

CHINA'S CREATIVE INDUSTRIES: CLUSTERS AND PERFORMANCES

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“We observe nowadays that ‘culture’ attracts the attention of men of politics: not that politicians are always ‘men of culture’, that ‘culture’ is recognized both as an instrument of policy, and as something socially desirable which it is the business of the state to promote.”

T.S. Eliot, *Notes Towards the Definition of Culture*, 1948, Quoted in Throsby, 2001.

1. INTRODUCTION

China's cultural industries are currently undergoing a period of rapid transformation. In 2006, cultural industries achieved 512 billion Yuan (£34 billion) of value added and grew 17% from 2005 (Tuo, 2008). Internationally, China's export of core cultural products amounted to 9.6 billion USD (£4.8 billion) in 2006 (Hu, 2008). In the same year, China's BOP from cultural services export increased 20% and amounted to \$2.7 billion (£1.4 billion) (ibid.). Although the share of cultural industries to China's GDP remains small (2.5%) in comparison to developed countries such as Britain (10%), the growth of cultural industries has been substantial in the past few years. Increasingly perceived as new growth industries requiring active government support, both the Culture Ministry and the government at various levels have promulgated over 25 piecemeal regulations and directives to encourage cultural industries and the development of specific clusters such as animation since 2005¹. From 2001 to 2006, the state fiscal expenditure and infrastructure investment into cultural industries both doubled, and grew, on average, 17% and 16 % respectively² (CM, 2008).

In spite of wide publicity given to cultural industries in China, most academic discussions and policy recommendations have not been the subjects of rigorous economic analysis³. This paper argues and advocates for a pragmatic economic approach to study cultural industries as 'creative industries' drawing on the British approach which actively promotes strategic industrial policy for the creative sector⁴. Building on our previous modelling approach to the UK creative industries (Ye and Yin, 2007), this paper further develops new sets of analytical tools for conducting economic analysis in creative industries, in particular, those which can provide objective assessment of creative industries. The paper tries to contribute towards creative industries research in two aspects. First, the paper develops a set of new

¹ The research was conducted on the legal database of Peking University as of Nov 2007.

<http://www.lawyee.net/>

² Culture Ministry, 2008 <http://www.ccnt.gov.cn/whbwhgz/whbwhtj/index.htm>

³ The author leads a newspaper column "creative observer" in Beijing Business Today and argues that creative industries should be considered pragmatically as an area of new industrial policy for China.

See the article: <http://www.bbtnews.com.cn/whcy/channel/political36657.shtml>, Also Ye & Li (2008)

⁴ See Garham (2005) for an explication of the British approach towards creative industries.

analytical tools which offer some utilities to the government and businesses. The mapping approach helps to understand regional aspects of creative industries and reveal new issues which deserve attention by the government. The financial tools which made available a performance based matrix helps the investors to overcome the problem of asymmetrical information in creative finance (both public and private), when the investors and creative businesses lack data or methods to properly evaluate industrial performances. Finally, the study contributes towards the research on China's creative industries through the development of a new database which helps the government and businesses to better understand the economic potential of creative industries.

The key objective of this paper is to understand the true state of China's cultural and creative industries by drawing on empirical findings which for the first time examine the clusters and the performance of creative industries in China. Based on the analyses provided by our tools, the paper explores the policy implications for economic planning and finance for creative industries. The structure of this paper is as follow. First, the paper provides an overview on the recent development of China's creative industries. It discusses contribution from the current study in the context of China's new industrial policy and the theories of creative industries. The paper then examines the classification of creative industries in China and compares China's classification with Britain and the US to shed lights on their differences. Second, the paper examines the spatial concentration of creative industries in China's 31 provinces and municipalities. It presents the findings from the analysis of location quotient and coefficient of specialisation in China's 31 provinces and municipalities and discusses emerging policy issues. The paper then examines the financial performance of creative clusters in China. The performance indicators help to provide an objective assessment on the performance of China's creative industries. The study concludes by summarising the key findings and further discussing the implications and recommendation for developing China's creative industries.

2. CREATIVE INDUSTRIES AS NEW INDUSTRIAL POLICY

Although creative industries is a relatively recent policy construct by the new Labour government in Britain (Roodhouse, 2003), much of the discussion on creative industries can be traced back to the early contribution from the critical cultural theories developed by the Frankfurt School (Adorno and Horkheimer, 1997; Adorno, 2001), and the work on social and cultural capital (see Bourdieu, 1984). Cultural economics, which emerged from the early, predominantly sociological paradigm also contributed towards a better understanding about creativity and the knowledge economy through interdisciplinary research into business, economics and organisation (see Caves, 2003; Thorsby, 2007). From the early applied analysis on the arts sector by prominent American economists such as Baumol and Bowen (1966), American economists have been motivated in their pursuit by applying economic analysis to inform the course of public debate on the arts. However, as noted by Florida (2008), in recent years, due to domestic constraint on the war and the pressure from 'smoke-stake' industries, American policy makers have not been able to give the same level of attention to the creative industries as Britain which completely rebranded her 'industrial policy' with creative prefix. In the British context, Garnham (2005) argued that the mobilisation of the term "creative industries" rather than "cultural industries" has enabled the new Labour government to achieve a number of important policy goals and the most important of which is the admittance of software industry, an important part of the knowledge economy into the classification. Furthermore, the 'rebadge' of Britain as a 'creative hub' help to galvanise the necessary public support for the existence of a 'creative' sector (Flew, 2002). The claims that the creative industries are both the key growth sector and sources of future employment growth and export made it possible to present the industries as a much larger and more significant part of the economy (Hesmondhalgh, 2007, p145). In essence, the policy towards creative industries is created to meet the demand of an increasingly consumption driven and knowledge intensive part of the British economy. In contrast to the US, the UK experience demonstrates the return of culture as "an instrument of policy" and the alleviation of cultural/creative industries into the arena of the mainstream economic policy of the government.

3. CHINA'S CULTURAL/CREATIVE INDUSTRIES

Unlike Britain, historically, China has always maintained that it is the business of the state to use culture as a policy 'instrument'. The difference is that China's policy emphasis has always relied on a dominant culture/ideology whether indigenous or imported in order to harmonise diversity and difference. Such emphasis is evident in the traditional Confucius ethics, the importation of Buddhism and the latest slogan of Hu government on 'developing a harmonious society'. Over emphasis of a dominant culture/ideology, however, could compromise cultural diversity which is an important condition for creativity as shown by international experiences (see Florida, 2002).

