
39	Stuttgart	0.4008

40	Canberra	0.3722
41	Houston	0.3668
42	Prague	0.3627
43	Glasgow	0.3582
44	Hong Kong	0.3552
45	Hamburg	0.3351
46	Taipei	0.3167
47	Phoenix	0.3143
48	Novato	0.3120
49	Tianjin	0.3116
50	Bucharest	0.3005
51	Begues	0.2971
52	Dallas	0.2900
53	Vienna	0.2831
54	Marseille	0.2820
55	Pusan	0.2780
56	Marcoussis	0.2639
57	Boston	0.2600
58	Redwood City	0.2450
59	Plainsboro	0.2300
60	Iselin	0.2275
61	Toronto	0.2135
62	Santa Clara	0.2125
63	Alexandria	0.2120
64	Jericho	0.2100
65	Sydney	0.2092
66	Montreal	0.2066
67	Kyoto	0.2017
68	Portland	0.1955
69	Oakbrook Terrace	0.1912
70	Binfield	0.1892
71	Manchester	0.1892
72	McLean	0.1868
73	Lyon	0.1810
74	Foster City	0.1800
75	Rome	0.1785
76	Bertrange	0.1756
77	Tama	0.1756
78	Trondheim	0.1747
79	Sao Paulo	0.1724
80	San Jose	0.1695
81	Purchase	0.1660
82	Warsaw	0.1635

83	Winnipeg	0.1626
84	Newcastle upon Tyne	0.1611
85	Leatherhead	0.1605
86	Valencia	0.1573
87	Helsinki	0.1527
88	San Mateo	0.1520
89	Tampa	0.1519
90	Austin	0.1500
91	Miami	0.1500
92	Manila	0.1490
93	Long Beach	0.1489
94	Glendale	0.1485
95	Marlow	0.1476
96	Budapest	0.1442
97	Bordeaux	0.1422
98	Huntington Beach	0.1390
99	Hinsdale	0.1387
100	Englewood	0.1385

Table 9. City level - Investment inflows (in \$billion) in 2009

rank	city	InFlows
1	London	8.1416
2	Shanghai	1.9822
3	Paris	1.3578
4	New York	0.8316
5	Sydney	0.7158
6	Boston	0.5904
7	Washington	0.5405
8	Tokyo	0.5191
9	Melbourne	0.4544
10	Milan	0.4344
11	Moscow	0.4144
12	Rio De Janeiro	0.4068
13	Guangzhou	0.3973
14	Warsaw	0.3637
15	Atlanta	0.3195
16	Canberra	0.3115
17	Nanjing	0.3080
18	Seoul	0.3058
19	Dusseldorf	0.2930
20	Barcelona	0.2823

21	Kuala Lumpur	0.2675
22	Rotterdam	0.2479
23	San Francisco	0.2467
24	Vancouver	0.2413
25	Munich	0.2410
26	Clichy	0.2395
27	Hamburg	0.2333
28	Taipei	0.2330
29	Levallois Perret	0.2300
30	Issy Les Moulineaux	0.2279
31	Bridgewater	0.2260
32	Norwich	0.2130
33	Trondheim	0.1921
34	Chicago	0.1697
35	Espoo	0.1688
36	Bellevue	0.1660
37	Birmingham	0.1655
38	Norderstedt	0.1628
39	Prague	0.1626
40	Irvine	0.1595
41	Rome	0.1537
42	Osaka	0.1536
43	Shenzhen	0.1504
44	Bucharest	0.1504
45	Birmingham, US	0.1465
46	Saint-Cloud	0.1455
47	Hoboken	0.1449
48	Amsterdam	0.1405
49	Roissy	0.1400
50	Newstead	0.1394
51	Zurich	0.1375
52	Denver	0.1331
53	Kloten	0.1318
54	Geneva	0.1307
55	Luxembourg	0.1201
56	Roseville, US	0.1186
57	San Diego	0.1151
58	Seattle	0.1130
59	Fairfax	0.1106
60	Cologne	0.1103
61	Seongnam	0.1097
62	Oslo	0.1094
63	Nagoya	0.1086

64	Sao Paulo	0.1055
65	Lisbon	0.1051
66	Vienna	0.1051
67	Lyon	0.1043
68	Ivry Sur Seine	0.1024
69	Regensburg	0.1019
70	Miami	0.1011
71	Brussels	0.1004
72	Sacramento	0.0961
73	Antwerp	0.0945
74	Basel	0.0931
75	Edinburgh	0.0920
76	Sunderland	0.0918
77	Fareham	0.0908

Table 10. City level - Investment inflows (in \$billion) in 2010

rank	city	Inflows
1	New York	2.9370
2	London	2.7037
3	Shanghai	1.8572
4	Paris	1.3004
5	Washington	1.1131
6	Bellevue	0.9600
7	Berlin	0.7588
8	San Francisco	0.7410
9	Rio De Janeiro	0.7097
10	Tokyo	0.6848
11	Chicago	0.6498
12	Frankfurt	0.5884
13	Brisbane	0.5362
14	Brasilia	0.5032
15	Moscow	0.5017
16	Beijing	0.4834
17	Vienna	0.4797
18	Munich	0.4762
19	Guangzhou	0.4651
20	Cologne	0.4029
21	Arlington	0.3713
22	Dusseldorf	0.3643
23	Hamburg	0.3430
24	Houston	0.2928
25	Hong Kong	0.2888

26	Manchester	0.2782
27	Stockholm	0.2719
28	Amsterdam	0.2676
29	Warsaw	0.2648
30	Melbourne	0.2642
31	Oakland	0.2612
32	Honolulu	0.2310
33	Sydney	0.2169
34	Spring	0.2138
35	Los Angeles	0.2080
36	Whippany	0.2028
37	Barcelona	0.1892
38	Birmingham	0.1863
39	Lexington	0.1771
40	Fort Lauderdale	0.1700
41	Perth	0.1588
42	Astoria	0.1550
43	Montreal	0.1546
44	Dublin, US	0.1462
45	Singapore	0.1454
46	Madrid	0.1436
47	Levallois Perret	0.1400
48	McLean	0.1367
49	Jersey City	0.1359
50	Erlangen	0.1344
51	Seoul	0.1305
52	Mansfield	0.1289
53	Auckland	0.1286
54	Issy Les Moulineaux	0.1250
55	Brookline	0.1115
56	Glasgow	0.1075
57	Milan	0.1073
58	Irvine	0.1032
59	Nanterre	0.1027
60	Seongnam	0.1015
61	Barueri	0.1010
62	Santiago	0.0987
63	Durham	0.0980
64	Santa Clara	0.0962
65	Prague	0.0954
66	Fredrikstad	0.0945
67	Wroclaw	0.0941
68	Littleton	0.0939

69	Utrecht	0.0932
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Table 11. City level - Investment outflows (in \$billion) in 2007

rank	city	OutFlows
1	Boston	5.4226
2	New York	4.8260
3	London	4.7871
4	Frankfurt	4.0387
5	Munich	2.6441
6	Tokyo	2.0594
7	Wiesbaden	1.8513
8	Hamburg	1.7408
9	Los Angeles	1.6409
10	Chicago	1.2925
11	Zurich	1.1076
12	Hong Kong	1.0852
13	Houston	1.0483
14	Newport Beach, Ca	0.8716
15	Madrid	0.8425
16	Dallas	0.7494
17	Tel Aviv	0.7027
18	Newark	0.6459
19	Kuwait City	0.6412
20	Kuala Lumpur	0.6121
21	Redwood City	0.5866
22	Toronto	0.5135
23	Stockholm	0.4788
24	Shenzhen	0.4635
25	Paris	0.4205
26	Atlanta	0.4169
27	San Francisco	0.4164
28	San Mateo	0.3996
29	Cayman Islands	0.3493
30	Osaka	0.3364
31	Dublin	0.3235
32	Seattle	0.3100
33	Pittsburgh	0.2750
34	Barcelona	0.2500
35	Washington	0.2420
36	Abu Dhabi	0.2372
37	Jackson, MS	0.2366
38	Darmstadt	0.2331

39	Dusseldorf	0.2313
40	Edinburgh	0.1968
41	San Antonio	0.1930
42	Norwalk, CT	0.1869
43	Helsinki	0.1850
44	Beirut	0.1826
45	Rockville, MD	0.1807
46	Oakland	0.1797
47	Taipei	0.1779
48	Tripoli	0.1763
49	Sydney	0.1758
50	Des Moines	0.1727
51	Melbourne	0.1717
52	La Coruna	0.1701
53	The Hague	0.1610
54	Quebec City	0.1553
55	Philadelphia	0.1550
56	Brisbane	0.1549
57	Doha	0.1355
58	Trieste	0.1212
59	Wilmslow	0.1171
60	Luxembourg	0.1039
61	Oulu	0.0999
62	Sundsvall	0.0996
63	Amsterdam	0.0922
64	Dubai	0.0857
65	White Plains, NY	0.0795
66	Bonn	0.0792
67	Douglas	0.0769
68	Rome	0.0730
69	Copenhagen	0.0720
70	Anaheim, CA	0.0717
71	Vienna	0.0702
72	Norwich	0.0697
73	Siena	0.0694
74	Irvine	0.0665
75	San Diego	0.0662
76	Charleroi	0.0641
77	Lisle, IL	0.0602
78	Nashville, TN	0.0592
79	Hartford CT	0.0555

Table 12. City level - Investment outflows (in \$billion) in 2008

rank	city	OutFlows
1	New York	22.0860
2	Boston	8.3147
3	London	6.2613
4	Dublin	5.7287
5	Madrid	3.9832
6	Sydney	3.5957
7	Munich	2.7005
8	Houston	2.6306
9	Norwalk, CT	2.1190
10	Stockholm	2.0767
11	Bonn	2.0661
12	Tokyo	2.0432
13	Newark	2.0030
14	Singapore	1.7485
15	Frankfurt	1.7309
16	Los Angeles	1.4138
17	Lyon	1.3779
18	Tel Aviv	1.2397
19	Amsterdam	1.1896
20	Toronto	1.1523
21	Wiesbaden	1.1058
22	Sacramento	1.0030
23	Zurich	0.9546
24	Newport Beach, Ca	0.9186
25	Fort Myers	0.8339
26	Vienna	0.7884
27	Atlanta	0.7666
28	Petah Tikva	0.7470
29	Yahud	0.7250
30	Hamburg	0.7015
31	San Francisco	0.5905
32	Luxembourg	0.5559
33	Shenzhen	0.5353
34	Paris	0.4746
35	Cork	0.4581
36	Hong Kong	0.4459
37	Washington	0.4321
38	Abu Dhabi	0.3918
39	Dusseldorf	0.3849
40	Melbourne	0.3407
41	Charlotte	0.3350

42	San Diego	0.3120
43	Dubai	0.3000
44	San Mateo	0.2974
45	Seoul	0.2780
46	Guernsey	0.2626
47	Chicago	0.2600
48	Pittsburgh	0.2600
49	Cheshunt	0.2350
50	Innsbruck	0.2248
51	Oslo	0.2200
52	The Hague	0.2108
53	Irvine	0.2000
54	Trieste	0.1864
55	Mission Viejo, CA	0.1840
56	Oakland	0.1800
57	Osaka	0.1702
58	Philadelphia	0.1695
59	Reykjavic	0.1681
60	Norfolk, VA	0.1527
61	Edinburgh	0.1488
62	La Coruna	0.1407
63	Bentonville, AK	0.1400
64	San Jose	0.1390
65	Barcelona	0.1381
66	Stamford	0.1367