At the recently concluded, 17th Conference of the CCP, cultural development was suggested as a source of creativity and a force for building national solidarity. In this important policy document which points to the future directions of the Chinese economy, several new developments were proposed⁵. Amongst these, the economic agenda which echoed China's 11th five years plan featured headings on the national systems of innovation, growth through industrial upgrading, energy saving, emission reduction and increasing regional coordination. The political agenda which placed democracy and reform institutions at its core also marked a new phase of the reform aiming at strengthening internal democracy within the party. The cultural agenda following economic and political agendas was aimed at enhancing "cultural creativity" achievable through building "the soft power of the Chinese culture".

Some new and specific policy measures were also proposed including the call for the establishment of cultural quarters, the training of a group of core cultural entrepreneurs and the introduction of strategic investors into cultural industries. Without compromising the ideological fundamental, these specific, added emphases have shown greater resolution on the part of the Chinese government to develop cultural industries. Never the less, as creativity ultimately depends on openness and freedom to debate and disagree (Leadbeater and Wilsdon, 2007), the report remained largely silent on key issue such as the freedom of speech.

⁵ Amongst these, the Part five, six and seven of the report focused on the economy, democracy and culture and constituted three most important aspects of the CCP's eleven parts report.

Despite the emphasis given by the government and the attention of the media, in reality, China's international competitiveness in services sector and cultural industries on the whole lags well behind many countries. China's cultural industries remain highly regulated, controlled by the state and largely shielded from international competition. According to Hu who is the Director of Services Trade Division in the Ministry of Commerce (2008), in 2006 the import to export ratio for books in 10:1 for the whole China while the value of overseas film export was less than 2 billion RMB (£127 million), much smaller than the East of England had achieved from media and digital businesses in 2002 (£32 billion). For a country with such a long history like China, cultural heritage export was only 30 million USD (£15 million), much less than an export oriented manufacturing company would achieve in a year. Even in the much publicised animation and cartoon industries, 89% of the market is dominated by foreign companies: the Japanese companies occupied 60% of the market and the European and American combined made up 29%, leaving a small 11% of the market to the local indigenous Chinese producer (ibid.). The comparison stands in stark contrast to China's vast manufacturing power.

The next part of paper examines the classification of creative industries in China and discusses its implications for industrial policy. As all creative industries are pre-existent, re-classification is crucial for two reasons. Firstly, different methods of re-classification assign different weights, and therefore, values to the otherwise less known grouping of profession, of what makes up the difference in wages and the industrial organisation between a clay modeller working in a car factory and a traditional clay artisan working on the street. Secondly, new grouping of industries provides political legitimacy needed to incentivise the public support and to re-mobilise the resources towards a particular end. For China's classification, my main argument is, rather than importing classification from other countries, the new systems of classification in China should reflect sufficiently her comparative advantage and as such the re-classification and the approach should be the subject of rigorous, empirical analysis.

4. The Classification of Creative Industries and International Comparison

Since 2002, several types of parallel classifications of creative industries were developed by large cities, notably Beijing and Shanghai⁶. Even the phase ‘creative industries’ have gained a lot of currency in the vocabulary of Chinese language and become virtually synonymous with ‘cultural industries’. Unlike the government in the US and the UK which has officially classified creative industries, the Chinese government has not officially provided a classification on creative industries. The table below shows the classification of creative clusters developed by Zhang (2007).

Table 1: The Classification of Creative Clusters

Clusters		
Gardening, Display Arts & Porcelain	Legal Services	Publishing
Metal Arts	Consultancy & Surveying	Radio Broadcast
Lacquer Arts	Advertising	TV Broadcast
Flower Painting Arts	IPR Services	Film
Natural Fibre Knitting	Tourism Organisation	Music & Video Production
Embroidery	Other Business Services	Artistic Creation & Performance
Carpets	Engineering Research & Development	Arts & Performing Arts Sites
Jewellery & Related	Agriculture Sciences & Development	Archaeology Relics & Protection
Other arts & crafts	Medical Research & Experiment	Museum
Telecommunication	Engineering Technology & Planning	Community Cultural Activities
Internet Info Services	Other Professional Services	Culture & Arts Brokerage
Broadcasting & TV transfer	Intermediary for Technology	Other Culture and Arts
Satellite Transfer Services	Other Scientific Services	Sports Organisation
Computer Systems Services	Tourism Site & Management	Sports Sites
Data Processing	Haircutting & Beauty Saloon	Other Sports
Other Computing Services	Wedding Services	Indoor Entertainment
Public Software	Photography & Film Development	Scheme Parks
Other Software	Other Education	Leisure & Exercises
Business & Management Consultancy	Newspaper	Other Entertainment

Source: Zhang, 2007

The purpose of this section is to critically examine the classification of creative industries developed by Zhang (2007) in his book “Report on the Development of

⁶ Differences exist between Shanghai and Beijing classification (see the comparison in Appendix 2). Beijing’s classification of creative industries is considerably larger than Shanghai - Beijing contains 22 more industrial clusters than 38 industries identified by Shanghai. See Appendix 1.

Creative Industries in China” (hereinafter as the DCI Report). The classification built on the NBS classification (GB/T4754-2002) forms part of creative industries classification in Beijing and Shanghai. There are several issues emerging from a critical analysis of the DCI classification. The first issue lies in the effect of including telecommunication industry. Telecommunication is included in the US classification of creative industries but left out in the UK classification. As demonstrated by the table below, the effect of the inclusion has dramatically altered business revenue, employment, profit and net asset of creative industries. It is arguable whether the telecommunication should be included as a whole when only parts of the telecommunication are relevant to creative industries, for example, text and multimedia messages, ring-tone, games, contents, software and download.

Table 2: Effects of Including Telecommunication in China’s Creative Industries

	Excluding Telecom	Including Telecom	Increase after inclusion (%)
Total main business revenue from creative industries (100 million RMB)	12830.80	18286.24	30%
Total creative employment	1,529,300,000	2,434,800,000	45%
Total profit for creative industries (100 million RMB)	1946.22	3476.75	45%
Total net asset for creative industries (100 million RMB)	11778.49	25852.95	54%

Another major difference points to the exclusion of knitted goods, garment and leather products, and footwear clusters which are included in the British definition but left out by the DCI report. In British case, the value added from footwear and knitted goods are substantial for manufacturing as they share respectively 50% and 42% of manufacturing value added (See Ye and Yin, 2007). Forward linkages are also strong in these clusters: 1.35 (knitted goods), 1.39 (garment and leather products) and 3.84 (footwear). Without the rigorous analysis of an input output system to verify its role in China, the common sense will tell that the inclusion of these clusters would add substantially to China’s creative manufacturing. As a major exporter in these manufacturing categories, the DCI report significantly underestimates China’s strength in these competitive clusters. On the whole, the DCI classification omitted a

large part of creative related manufacturing clusters. The creative manufacturing and services represented 16% and 84% of all categories in the DCI classification. By its share of the total, creative manufacturing only accounted for 10%, 14% and 23 % in terms of the number of firms, annual business revenue and the employment of all creative industries.

As China's current comparative advantage lies in manufacturing, the report understates the importance of creative manufacturing when it has most potential to be developed and therefore needs to be classified as such. On the other hand, the report significantly overstates the importance of creative services by admitting telecommunication into the classification. In comparison to the US copyright based approach, the DCI classification also does not consider how to capture and reflect intellectual property aspects of creative related manufacturing industries, a potent source of innovation. Furthermore, distributional aspects of creative services such as retail and wholesale which are included in the UK classification are not included in the DCI classification⁷.

In terms of its approach, the DCI report classification has not been the subject of rigorous empirical investigation based on factual evidence as it did not provide the rationale or the methodology behind its re-classification. This lack of clarity has led to the use of imported classification without given special consideration to China's national conditions (*Guoqing*). The empirical evidences could be gained via a useful clusters planning exercise such as what the UK government has done by commissioning external consultancy to Michael Porter in order to understand the state of creative industries before its launch⁸. The outcome of the planning exercise provides better information on clusters which ultimately helps to inform the design of the UK industrial policy reflecting UK's comparative advantages.

5. Regional Policy for Creative Clusters

⁷ The role of retail and wholesale is very important especially when operates through the effect of trade margin on inter and intra industry linkages (Ye and Yin, 2007).

⁸ The exercise is also flexible enough to be updated in, for example, a creative observatory to continuously reflect clusters' evolving conditions.

Previous discussion reveals major shortcomings in the DCI report in terms of classification and its approach. One of main argument is that both the classification and the approach did not reflect sufficiently China’s current comparative advantage and lack in factual support based on empirical evidence. The classification included telecommunication cluster which significantly distorted the composition of creative industries and excluded creative distribution, knitted goods, garment, leather products, footwear and distribution clusters. At the heart of these problems is the lack of research – the DCI report uses mostly imported classification without independently searching for evidences before its re-classification, which could otherwise help to provide a more informed view.

This section further examines the current approach on regional planning adopted by the government which is so far very restrictive in terms of the cities it has selected to develop creative industries. The factual basis of evaluation in this section is an empirical investigation into the diversity, strength and specialisation in China’s creative industries through the analysis of Location Quotient⁹ (LQ) in 31 provinces and municipalities as shown in the table below.

Four LQ indicators were developed by this paper to measure the diversity, strength and specialisation of a region’s creative industries. The first indicator shows the number of creative industries with the value of LQ that is equal or greater than one, therefore, indicating the diversity of creative industries in such region. The second indicator shows the sum of all creative industries with the value that is greater or equal to one indicating the absolute strength of a region’s creative industries. The third indicator shows the share of national GDP indicating a region’s economic importance. The fourth indicator (divide the second with the first) measures the relative strength and, therefore, the degree of specialisation in creative industries in a region. The result is ranked from the highest to the lowest.

Table 3: Diversity, Strength and Specialisation in China’s Regional Creative Industries

⁹ $LQ_{it} = \frac{\text{Regional Employment in Industry } i \text{ in Year } t}{\text{Total Regional Employment in in Year } t} \div \frac{\text{National Employment in Industry } i \text{ in Year } t}{\text{Total National Employment in Year } t}$

1: No.LQ≥1	Rank	2: Sum LQ≥1	Rank	3: % of GDP	Rank	4: Ave LQ≥1	Rank
Beijing	1	Beijing	1	Shanghai	1	Beijing	1
Guangxi	2	Shanghai	2	Beijing	2	Shanghai	2
Tianjin	3	Guangxi	3	Tianjin	3	Tibet	3
Liaoling	4	Hainan	4	Zhejiang	4	Fujian	4
Shanghai	5	Tianjin	5	Guangdong	5	Zhejiang	5
Hainan	6	Jilin	6	Jiangsu	6	Hainan	6
Jilin	7	Yunan	7	Shandong	7	Tianjin	7
Xinjiang	8	Shanxi	8	Fujian	8	Qinghai	8
I.Mongolia	9	Liaoling	9	Liaoling	9	Yunnan	9
Sichuan	10	Qinghai	10	I.Mongolia	10	Shanxi	10
Yunnan	11	Xinjiang	11	Heilongjiang	11	Heilongjiang	11
Shanxi	12	Ningxia	12	Jilin	12	Gansu	12
Ningxia	13	I.Mongolia	13	Xinjiang	13	Anhui	13
Qinghai	14	Tibet	14	Hebei	14	Guangxi	14
Hubei	15	Sichuan	15	Shanxi	15	Jilin	15
Hunan	16	Gansu	16	Hainan	16	Shangdong	16
Gansu	17	Hubei	17	Hubei	17	Henan	17
Shanxi	18	Hunan	18	Chongqing	18	Guizhou	18
Heilongjiang	19	Heilongjiang	19	Ningxia	19	Ningxia	19
Guangxi	20	Fujian	20	Hunan	20	Hubei	20
Guangdong	21	Shanxi	21	Henan	21	Chongqing	21
Guizhou	22	Guizhou	22	Qinghai	22	I.Mongolia	22
Tibet	23	Jiangxi	23	Shanxi	23	Hunan	23
Fujian	24	Guangdong	24	Tibet	24	Jiangxi	24
Henan	25	Hennan	25	Jiangxi	25	Xinjiang	25
Chongqing	26	Chongqing	26	Sichuan	26	Liaoling	26
Hebei	27	Anhui	27	Anhui	27	Hebei	27
Anhui	28	Hebei	28	Guangxi	28	Shanxi	28
Zhejiang	29	Zhejiang	29	Yunnan	29	Sichuan	29
Shandong	30	Shandong	30	Gansu	30	Guangdong	30
Jiangsu	31	Jiangsu	31	Guizhou	31	Jiangsu	31

Other than Tibet and Qinghai of which the denominators were distorted due to missing value, the overall regional pattern show a concentration to the east and a gradual lessening from the central to the Western region. The relative values of LQ for the east, central and western region were 1.24, 1.21 and 1.20.