Table 13. City level - Investment outflows (in \$billion) in 2009

rank	city	OutFlows
1	New York	4.3648
2	Beijing	2.1398
3	Seoul	1.9809
4	Frankfurt	1.9205
5	Munich	1.8554
6	Hamburg	1.3640
7	London	1.3156
8	Stockholm	0.9370
9	Boston	0.9094
10	Hong Kong	0.9048
11	Paris	0.7097
12	Muscat	0.6358
13	Los Angeles	0.5583
14	Washington	0.4652

15	Zurich	0.4508
16	Trieste	0.4344
17	Sao Paulo	0.4068
18	Chicago	0.3715
19	Atlanta	0.3710
20	Brussels	0.3667
21	Stuttgart	0.3517
22	Doha	0.3442
23	Madrid	0.3408
24	Hamilton	0.3347
25	Tel Aviv	0.3039
26	Tokyo	0.2623
27	Tripoli	0.2473
28	Beirut	0.2471
29	Dublin	0.2208
30	Innsbruck	0.2045
31	Sydney	0.1700
32	San Antonio	0.1697
33	Haywards Heath	0.1655
34	Osaka	0.1600
35	Birmingham, US	0.1472
36	Dallas	0.1465
37	Petaling Jaya	0.1400
38	Brisbane	0.1394
39	Wiesbaden	0.1286
40	Shah Alam	0.1275
41	Palo Alto, CA	0.1186
42	Milwaukee	0.1130
43	Newport Beach, Ca	0.1106
44	Guernsey	0.1073
45	Rio De Janeiro	0.1055
46	La Coruna	0.1011
47	Swindon	0.0918

Table 14. City level - Investment outflows (in \$billion) in 2010

rank	city	Outflows
1	Singapore	2.5453
2	New York	2.4099
3	Munich	2.2070
4	Mountain View, CA	1.7700
5	Hamburg	1.5426
6	Seoul	1.0918
7	Washington	1.0228
8	Frankfurt	0.9925
9	Newport Beach, Ca	0.8578
10	Toronto	0.8131
11	Sao Paulo	0.8107
12	Boston	0.8066
13	Hong Kong	0.7353
14	Stockholm	0.6812
15	Los Angeles	0.5990
16	Osaka	0.4788
17	San Antonio	0.4200
18	Denver	0.4188
19	Des Moines	0.4100
20	Paris	0.3693
21	Doha	0.3619
22	Beijing	0.3609
23	Tel Aviv	0.3300
24	Houston	0.3117
25	Phoenix	0.3100
26	Milwaukee	0.3050
27	Atlanta	0.2994
28	Innsbruck	0.2822
29	Beirut	0.2792
30	London	0.2782
31	Oslo	0.2511
32	Kuala Lumpur	0.2398
33	Santa Monica	0.2310
34	Bentonville, AK	0.1931
35	Trieste	0.1889
36	Dublin	0.1771
37	San Diego	0.1735
38	Stuttgart	0.1601
39	Melbourne	0.1588

40	Leninsky	0.1407
41	Mexico City	0.1400
42	Sydney	0.1376
43	Christchurch	0.1286
44	Brisbane	0.1192
45	Baltimore	0.1190
46	Sundsvall	0.1153
47	Verona	0.1073
48	Norfolk, VA	0.1070
49	Edinburgh	0.1024
50	Newark	0.0987
51	San Francisco	0.0962
52	Milan	0.0916

Table 15. City level - Self Investment flows (in \$billion) in 2007

rank	city	self-inv
1	Tokyo	4.8513
2	London	4.3139
3	New York	2.4830
4	Seoul	1.0064
5	Toronto	0.9229
6	Paris	0.7520
7	Atlanta	0.6609
8	Detroit	0.6260
9	Oslo	0.4236
10	Copenhagen	0.3602
11	Stockholm	0.3436
12	Taipei	0.2868
13	Houston	0.2715
14	Fort Worth	0.2380
15	Rome	0.2210
16	Osaka	0.2137
17	Moscow	0.2070
18	Beijing	0.1982
19	Sydney	0.1896
20	Singapore	0.1813
21	San Diego	0.1779
22	Madrid	0.1525
23	Santa Clara	0.1494
24	Edinburgh	0.1323
25	Hong Kong	0.0898
26	Perth	0.0810

27	Munich	0.0781
28	Montreal	0.0744
29	Brussels	0.0654
30	Princeton, NJ	0.0625
31	Vancouver	0.0614
32	Tel Aviv	0.0613
33	Wellington	0.0598
34	Riverside	0.0590
35	Rochdale	0.0554

Table 16. City level - Self Investment flows (in \$billion) in 2008

rank	city	self-inv
1	New York	18.1327
2	London	5.8438
3	Tokyo	3.1064
4	Paris	1.7234
5	Madrid	1.5435
6	Seoul	1.0956
7	Boston	1.0130
8	Oslo	1.0094
9	Dubai	0.7081
10	Moscow	0.6500
11	Stockholm	0.5801
12	Denver	0.4050
13	Washington	0.3245
14	Hong Kong	0.3221
15	Dublin	0.2722
16	Los Angeles	0.2690
17	Sydney	0.1990
18	Toronto	0.1913
19	Singapore	0.1776
20	Amsterdam	0.1664
21	Brisbane	0.1658
22	Taipei	0.1649
23	Barcelona	0.1565
24	Stamford	0.1344

Table 17. City level - Self Investment flows (in \$billion) in 2009

rank	city	self-inv
1	Tokyo	6.4717
2	London	2.1933
3	Seoul	2.0719
4	Vienna	1.7721
5	Beijing	1.3771
6	Paris	1.2329
7	Moscow	1.1858
8	Shanghai	1.0899
9	Taipei	0.8011
10	New York	0.5654
11	Hong Kong	0.5405
12	Munich	0.3842
13	Osaka	0.3509
14	Dusseldorf	0.2783
15	Toronto	0.2691
16	Redwood City	0.2318
17	Washington	0.2216
18	Brussels	0.2079
19	Guangzhou	0.1755
20	The Hague	0.1706
21	Singapore	0.1616
22	Giessen	0.1480
23	San Mateo	0.1362
24	Zurich	0.1297
25	Budapest	0.1282
26	Sao Paulo	0.1231
27	Melbourne	0.1216
28	Copenhagen	0.1188
29	Utrecht	0.1187
30	Houston	0.1172
31	Baltimore	0.1150
32	Barcelona	0.1122
33	Hamburg	0.1080
34	Ann Arbor	0.1079
35	Stockholm	0.1063
36	Irvine	0.0977
37	Tel Aviv	0.0970

Table 18. City level - Self Investment flows (in \$billion) in 2010

rank	city	self-inv
1	Tokyo	6.1956
2	London	1.9126
3	Sydney	1.7447
4	Hong Kong	1.5375
5	New York	1.0843
6	Singapore	1.0260
7	Paris	0.8832
8	Moscow	0.7002
9	Beijing	0.6747
10	Mumbai	0.5637
11	Toronto	0.5618
12	Stockholm	0.5203
13	Washington	0.4524
14	Seoul	0.3950
15	Oslo	0.2464
16	Barcelona	0.2245
17	Dubai	0.1947
18	Copenhagen	0.1668
19	Sao Paulo	0.1514
20	Taipei	0.1505
21	Newark	0.1458
22	Guangzhou	0.1428
23	Madrid	0.1396
24	Philadelphia	0.1290
25	Osaka	0.1234
26	Winnipeg	0.1089
27	Vienna	0.0934

Table 19. City dyads - Top 100 Investment flows (in \$billion) over the 4-year period 2007-2010

rank	from	to	investment
1	New York	London	6.1661
2	London	Madrid	5.5947
3	Boston	New York	5.1045
4	Dublin	London	3.9431
5	New York	Paris	3.3461
6	New York	Frankfurt	3.1965
7	Madrid	London	3.046
8	Boston	London	2.7456
9	New York	San Francisco	2.7435
10	New York	Washington	2.6456

11	New York	Chicago	2.1581
12	Beijing	Shanghai	1.8889
13	Mountain View, CA	New York	1.77
14	New York	Tokyo	1.6823
15	Singapore	Shanghai	1.5449
16	Boston	Seattle	1.494
17	Munich	Paris	1.4486
18	London	Paris	1.4144
19	Los Angeles	Singapore	1.4082
20	Boston	Washington	1.3325
21	Bonn	London	1.3125
22	Frankfurt	Paris	1.2812
23	Seoul	London	1.2762
24	Frankfurt	London	1.1732
25	New York	Seoul	1.1706
26	Tokyo	London	1.1369
27	Sao Paulo	Rio De Janeiro	1.1188
28	Toronto	London	1.0736
29	Hong Kong	Shanghai	1.0592
30	Osaka	Tokyo	1.0587
31	New York	Singapore	1.0411
32	Wiesbaden	Singapore	1.0136
33	Tel Aviv	New York	1.0069
34	Sacramento	New York	1.003
35	Shenzhen	Beijing	0.9988
36	Singapore	London	0.9495
37	New York	Berlin	0.946
38	Frankfurt	Prague	0.9443
39	Sydney	Singapore	0.9315
40	Newark	London	0.9305
41	Washington	London	0.9207
42	Hong Kong	Guangzhou	0.8681
43	New York	Miami	0.8556
44	London	Brussels	0.8462
45	Fort Myers	London	0.8339
46	Stockholm	Singapore	0.8195
47	Munich	Crawley	0.811
48	Houston	Los Angeles	0.795
49	Hamburg	Munich	0.7946
50	Sydney	London	0.7872
51	Newport Beach, Ca	San Diego	0.7828
52	Doha	London	0.7715
53	Seoul	Berlin	0.7588

54	Boston	Paris	0.758
55	Tokyo	Osaka	0.7555
56	Frankfurt	Warsaw	0.7511
57	Munich	Moscow	0.7486
58	Petah Tikva	New York	0.747
59	Lyon	Paris	0.7329
60	Yahud	New York	0.725
61	Tokyo	Beijing	0.7073
62	Dublin	Shanghai	0.7067
63	Munich	London	0.7064
64	Boston	Bellevue	0.7018
65	Wiesbaden	Paris	0.6875
66	Sydney	Melbourne	0.6758
67	Munich	Boston	0.6727
68	Madrid	Sao Paulo	0.6657
69	London	New York	0.662
70	Muscat	London	0.6574
71	New York	Stamford	0.651
72	Newport Beach, Ca	Chicago	0.6498
73	Lyon	Issy Les Moulineaux	0.645
74	Kuwait City	Kuala Lumpur	0.6412
75	Munich	Canberra	0.637
76	Seoul	Sydney	0.6257
77	Kuala Lumpur	Singapore	0.6121
78	Redwood City	Tokyo	0.5866
79	Luxembourg	Milan	0.5559
80	Frankfurt	Shanghai	0.551
81	Hamburg	Tokyo	0.5413
82	Houston	Chicago	0.54
83	Pittsburgh	San Francisco	0.535
84	Hamburg	Paris	0.5322
85	Hamburg	London	0.5289
86	Beirut	London	0.5265
87	Boston	San Francisco	0.5146
88	Los Angeles	Oakland	0.5108
89	Bonn	Luxembourg	0.5048
90	Stockholm	Paris	0.5038
91	New York	Brasilia	0.5032
92	Los Angeles	San Francisco	0.4957
93	Dublin	Munich	0.4922
94	Singapore	Beijing	0.4834
95	Atlanta	New York	0.4708
96	Houston	San Francisco	0.467