There are interesting findings regarding individual differences amongst 31 Provinces and Municipalities which show different conditions in terms of diversity, strength and specialisation in creative industries. If we look at the provinces/municipalities which have higher than the average number of LQ (indicating diversity) and those with higher than the average absolute values of LQ (indicating strength), most of these

provinces/municipalities seem to locate along the border regions, except Shanxi. The list includes Liaoning, Jilin, Tianjin, Hainan, Guangxi, Yunnan and Xinjiang, most of them (except Tianjin) are known for having a more diverse culture and ethnic minority (other than the Han nationality).

The absolute lead of Beijing in China's creative industries is also most obvious as the absolute value of LQ for Beijing is 64.5 which is about five times of the average for all other regions which show the above national average concentration in creative industries. A second interesting observation is that Shandong, Jiangsu, Zhejiang and Guangdong which ranked on top in terms of their shares of GDP appear mostly on the lower half of the table in terms of diversity and absolute strength. However, in terms of relative value of LQ (indicating specialisation), Fujian and Zhejiang comes back to the top because of high level of specialisation in certain creative industries.

Table 4: Correlation between LQ, CS and GDP Share in 31 Chinese Provinces

Between the Absolute Value of $LQ \geq 1$ and CS	0.84
Between the Relative Value of $LQ \geq 1$ and CS	0.78
Between the Number of $LQ \geq 1$ and Share of GDP	0.22
Between the Absolute Value of $LQ \geq 1$ and Share of GDP	0.59
Between the Relative Value of $LQ \geq 1$ and Share of GDP	0.70

To test the robustness of LQ measure, further analysis was conducted to derive Coefficient of Specialisation (CS) for China's creative industries. Test was carried out on the relationships between LQ and CS in 31 Provinces. The results shown in the first two rows of Table 4 indicate strong positive relationships between the two. Another test was conducted to look at various relationships between LQ and (provincial/municipal) share of GDP. The results presented on the second, third and fourth column of Table 4 show that the relationship weakens as diversity (number of CI where $LQ > 1$) increases but strengths with the overall absolute strength and increasing specialisation (as LQ moves from the absolute towards relative value).

The interpretation might be that a region tends to be less specialised when it

contains a large pool of creative clusters, however, when the combined strengths of creative industries are strong, such region tends to be stronger in its contribution to GDP so is when it is more specialised with relatively fewer but individually stronger creative clusters. Such effect could be seen from the GIS maps shown in Appendix 1 which shows the concentration of creative clusters and demonstrates different effects of specialisation in the arts and crafts manufacturing, software and entertainment clusters.

For manufacturing related creative clusters such as the arts and crafts manufacturing, the map shows that there is a clear concentration to the east, led by Fujian (4.10) and followed by Zhejiang (2.10), Guangdong (2.08) and Shandong (1.5). The effect of specialisation could be seen clearly in the case of Fujian and Zhejiang which are both highly specialised in the arts and crafts manufacturing. For software clusters, Beijing, Shanghai and Guangdong stand out from the rest of the country as the regions which have LQ significantly > 1. The values of LQ in software for Beijing, Shanghai and Guangdong were 9.33, 3.44 and 1.29.

The implications following from the analysis are two folds. First, the Chinese government needs to be more inclusive in terms of geographical coverage of creative industries – the inland border and coastal regions such as Liaoning, Jilin, Tianjin, Hainan, Guangxi, Yunnan and Xinjiang have good potential to develop creative industries. This is especially important to avoid cultural ethnocentrism in the making of public policy considering that most of these provinces are characterised by high level of cultural diversity. The second implication is that the effect of specialisation should be an important consideration in creative industries planning. A region does not need to possess all creative industries to be strong but it could excel in economic progress from specialising into the industry which it enjoys comparative advantage as the case of Fujian and Zhejiang in creative manufacturing demonstrate. However, for the central cities designated for creative industries, an overall lead in diversity, strength and specialisation is clearly important and therefore, regions such Beijing and Tianjin are on the lead, followed closely by Shanghai.

6. The Performance of Creative Industries

The empirical analysis of previous section outlines a number of interesting patterns focusing on the spatial distribution of creative industries in China. The finding showed new discoveries in relations to the roles of cultural diversity and specialisation in China's creative industries. This section further examines another important yet overlooked dimension of creative industries, namely, the performance of creative industries and the selection of 'key' clusters based on their performances. The construction of performance matrix and clusters selection tools are one of two main contributions this study aims to achieve. These are represented graphically below.

Figure 1: Performance Matrix and Clusters Selection Tools

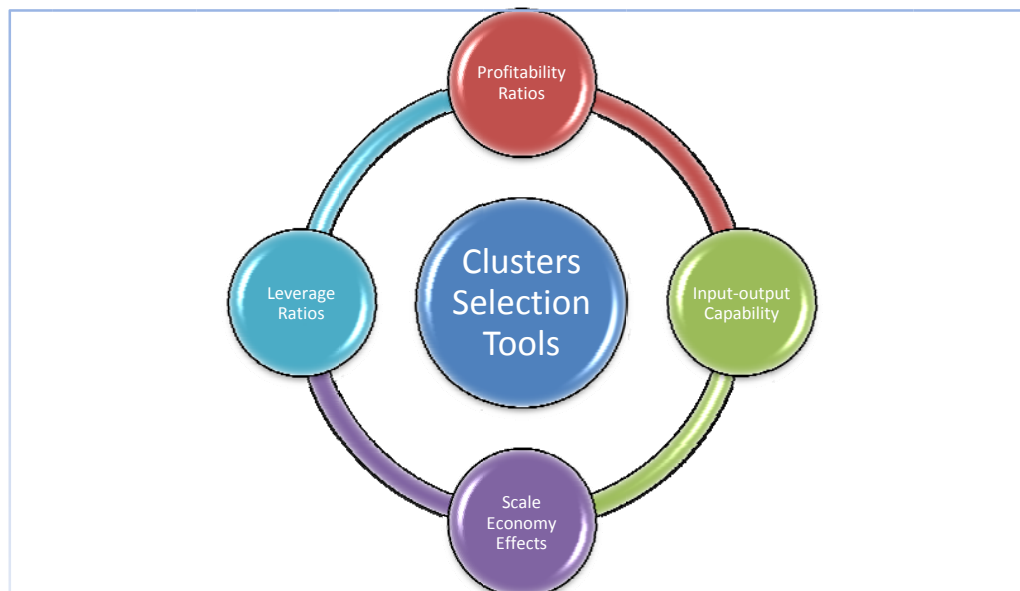


Figure 1 shows four performance assessment blocks which make up a system of performance measures on China's creative industries. The selection of clusters is achieved by screening the matrixes which contain different performance indicators. The overall systems of performance matrixes consist of four dimensions: profitability, leverage/liquidity, scale economy effect and input-output capability. Each of these dimensions contains multiple indicators.

In terms of the best and worst performing clusters, the tables in Appendix 2 illustrate

the performance of individual cluster in creative industries. For liquidity, profitability and return, the worst performing clusters are *archaeology and cultural protection*, and *sports organisation*. The best performing clusters are *agriculture research and experiment* and *legal services* (exclude telecommunication for the reason discussed in section 4). Other clusters which achieve good performance include *other education*, *publishing* and *newspaper*. In terms of the net profit ratio, the *business and management consultancy* cluster comes up on top and overtakes legal services although its other indicator remains modest.

Table 5: The Performance of Culture and Arts Industries

	Debt Ratio	Interest Coverage	Total Asset Turnover	Net Profit	ROA	TFP	Profit to Cost & Expense	Total Asset Contribution Factor
Newspaper	0.41	0.40	0.57	0.14	0.08	3.54	0.14	0.16
Publishing	0.34	0.49	0.53	0.13	0.07	7.49	0.14	0.12
Radio Broadcast	0.44	0.45	0.24	0.13	0.03	6.69	0.13	0.05
TV Broadcast	0.41	0.19	0.33	0.06	0.02	3.33	0.07	0.06
Film	0.50	-0.07	0.19	-0.04	-0.01	0.91	-0.04	0.03
Music & Video Production	0.34	0.01	0.38	0.00	0.00	1.67	0.00	0.04
Artistic Creation & Performance	0.40	0.21	0.33	0.11	0.04	1.51	0.10	0.11
Arts & Performing Arts Sites	0.29	-0.10	0.14	-0.07	-0.01	0.75	-0.06	0.02
Archaeology Relics & Protection	0.40	-0.61	0.15	-1.10	-0.16	-10.42	-0.53	-0.15
Museum	0.58	-0.02	0.09	-0.01	0.00	1.56	-0.01	0.01
Community Cultural Activities	0.55	-0.07	0.14	-0.04	-0.01	0.89	-0.04	0.03
Culture & Arts Brokerage	0.47	-0.13	0.30	-0.07	-0.02	0.64	-0.06	0.02
Other Culture and Arts	0.55	-0.01	0.18	0.00	0.00	1.24	0.00	0.03
Sports Organisation	0.56	-0.55	0.15	-0.36	-0.06	-1.98	-0.23	-0.03
Sports Sites	0.72	-0.04	0.11	-0.02	0.00	1.35	-0.02	0.01
Other Sports	0.46	0.01	0.19	0.01	0.00	1.39	0.01	0.03
Indoor Entertainment	0.52	-0.08	0.36	-0.04	-0.02	0.70	-0.04	0.05
Scheme Parks	0.65	0.06	0.14	0.04	0.01	1.90	0.04	0.03
Leisure & Exercises	0.63	-0.20	0.13	-0.15	-0.02	0.31	-0.13	0.01
Other Entertainment	0.62	-0.05	0.15	-0.03	0.00	0.85	-0.03	0.02
Creative Services Average	0.47	0.22	0.39	0.03	0.02	3.08	0.06	0.08

For the culture and arts clusters, other than the media industries consisting of *newspaper*, *publishing* and *broadcasting* (except film and music and video production), the performance is generally poor when compares with the average for creative services (shown in the table above). The superior performance of the media

industries compared with the group might be due to the fact that the media industries are largely owned by the state with little or no capitals from outside. The 6 media clusters' correlation is 0.74 between state ownership concentration and net profit ratio and 0.57 between state ownership concentration and TFP. The overall correlation for all 20 clusters is 0.25 between state ownership concentration and net profit ratio and 0.45 between state ownership concentration and TFP. The finding seems to suggest that a high level of state ownership implying administrative monopoly is likely to be the reason behind high profitability and TFP, at least for the successful media industries clusters.

Based on performance assessment, key creative clusters selected include *agriculture research and experiment, legal services, business and management consultancy, other education, publishing and newspaper*. These are clusters which should be encouraged by the government based on their current strengths in financial performance.

The Contribution and Limitation of Current Research

This section discusses the contribution, limitation and policy implications of current research in terms of its implications for setting industrial and public policies for creative industries. One of main contribution from this paper is the idea that the investment to and finance for cultural and creative industries can be guided by the assessment based on their financial performances. As such, the performance matrixes and selection tools used in the analysis of the previous section help to provide better information to investors in overcoming the problem of adverse selection and asymmetrical information between investors and creative business, a major problem facing creative entrepreneur and investors. Furthermore, the performance assessment helps to identify pillar industries for China's creative sector.

The second contribution of current study points to the application of the location quotient in analysing the spatial concentration in China's creative industries. The finding from the current research reveals a new pattern of concentration in creative cluster along the border regions which call for the attention of the government. The

suggestion is that the Chinese government needs to allow greater cultural diversity to develop and to develop creative clusters located in less developed, but ethnically diverse border regions particularly along the inland borders. The implication is different for the coastal border region, which, it is argued, should focus on developing specialised clusters based on their current strength, e.g. manufacturing related creative clusters such as the arts and crafts manufacturing.