97	Dublin	Amsterdam	0.4591
98	Cork	London	0.4581
99	Tel Aviv	London	0.4515
100	Zurich	Stuttgart	0.4454

Table 20. Top 100 - FS connectivities 2008

Rank	city	country	FNCs
1	London	United Kingdom	100.00
2	New York	U.S.	96.38
3	Hong Kong	China	92.62
4	Tokyo	Japan	82.24
5	Singapore	Singapore	82.06
6	Paris	France	79.01
7	Shanghai	China	76.86
8	Sydney	Australia	76.80
9	Seoul	Korea	70.21
10	Madrid	Spain	70.09
11	Milan	Italy	69.74
12	Beijing	China	69.21
13	Taipei	China	64.47
14	Toronto	Canada	63.91
15	Moscow	Russia	61.22
16	Frankfurt	Germany	60.63
17	Zurich	Switzerland	59.91
18	Mumbai	India	59.16
19	Brussels	Belgium	56.95
20	Kuala Lumpur	Malaysia	56.76
21	Chicago	U.S.	55.74
22	Amsterdam	Netherlands	55.63
23	Dublin	Ireland	55.57
24	Jakarta	Indonesia	54.47
25	Sao Paulo	Brazil	54.37
26	Bangkok	Thailand	54.19
27	Buenos Aires	Argentina	51.24
28	Warsaw	Poland	49.57
29	Los Angeles	U.S.	48.97
30	Istanbul	Turkey	48.80

31	Mexico City	Mexico	46.18
32	Stockholm	Sweden	44.35
33	Dubai	UAE	44.33
34	Manila	Philippines	42.92
35	Geneva	Switzerland	42.80
36	San Francisco	U.S.	41.55
37	Luxembourg	Luxembourg	41.36
38	Prague	Czeck Republic	39.79
39	Athens	Greece	39.48
40	Lisbon	Portugal	38.52
41	Guangzhou	China	37.89
42	Melbourne	Australia	37.58
43	Santiago	Chile	37.11
44	Rome	Italy	35.13
45	Washington	U.S.	34.71
46	Johannesburg	South Africa	34.32
47	Atlanta	U.S.	33.74
48	Caracas	Venezuela	33.49
49	Budapest	Hungary	33.25
50	Boston	U.S.	33.24
51	Dallas	U.S.	33.18
52	Auckland	New Zealand	33.06
53	Montreal	Canada	32.63
54	Manama	Bahrain	32.21
55	Houston	U.S.	31.81
56	Vienna	Austria	31.55
57	Cairo	Egypt	30.86
58	Munich	Germany	29.43
59	Bogota	Colombia	27.23
60	Lima	Peru	26.59
61	Karachi	Pakistan	26.36
62	Bangalore	India	25.84
63	Miami	U.S.	25.49
64	Vancouver	Canada	25.18
65	Shenzhen	China	24.92
66	Berlin	Germany	23.11
67	New Delhi	India	23.10

68	Hanoi	Vietnam	22.48
69	Chengdu	China	22.22
70	Bucharest	Romania	22.12
71	Ho Chi Minh City	Vietnam	22.05
72	Barcelona	Spain	21.51
73	Doha	Qatar	21.49
74	Panama City	Panama	21.25
75	Tel Aviv	Israel	21.21
76	Labuan	Malaysia	21.20
77	Düsseldorf	Germany	20.29
78	Denver	U.S.	19.60
79	Bratislava	Slovakia	19.56
80	Tianjin	China	19.20
81	Beirut	Lebanon	19.11
82	Birmingham (UK)	#N/A	19.09
83	Perth	Australia	19.03
84	Rio de Janeiro	Brazil	19.00
85	Seattle	U.S.	18.94
86	Portland	U.S.	18.49
87	Montevideo	Uruguay	18.36
88	Riyadh	Saudi Arabia	17.89
89	Osaka	Japan	17.67
90	Hartford	U.S.	17.60
91	Calgary	Canada	17.52
92	Nicosia	Cyprus	17.28
93	Edinburgh	United Kingdom	17.15
94	Brisbane	Australia	17.11
95	Calcutta	India	17.10
96	Minneapolis	U.S.	16.81
97	Chennai	India	16.43
98	Sofia	Bulgaria	16.29
99	Colombo	Sri Lanka	16.28
100	Stuttgart	Germany	16.14

Table 21. Real Estate data overview – flows in \$billion

	observations/transactions	total amount of flows	number of cities involved	average price per transaction
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2007	397	70.3047	189	0.1771
2008	393	132.4200	138	0.3369
2009	251	51.2006	118	0.2040
2010	216	47.6471	108	0.2206

Table 22. Spearman’s RHO correlation between FS connectivities and RE flows

		RE flows
FS conn	Correlation Coefficient	.646**
	Sig. (2-tailed)	.000
	N	141

** . Correlation is significant at the 0.01 level (2-tailed).

Table 23. Pearson correlation between FS connectivities and RE flows

		RE flows
FS conn	Correlation Coefficient	.611**
	Sig. (2-tailed)	.000
	N	141

** . Correlation is significant at the 0.01 level (2-tailed).

Table 24. QAP correlation between FS and RE networks

	Value	Signif	Avg	SD	P(Large)	P(Small)	NPerm
Pearson Correlation:	0.299	0	0	0.023	0	1	2500
Simple Matching:	0.156	0	0.151	0.003	0	1	2500
Jaccard Coefficient:	0.04	0	0.034	0.002	0	1	2500
Goodman-Kruskal Gamma:	0.91	0	0.018	0.161	0	1	2500
Hamming Distance:	16668	0	16759.83	336.392	1	0	2500

Figure 1. Global office market inflows, 2007-2010.

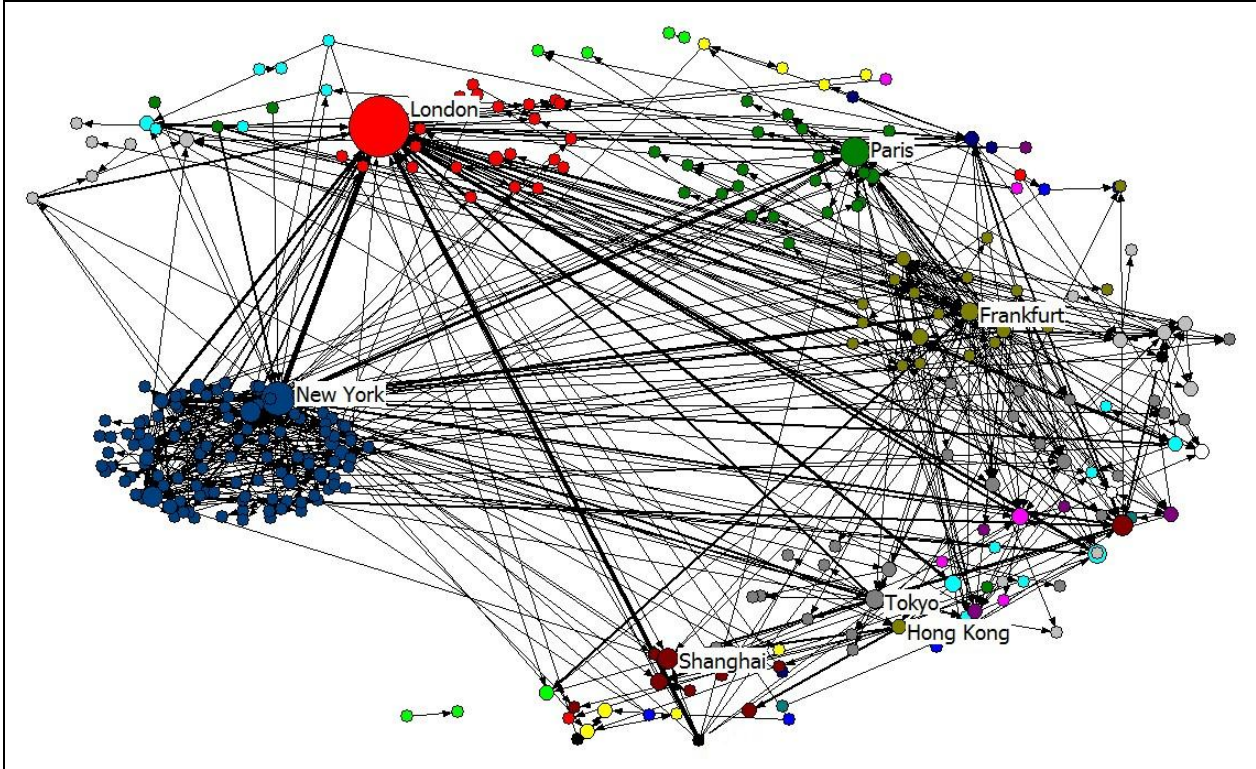


Figure 2. Global office market outflows, 2007-2010.