The third contribution of this paper lies in its critical analysis on the system of classification and the approach in classifying creative industries. It is argued that China should focus on developing an official classification which reflects sufficiently its current comparative advantage. Such classification, however, should be based on empirical evidences such as those established by the current study regarding the financial performance and the spatial patterns of creative clusters in China. The paper raises the awareness on the importance of an industrial policy to China's creative industries and the idea that an objective assessment on creative industries should be the basis of re-classification which reflects on the comparative advantages of nations (Ye & Yin, 2007). Rather than relying on imported classification, the implication is that China should 'grow' creative clusters from her manufacturing industries and strengthens IPR such as industrial design and patent which are important sources of technological innovation. As a key cluster which has the best overall financial performance, the role of *legal service* cluster is crucial in such regard.

Finally, the paper also reveals industries which deserve special consideration by the government. Sixteen out of 20 culture and arts clusters are performing below the benchmark standard according to the result of the assessment. The poor performance in China's culture and arts clusters is attributed towards tight political control on the media, which although allowing some clusters such as the newspaper, publishing and broadcasting to prosper, also creates administrative monopoly and rents. The vested interests when collude with the mechanism of political control often mean there are little incentives for change. Take film industry which performs badly as an example, although it grew significantly over the last three years (see Appendix 3), due to the restrictions imposed by the Culture Ministry, the value of

China's overseas film export is tiny in comparison to other countries.

The current study is, however, limited in its insight on historical performance due to the lack of appropriate time series data for comparison which would otherwise provide more meaningful indicators of progress in assessing financial performance. Firm specific performance data are also needed for the next stage research in order to complement the industrial performance data developed by the current study. These limitations should be removed in the future study which will be able to accumulate more time series data on industries and firm specific level on performance. The systems of classification could also be significantly improved through the development of an economic model for China's creative industries similar to what we have developed for the UK (Ye and Yin, 2007), which could potentially be used for international comparison.

Policy Implication and Recommendation

Although the development of creative industries present great potential to the Chinese government in tackling increasing energy shortage and pollution, the fundamental utility of creative industries for China lies in the promise of a more rational and diverse economic structure, driven by both production and consumption. China needs to pay more attention to the protection of intellectual property rights which remains a major hurdle to the sustainable development of creative industries especially those clusters located within manufacturing. It also needs to learn the fact that developing creative industries require a new way of planning and thinking on the part of the government leadership which requires unlearning from the past experience of developing manufacturing based industrial development strategy (Ye and Wang, 2008).

The new Industrial policy of creative industries needs to incorporate both economic and cultural values – that the culture is not only an instrument of economic policy but the economic policy is also a cultural construct embedded in social values important amongst these are diversity and tolerance. To attract talents or 'cultural factors of production' in an increasingly 'sticky' space, the Chinese policy maker needs to understand the competitiveness of a region and the fact that a cluster is no longer purely defined by its output but also its ability in attracting a critical mass of

talents and their agglomeration. Without diversity, such goal would be difficult to achieve as the international experience has demonstrated.

Creative clusters located in less developed border regions and the provinces of the hinterland have potential to develop from their current concentration. A mentality for change and new ways of thinking by the local government are crucial. With the insight gained from the current research, different Chinese regions can plan their specific regional creative clusters and becoming less reliant and dependent upon heavy industries which put much stress to the already fragile, ecological systems and the natural habitats in the west and the central regions. Rather than 'creating' creative industries, the Chinese government is better off by 'growing' creative industries from its current strengths. To encourage investment into creative industries, the government would need to establish a performance measurement system to provide objective evaluation in creative clusters planning and finance.

References

- ADORNO, T. W. (2001). The Culture Industry: Selected Essays on Mass Culture, Routledge.
- ADORNO, T. W. and M. Horkheimer (1997). Dialectic of Enlightenment, Verso.
- BOURDIEU, P. (1986). "The forms of capital (R. Nice, Trans.)." Handbook of theory and research for the sociology of education: 241-258.
- BAUMOL, W. J. & Bowen, W. G. (1966) Performing arts-the economic dilemma, Twentieth Century Fund.
- CAVES, R. E. (2003). "Contracts between Art and Commerce." The Journal of Economic Perspectives **17**(2): 73-84.
- LEADBEATER, C. & WILSDON, J. (2007) *The atlas of ideas: how Asian innovation can benefit us all*, London, Demos.
- FLEW, T. (2002) Beyond ad hocery: Defining Creative Industries. *The Second International Conference on cultural Policy Research, Conference Report, Wellington*.

- LORIDA, R. (2002) The Economic Geography of Talent. *Annals of the Association of American Geographers*, 92, 743-755.
- GARNHAM, N. (2005). "From cultural to creative industries." *International Journal of Cultural Policy* **11**(1): 15-29.
- HESMONDHALGH, D. (2007). *The cultural industries*. London, Sage.
- HU, J. (Jan, 2008) The Speech from the director of Trade in Services Division, Ministry of Commerce. *The Fifth New Year Forum of International Cultural Industries China 2008*. Beijing: Peking University.
- MARKUSEN, A. (1996) Sticky Places in Slippery Space: A Typology of Industrial Districts. *Economic Geography*, 72. MARKUSEN, A. (1996) Sticky Places in Slippery Space: A Typology of Industrial Districts. *Economic Geography*, 72.
- OAKLEY, K. (2004). "Not So Cool Britannia: The Role of the Creative Industries in Economic Development." *International Journal of Cultural Studies* **7**(1): 67.
- ROODHOUSE, S. (2003), *The new global growth industry: definitional problems in the creative industries - a practical approach*. Creative Industries, London, City University.
- SWENEY, M. (2008) Government pledges to make UK media and arts world leader. *The Guardian (Feb 22)*.
- THROSBY, C. D. (2001). *Economics and Culture*, Cambridge University Press.
- TUO, Z. (Jan 2008) The Speech from the Deputy Director of Culture Market Division, Ministry of Culture. *The Fifth New Year Forum of International Cultural Industries China 2008*. Beijing: Peking University.
- YE, Z. & WANG, Q. (2008) China's Animation Clusters: Spontaneous Order and Government-Business Game. *Xiamen University Working Paper*.
- YE, Z. & YIN, Y. (2007) Economic linkages and comparative advantage of the UK creative sector. *The University of Hertfordshire Business School Working Paper*.
- YE, Z. & LI, Y. (2008) The Performance of China's Creative Industries. *Xiamen University Working Paper*.
- ZHANG, J. (2007) *Development of Creative Industries in China*, Beijing, China's Economy Publishing.