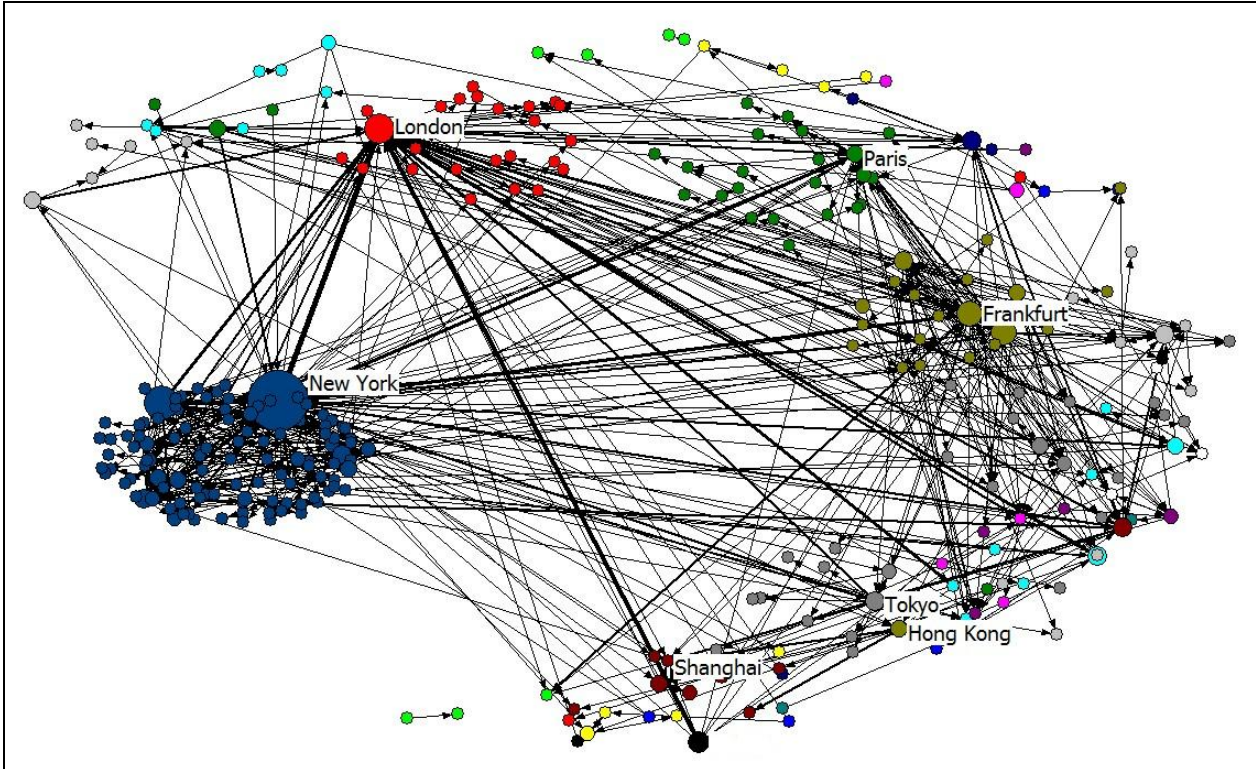
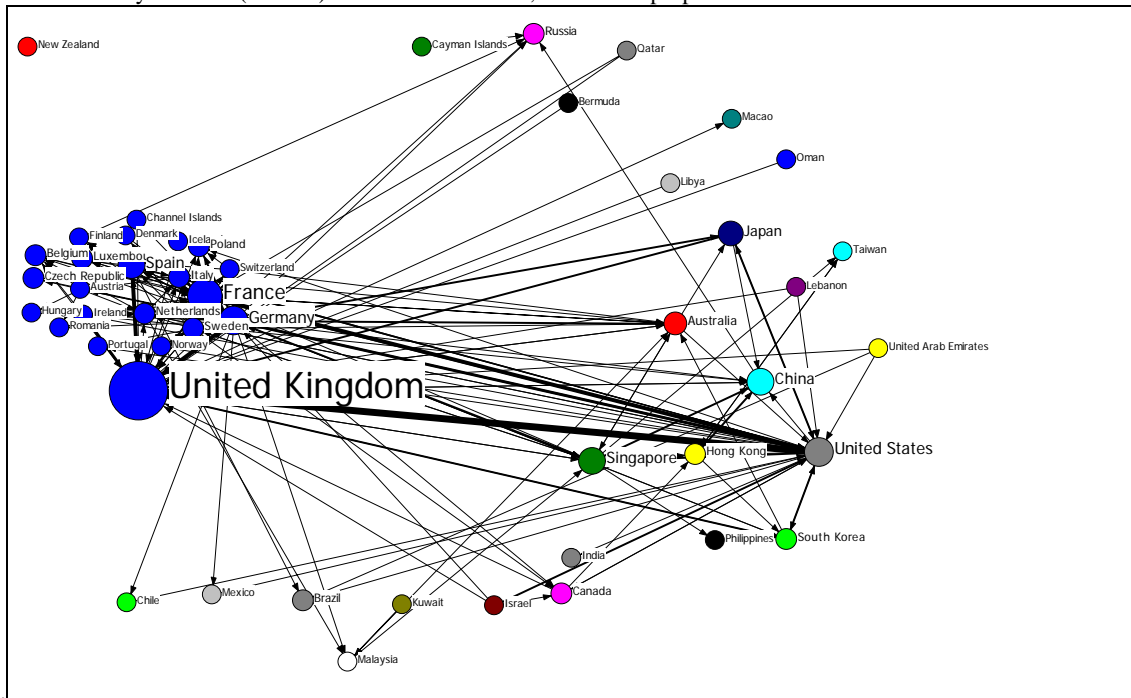


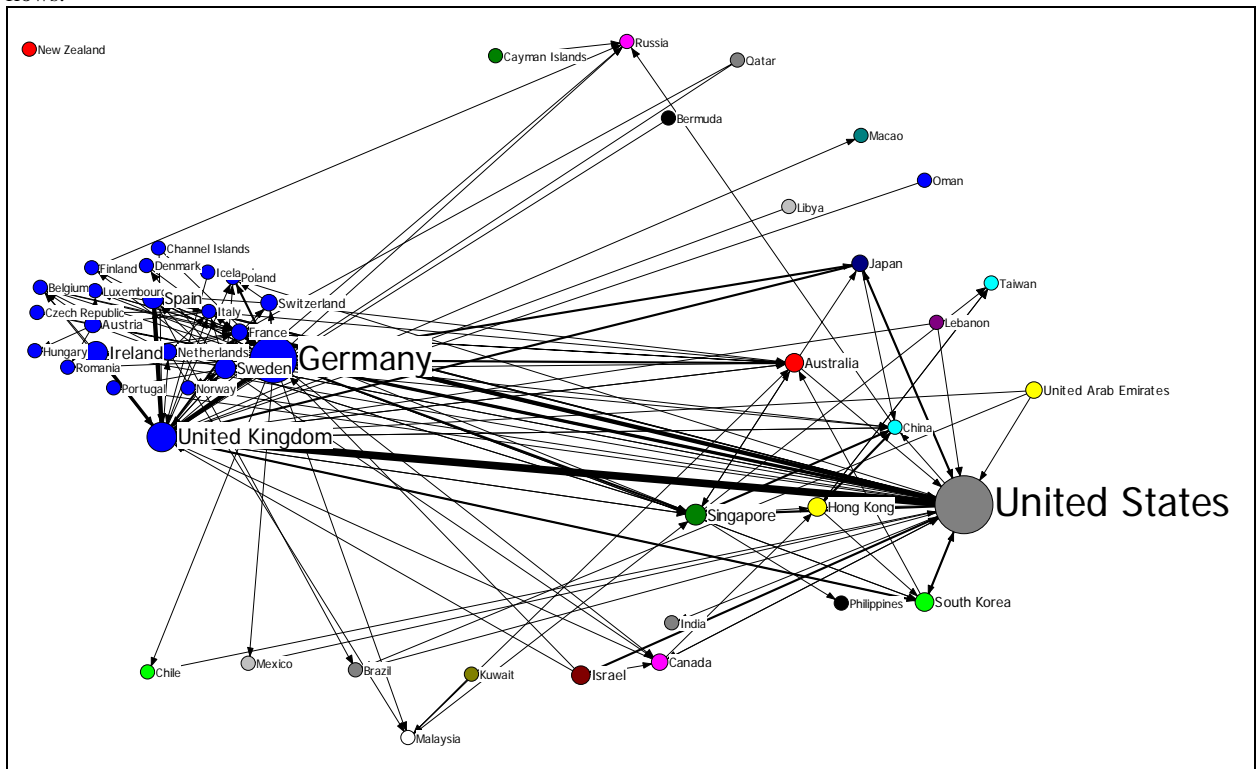
Figure 3. Network of investment flows over the 4-year period 2007-2010: node size is proportional to the amount of investment a country receives (inflows) from other countries; link size is proportional to the amount of investment



flows.

Figure 4. Network of investment flows over the 4-year period 2007-2010: node size is proportional to the amount a country invests (outflows) into other countries; link size is proportional to the amount of investment

flows.



The following set of figures (5 to 8) represent networks of Investment flows over each of the 4 years 2007-2010: node size is proportional to the amount of investment a country receives (inflows) from other countries and link size is proportional to the amount of investment flows.

Figure 5. Inflows 2007

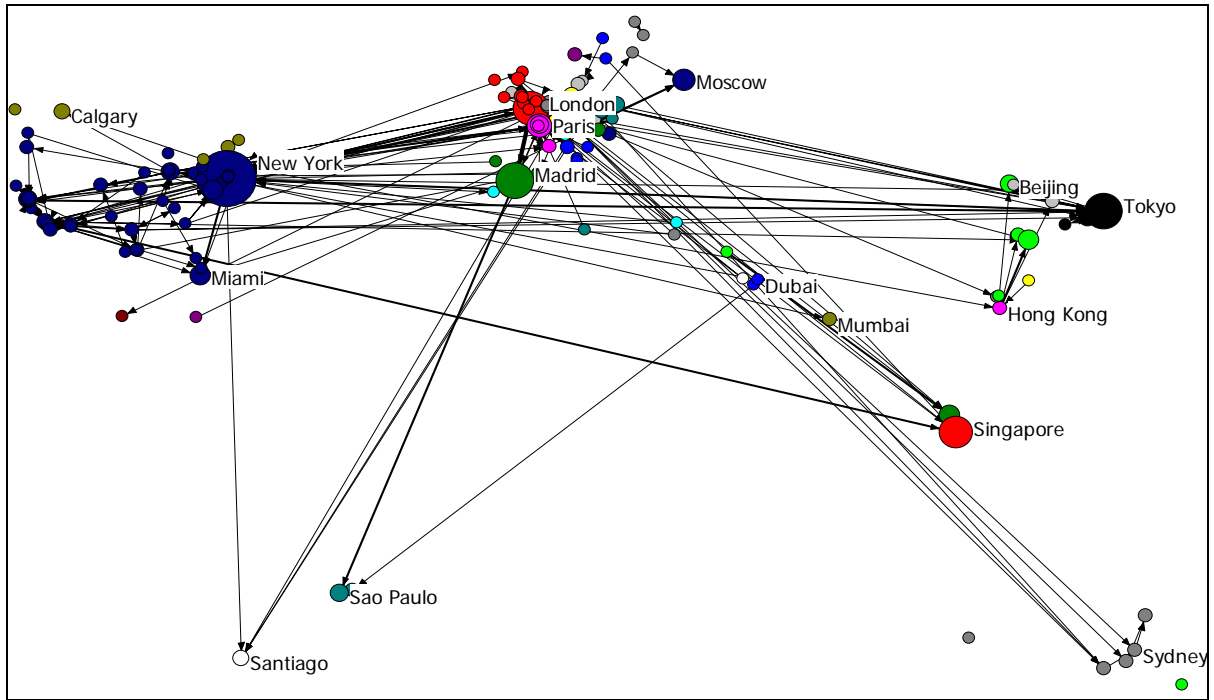


Figure 6. Inflows 2008

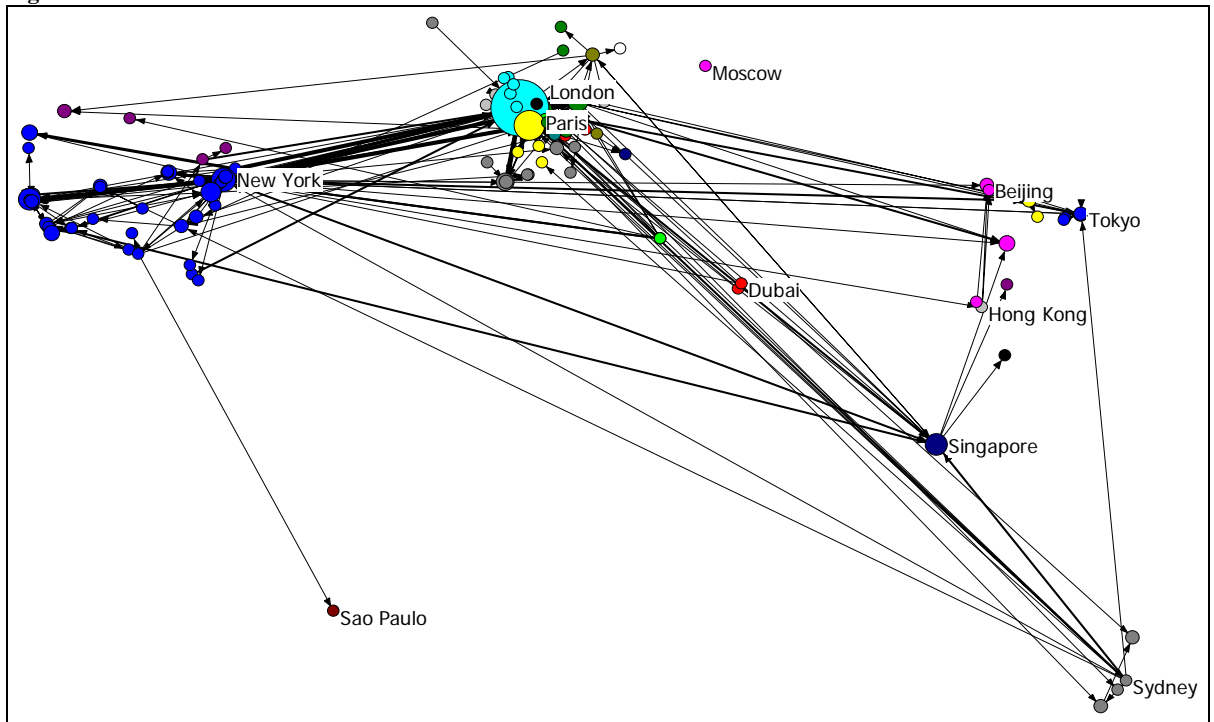


Figure 7. Inflows 2009

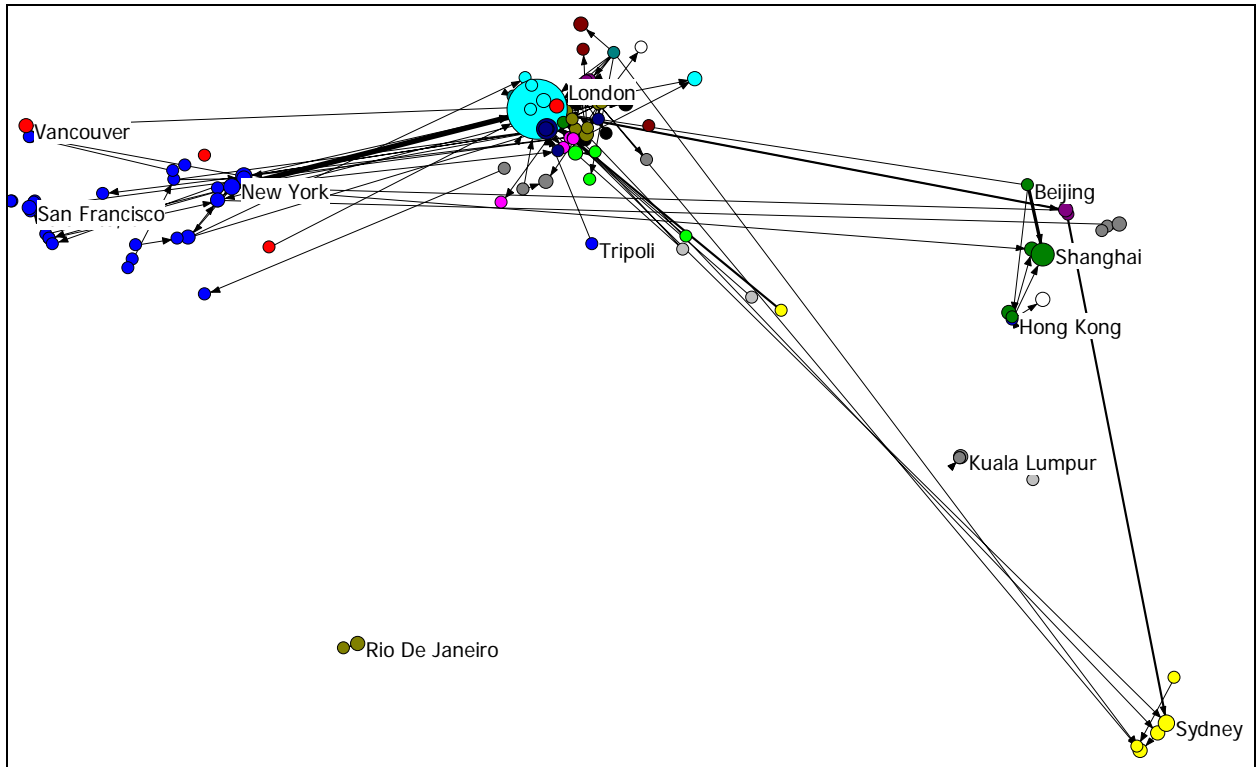


Figure 8. Inflows 2010

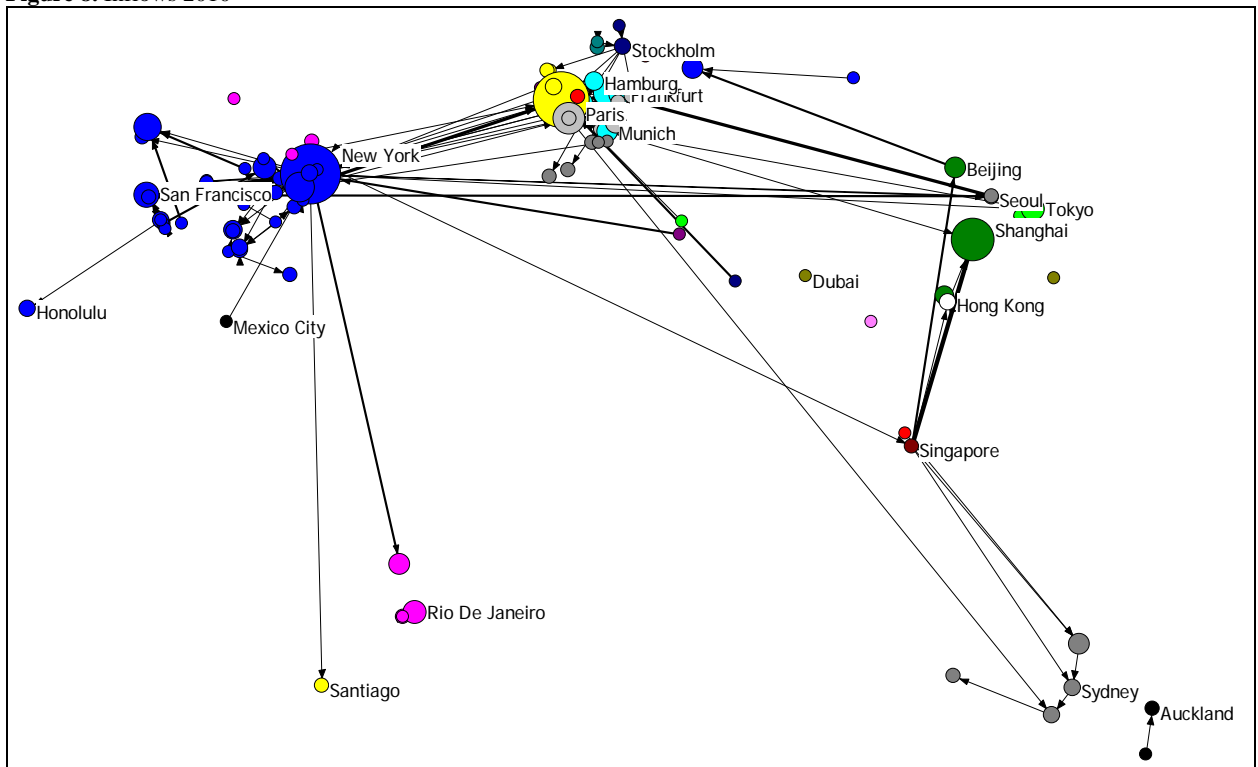
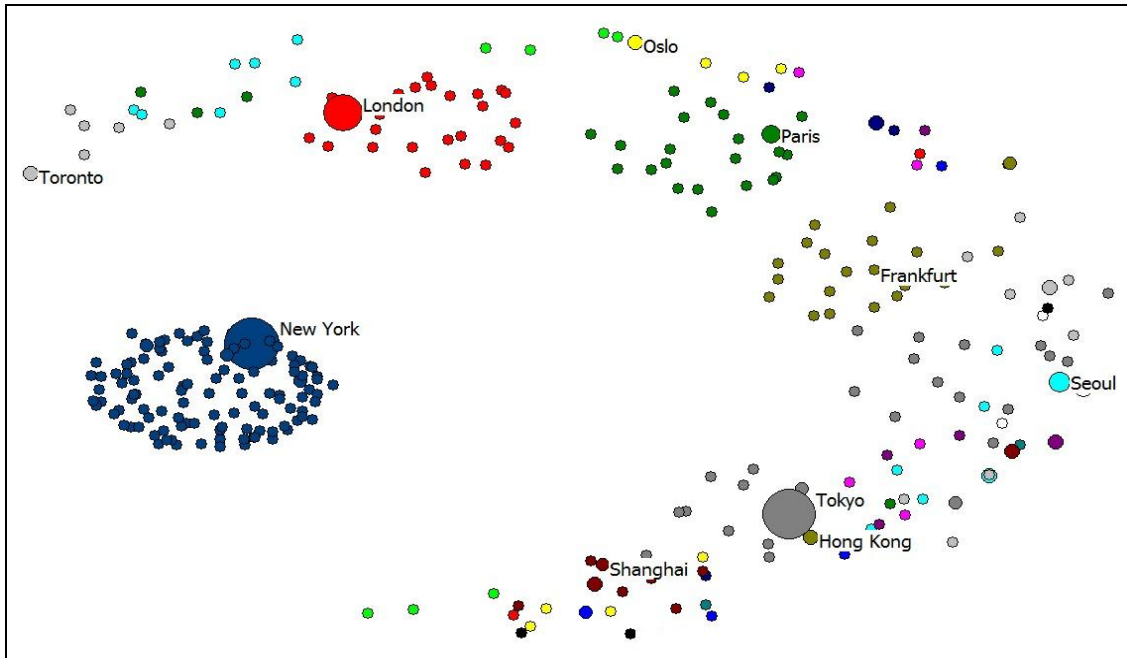


Figure 9. Office market 'self-investment' 2007-2010



The following set of figures (10 to 13) represent networks of Investment flows over each of the 4 years 2007-2010: node size is proportional to the amount a country invests (outflows) into other countries and link size is proportional to the amount of investment flows.