Appendix 1

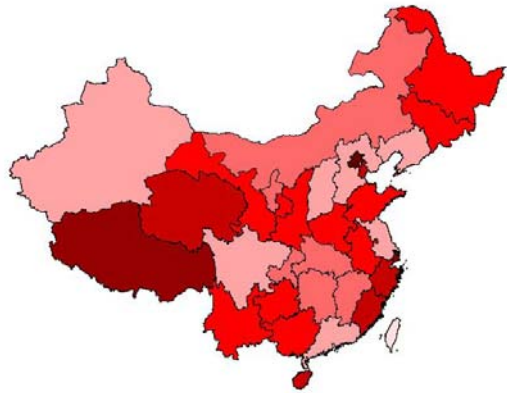


Figure I: LQ for Creative Industries

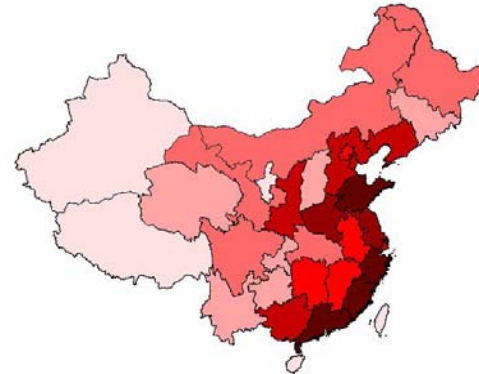


Figure II: LQ for the Arts and Crafts Manufacturing



Figure III: LQ for Software Clusters



Figure IV: LQ for Entertainment Clusters

Appendix 2

Table a: Top Performing Industries in Liquidity

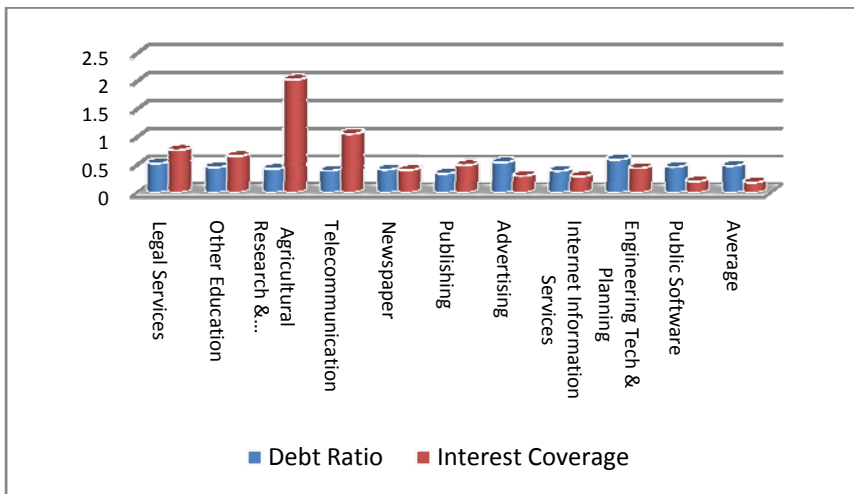


Table b: Bottom Performing Industries in Liquidity

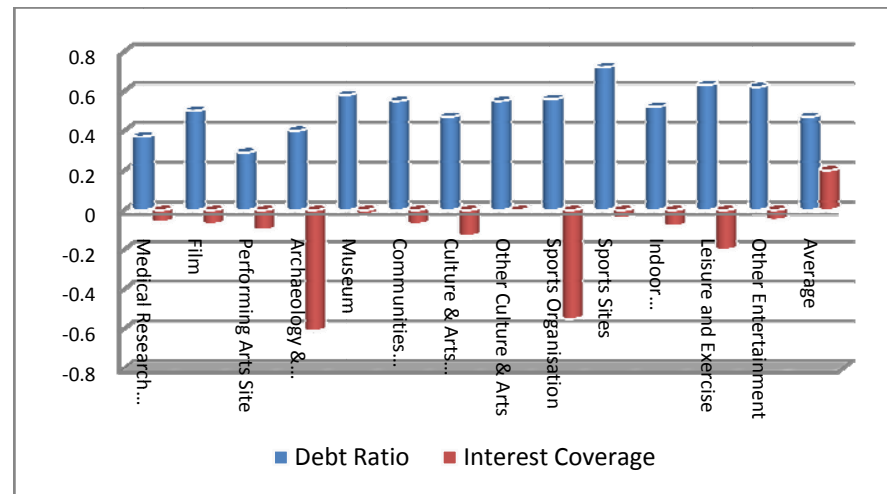


Table c: Top Performing Industries in Profitability