Figure 10. Outflows 2007

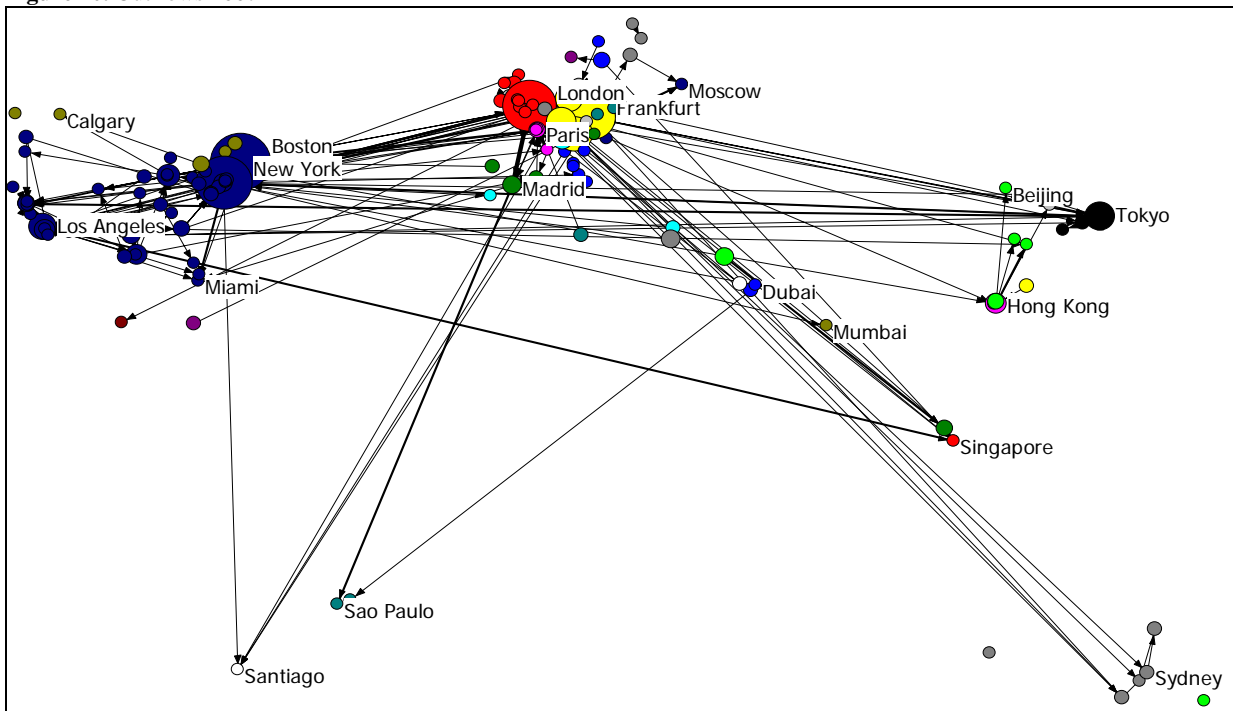


Figure 11. Outflows 2008

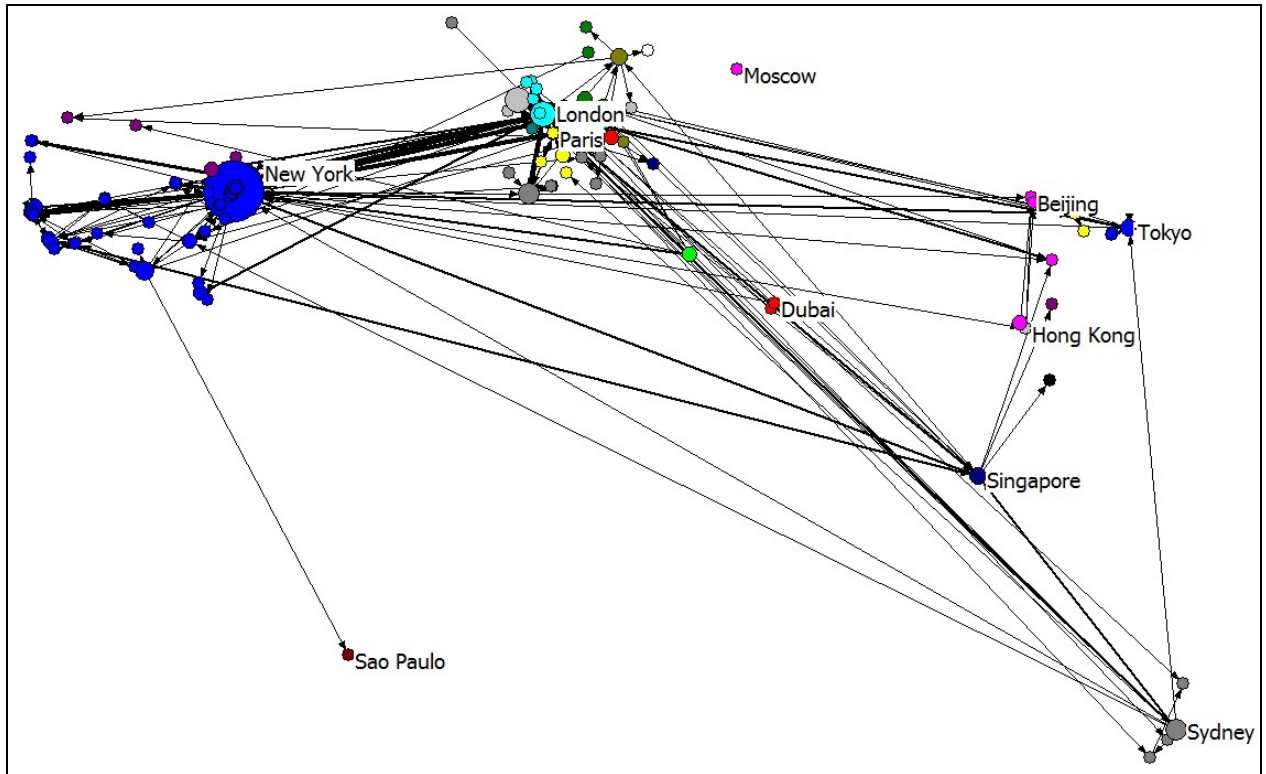


Figure 12. Outflows 2009

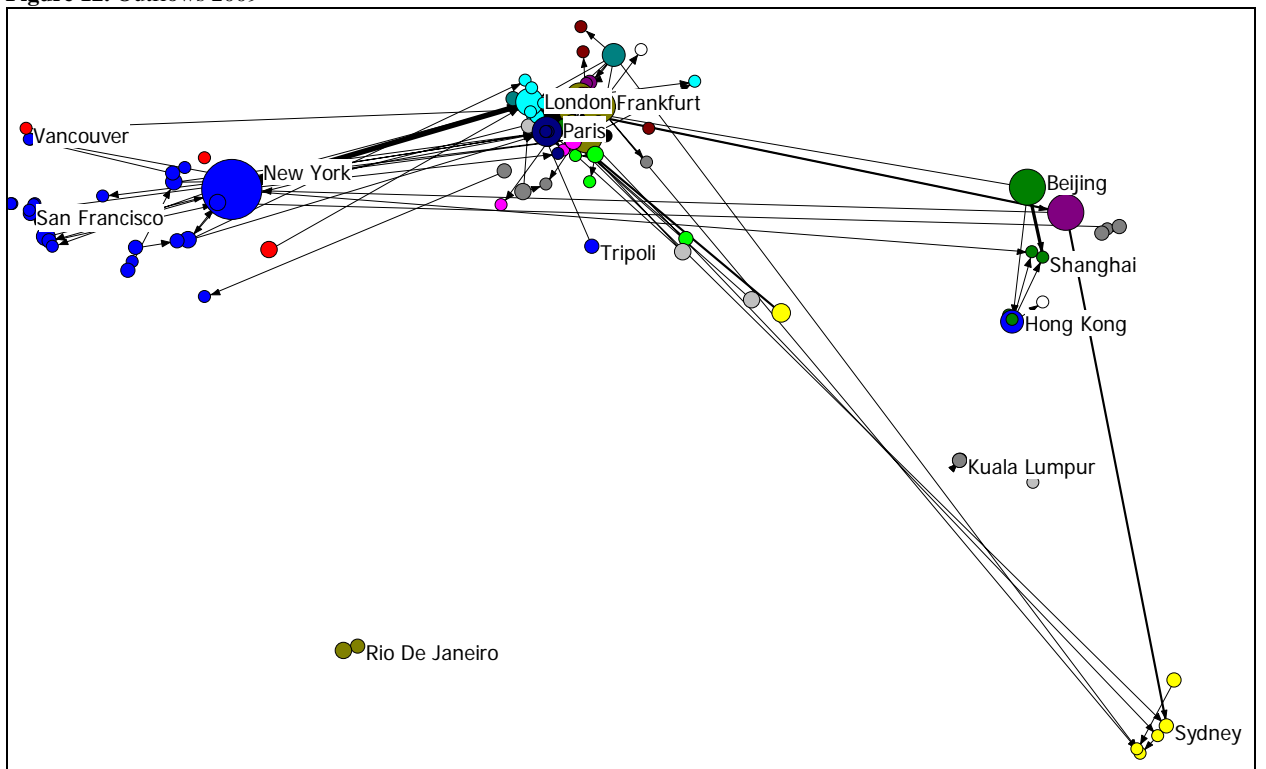


Figure 13. Outflows 2010

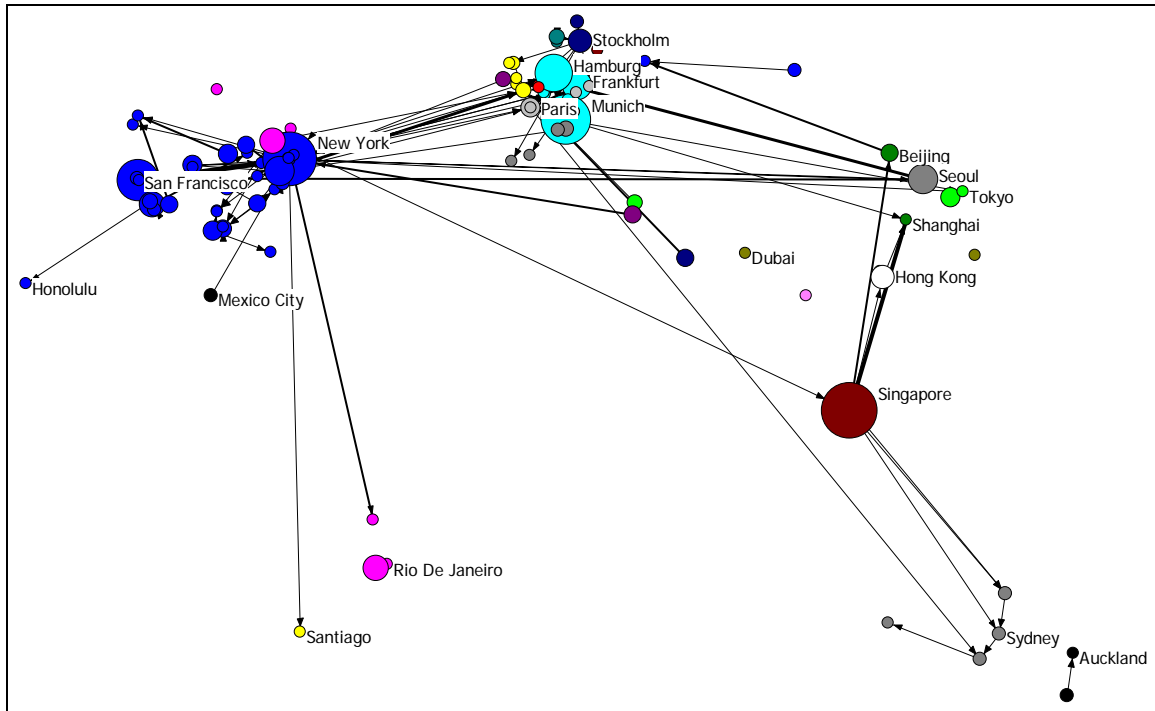


Figure 14. New York ego-network (RE flows for aggregated years from 2007-2010)

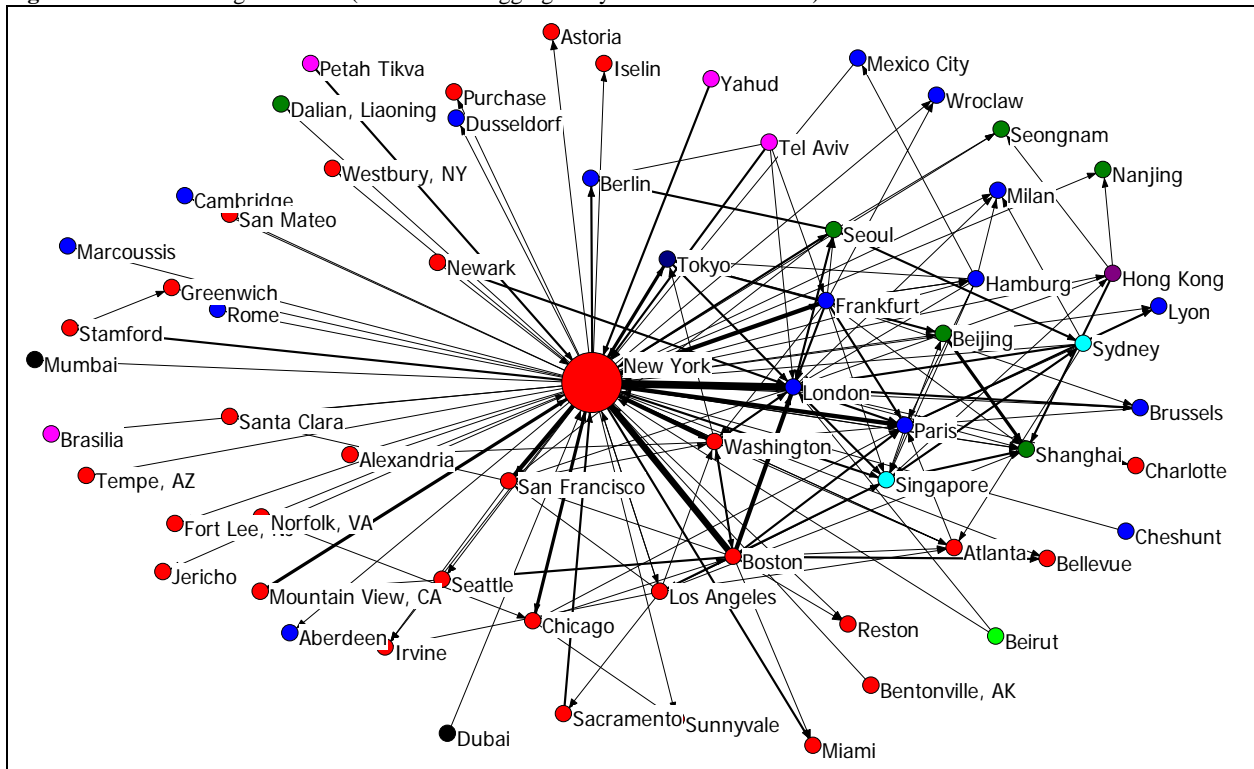


Figure 15. London ego-network (RE flows for aggregated years from 2007-2010)

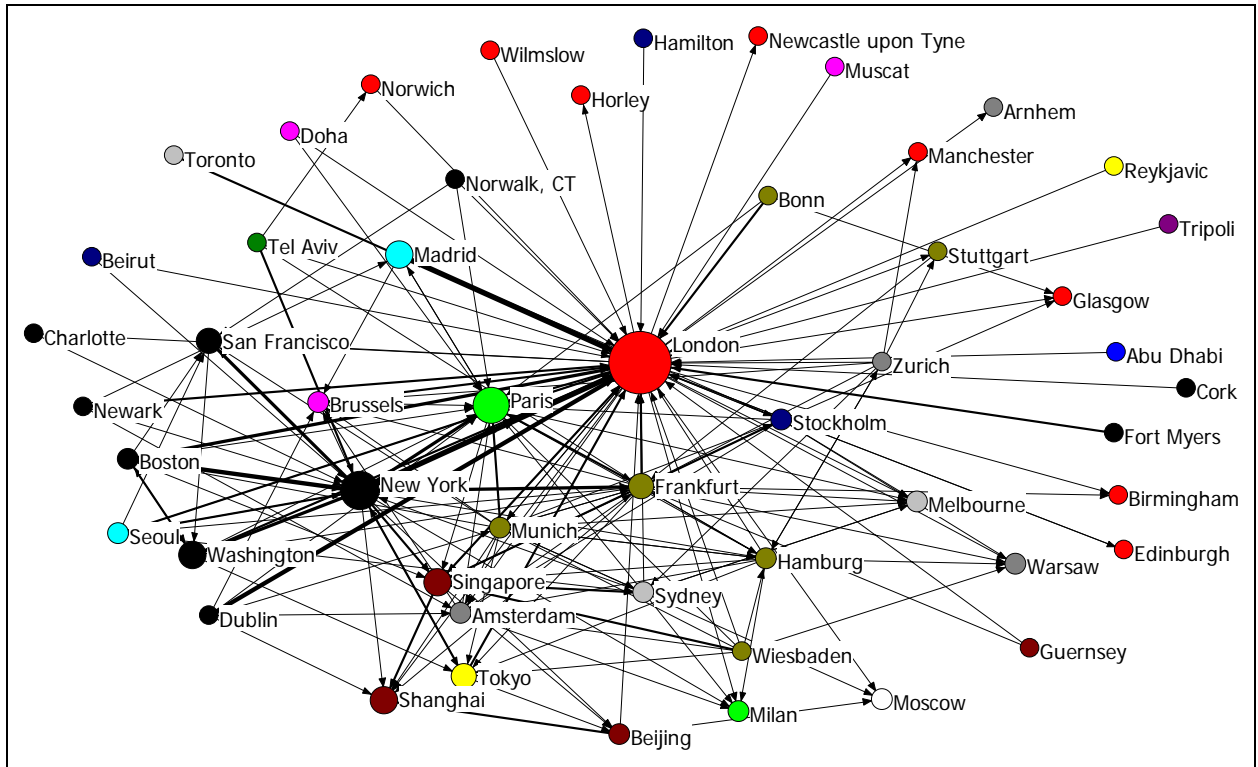


Figure 16. Brussels ego-network (RE flows for aggregated years from 2007-2010)

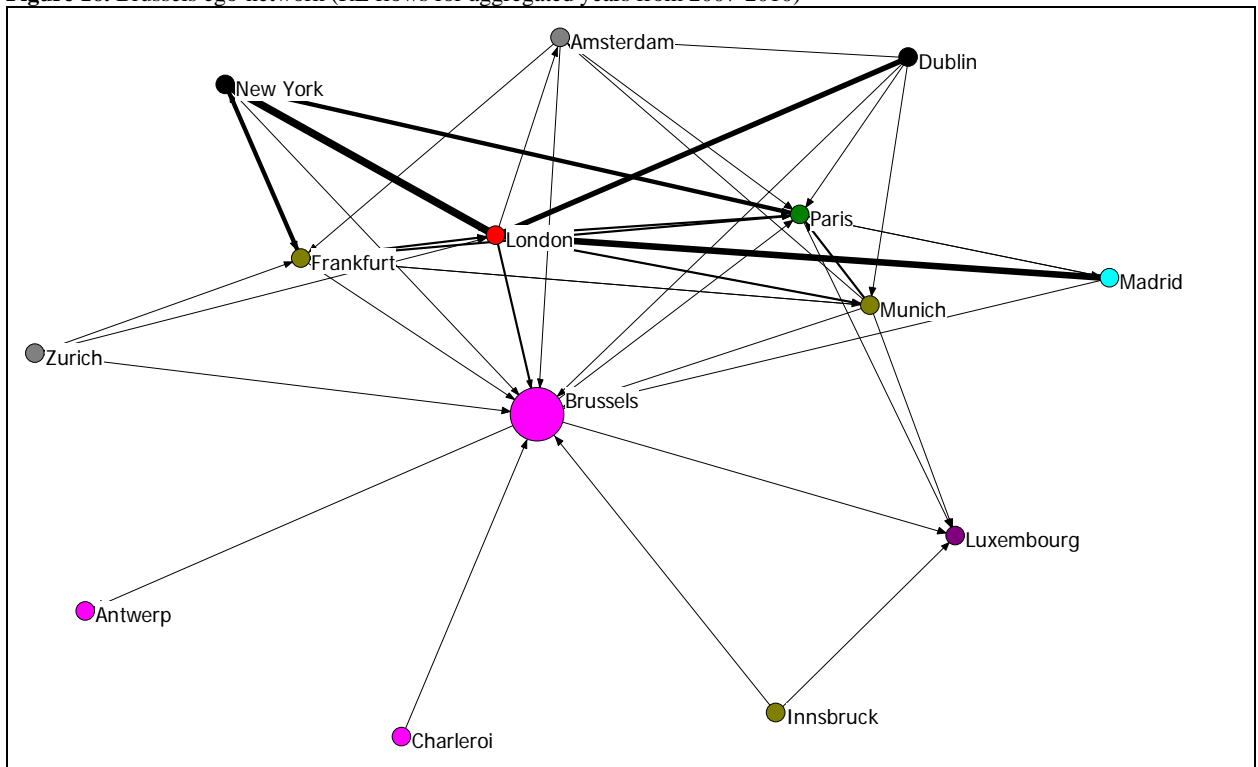


Figure 17. Financial services cities (nodes in red) in the global real estate investment network