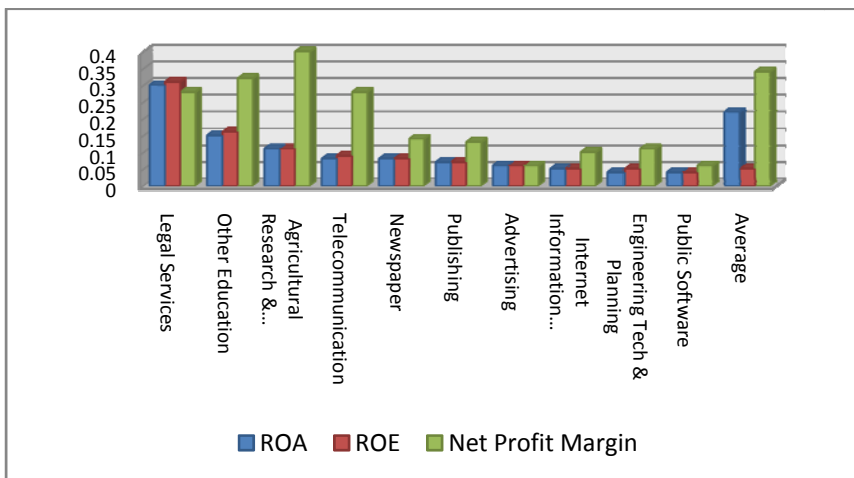


Table d: Bottom Performing Industries in Profitability

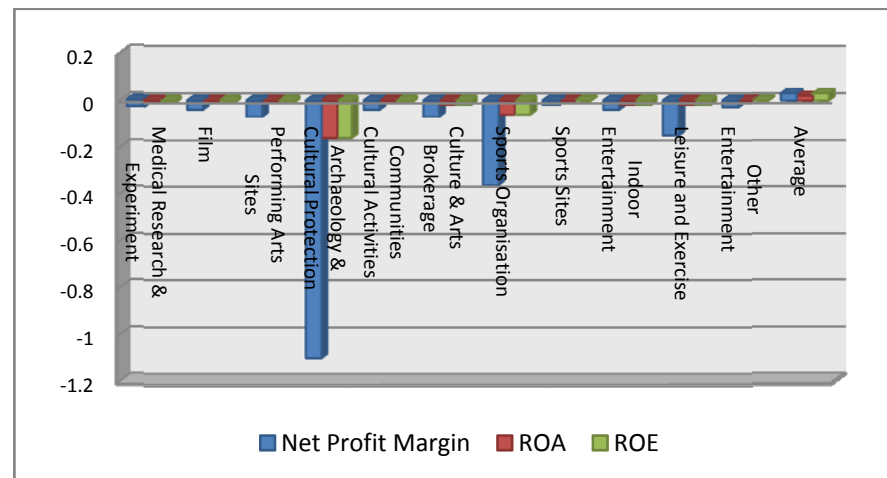


Table e: Top Performer in Profit to Cost & Expense Ratio

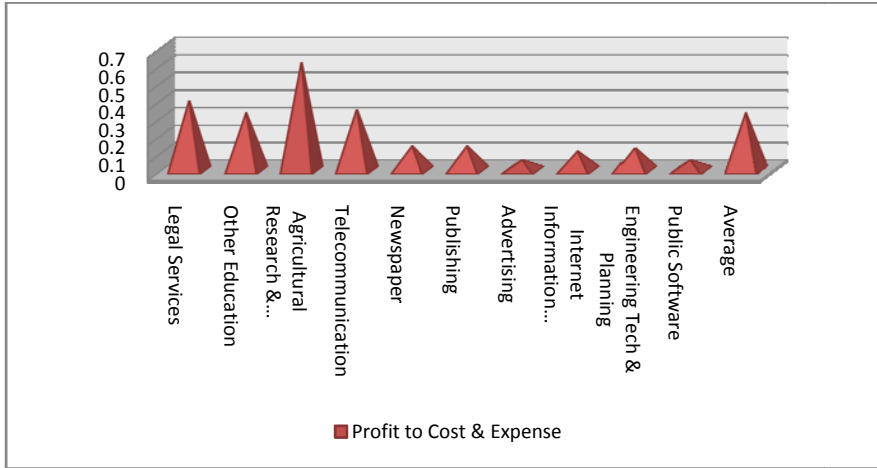


Table f: Bottom Performer in Profit to Cost & Expense Ratio

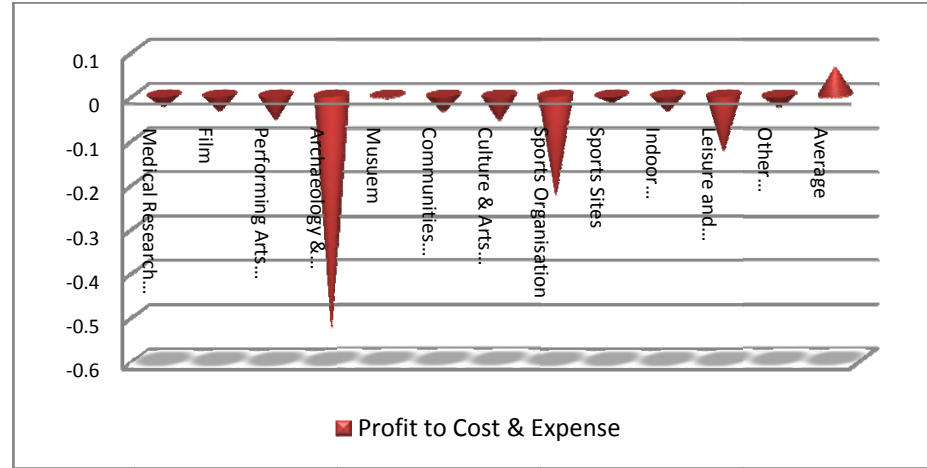


Table g: Top Performer in Total Factor Productivity

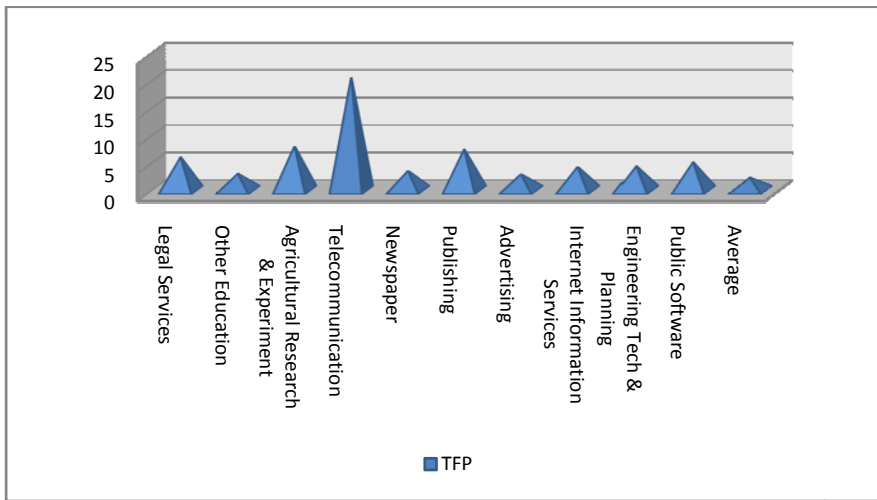


Table h: Bottom Performer in Total Factor Productivity