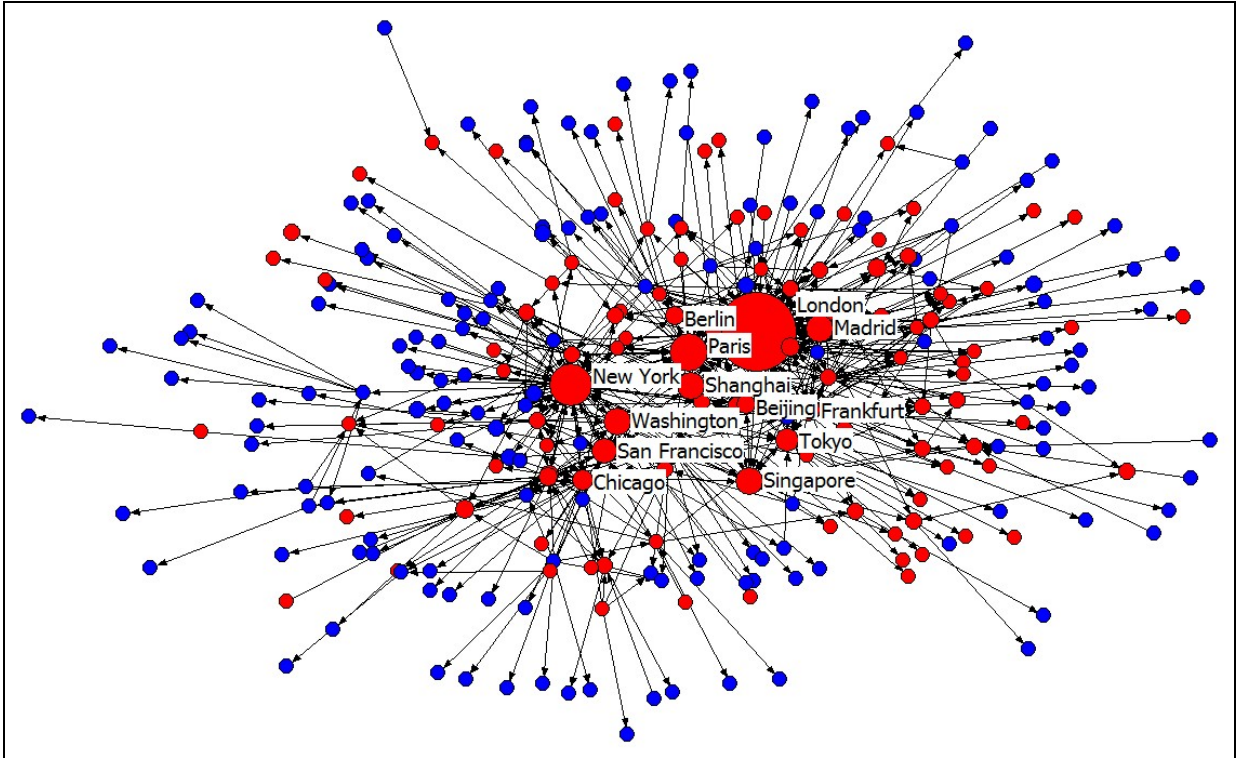


Figure 18. Financial services cities (nodes in red) in the global real estate investment network (geographical)

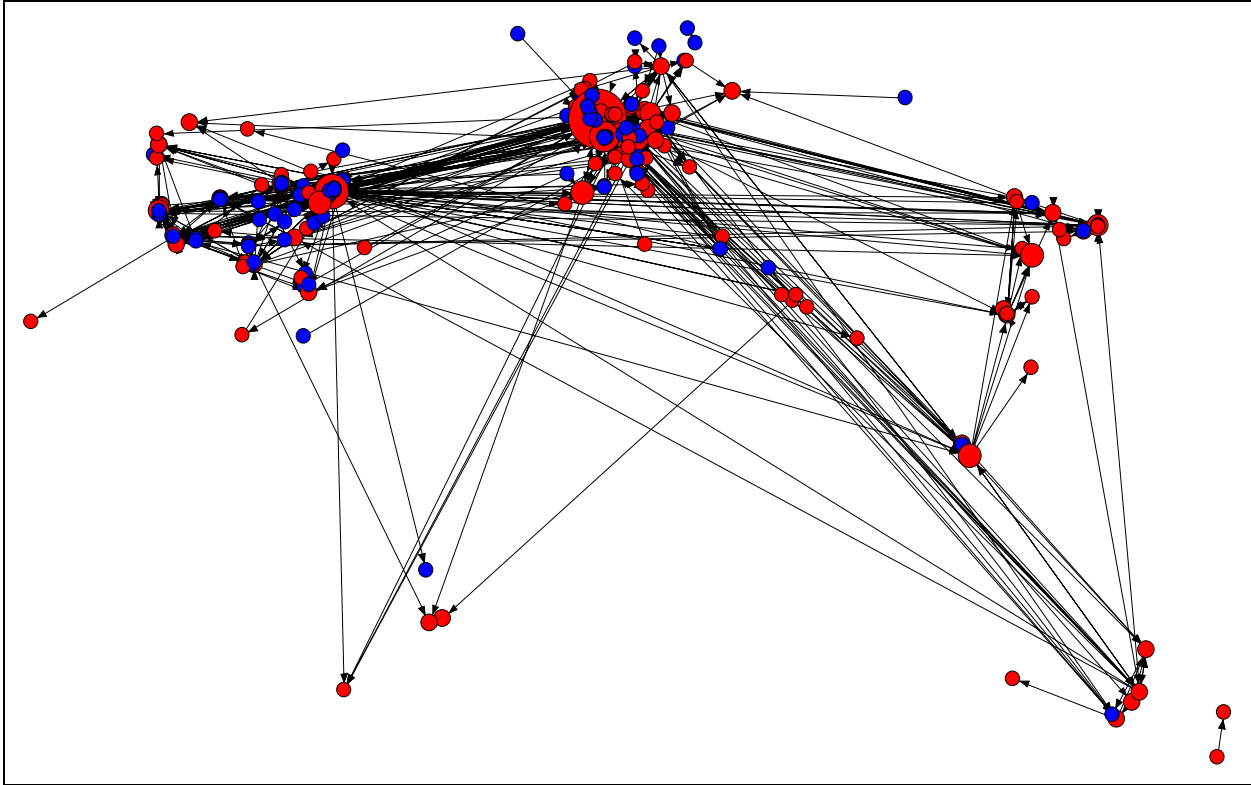


Figure 24. Chart representing investments inflows per European and US cities for each year 2007 to 2010.

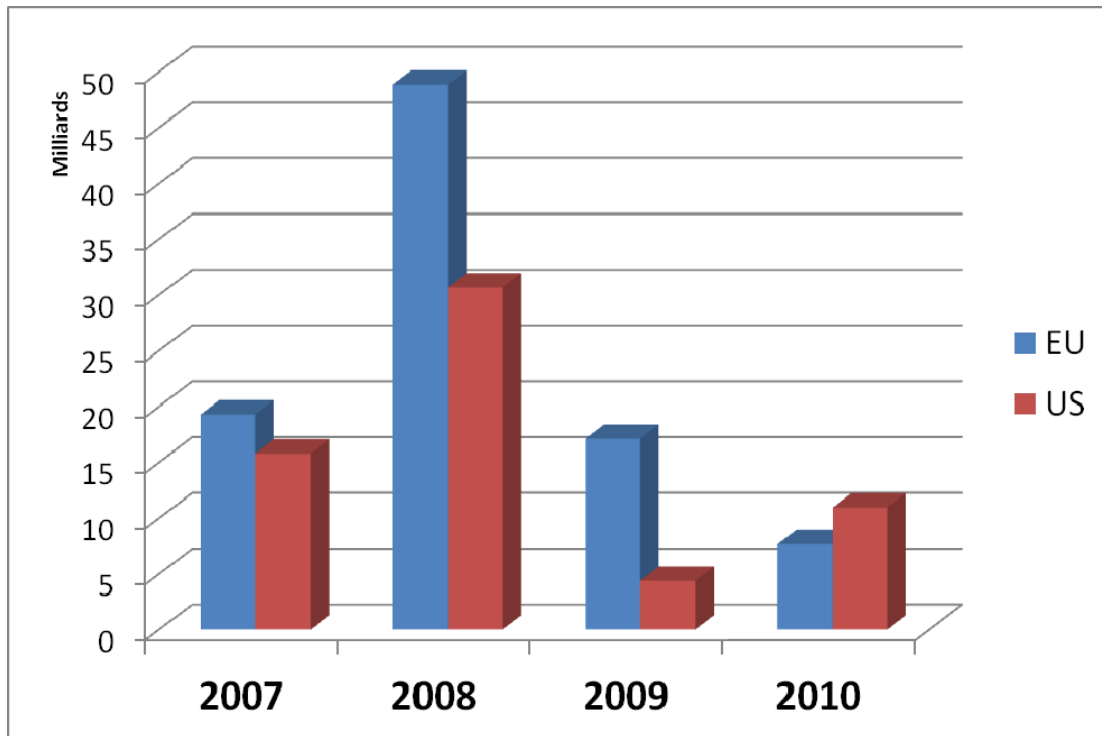


Figure 25. Chart representing investments outflows per European and US cities for each year 2007 to 2010

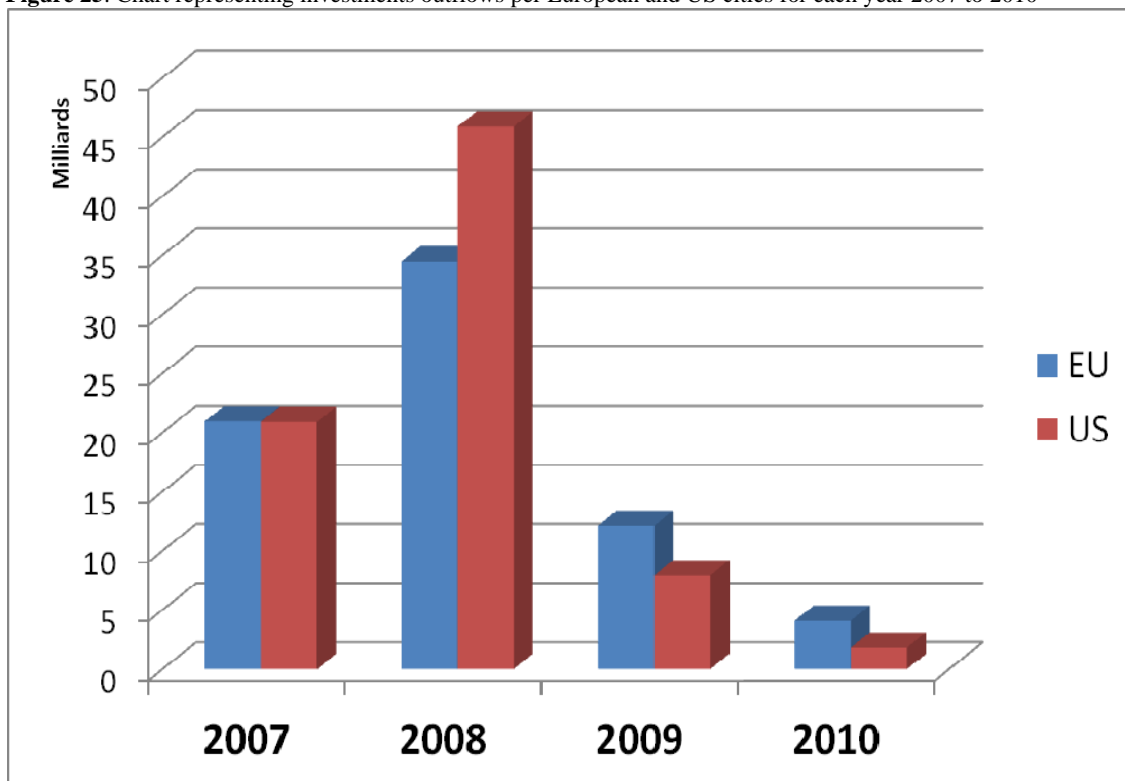


Figure 26. Sales activity and the global financial crisis

