

# IDENTIFICATION OF KEY DETERMINANTS OF SUCCESS FOR INTERNATIONAL FINANCIAL SERVICES CENTRES (IFSCS) WITH SPECIAL REFERENCE TO INDIA THROUGH GLOBAL FINANCIAL CENTRE INDEX (GFCIS) ANALYSIS AND FACTOR ANALYSIS

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## ABSTRACT

The History of International Financial Services Centers (IFSCs) is very long, dating back more than 150 years. Many countries established International Financial Centres (IFCs) to offer International Financial Services (IFS) at various stages of their economic growth. Over time, some of the important hubs for international financial services included London, Tokyo, New York, Hong Kong, Frankfurt and Singapore. These Centers created a large number of jobs and helped the economies of the countries in which they operate to grow. Around 119 centres have been established worldwide to meet the need for international financial services in over 196 countries (GFCI, 2015-2022). India's economy was opened in 1991, but capital account convertibility hasn't been achieved, therefore its influence on the world financial market is viewed as minimal. One of the world's largest economies and a significant consumer of IFS, India very recently announced the creation of IFSC in April 2015. Given how closely the global market is connected via technology, it is essential for India to set up IFSC and appear on the map of the world's financial centre. It is predicted that India is losing US \$50 billion year (2015) without an IFSC, and that loss will increase to US \$ 120 billion by 2025.

This paper identifies key determinants of success for IFSC in India by using the two analytical tools namely Global Financial Centre Index (GFCI) analysis in global context and the Factor Analysis in Indian context and finds that IFSC in India, though being a new financial service centre, can certainly increase its competitiveness and become a sustainable successful financial centre more quickly by focusing on the factors identified in this study and the economic impact of IFSC growth in India would be profound.

**Keywords:** International Financial Services Centre (IFSC), International Financial Services (IFS), Key Determinants, Global Financial Centres, Global Financial Centre Index (GFCI)

## INTRODUCTION

The History of International Financial Services Centers (IFSCs) is very long, dating back more than 150 years. Many countries established International Financial Centres (IFCs) to offer International Financial Services (IFS) at various stages of their economic growth. Over time, some of the important hubs for international financial services included London, Tokyo, New York, Hong Kong, Frankfurt and Singapore. "These Centers created a large number of jobs there as well as aided the economies of the countries in which they operate (Shah and Chugan 2016)". Around 119 centres have been established worldwide to meet the need for international financial services in over 196 countries (GFCI, 2015-2022). India's economy was opened in 1991, but capital account convertibility hasn't been achieved, therefore its influence on the world financial market is viewed as minimal. One of the world's largest economies and a significant consumer of IFS, India very recently announced the creation of IFSC in April 2015. Given how

closely the global market is connected via technology, it was essential for India to set up IFSC and appear on the map of the world's financial centre. "It is predicted that India is losing US \$50 billion year (2015) without an IFSC, and that loss will increase to US \$ 120 billion by 2025." (DEA 2016).

While announcing and issuing guidelines for IFSC is one part that Govt. of India has done, now the question that needs to be addressed is - how to make it successful or what are the key determinants for the success of IFSC with special reference to India (Shah and Chugan 2022).

Although a few researchers from a number of countries have studied the International Financial Services Centre and its competitiveness in great detail, but there have been very few significant studies undertaken in India, with the exception of a handful by the Ministry of Finance and the Regulators.

The economic impact of IFSC growth in India would be profound. The development of a flourishing IFSC in India will be facilitated by understanding key elements for its success.

## LITERATURE REVIEW

The history of international financial centres is comprehensively documented in Cassis' book *Capitals of Capital* (2010). The book opens with a well-known but intriguing fact: "Past performance is no assurance of future returns." This well-known warning, which is rightfully printed on all investment prospectuses, shows quite simply how much financiers tend to focus on the future and on what tomorrow may bring rather than lamenting the past. However, looking ahead does not imply dismissing the lessons from yesterday. "Although no two financial shocks are ever the same, they frequently exhibit startlingly similar patterns: when speculative bubbles burst, whether in the tulips in 1637, railways in 1845, or the Internet in 2000, it is always sudden, investors change their minds without notice, and at the height of the crisis, markets simply grind to a halt. No matter how vividly investors recall past blunders, it is impossible to anticipate the precise timing or effects of tomorrow's shocks. In this regard, historical knowledge is helpful but not essential".

A highly readable narrative history of the rise and shifting fortunes of the top worldwide financial centres over the past 225 years has been written by Cassis (2010). By using historical and comparative analysis, Cassis set out to look at the "dynamics of the growth and decline" of the centres, making it clear from the outset that central banks were important players in this process.

With a focus on the mechanics of their emergence and fall, the book conducts a historical and comparative analysis of the function of worldwide financial centres over the past 200 years or so. Since the factors that determine whether a centre gains or loses influence whether it is a global leader or a less significant center are complicated, it is not simply a matter of ranking them based on predetermined selection criteria. They can only be understood in the context of a specific country's economic, political, social, and cultural environment. Investigating a center's internal structure and operations is crucial to understand how these general elements have impacted its development.

For the first time, Battilossi and Cassis (1971) highlighted the competitiveness-related sectors in their article and emphasised the necessity for various global financial centres to consider the possibility of complementary services between two or more global centres. It highlights the necessity of creating a plan to compete in a specialised market and to work together in regions that are weak for a centre.

In his study, Kindleberger (1974) gives readers a useful understanding of the economic forces that influenced the development of numerous financial centres around the world. It attempts to classify economies according to regions and presents historical information on the economic factors involved in the establishment of financial centres.

Bryant (1989) focuses on Singapore's efforts to draw foreign investment by introducing policies that have helped to close the regulatory gap between different nations. It also demonstrates how Singapore has been upgrading its regulatory framework over time to meet the needs of global financial services. The report emphasises the crucial part played by Singapore's Monetary Authority (MAS) in developing the rules governing international financial services.

According to Kevin and Teresa (2010), a financial centre is generally defined as a location with a significant concentration of managed financial institutions and financial markets that engage in activities that are recognised on a global scale for their management effectiveness, efficiency, and legal standing. It is revealed in the paper that Australia's financial sector (gross value added) is very comparable to that of many other developed economies, including the US, UK, Japan, and Canada, but significantly less than a number of international financial hubs, most notably Luxembourg, Hong Kong, and Singapore. The significance of Australia as an international managed financial services centre in comparison to other major centres was calculated in this study using a variety of conventional

and non-conventional measures, parallels between the exports of financial services and the positions of international investments going in and out. Due to data restrictions, these metrics are compared on a national level as opposed to a municipal level, which is where an IFC's actions should be centred.

In their article, Masciandaro & Portolano (2000) connected the legal system with economic growth. It provides some insight into the dynamics of rivalry among offshore financial centres that draw funds from questionable sources. In order to provide the best international financial regulation, the article adopts a relational approach, concentrating on the connections made between offshore centres and criminal organisations. Off-shore nations' key challenge is coming up with a credible promise to avoid acting opportunistically after engaging with criminal groups. Off-shore centres must particularly display a "hostage" that boosts the confidence of criminal groups in the trade. A strong reputation as a provider of illicit financial services and reliance on money laundering profits both contribute to this outcome. Contracts in a world of restricted rationality are utterly insufficient. Ex post governance methods for the relationships are crucial. Offshore facilities that will be able to provide superior gap-filling devices will be in a favourable position, keeping the quality of regulation consistent. An effective judiciary is the device that the paper concentrates on. The study concludes with some recommendations for formulating a global response to the threat posed by such nations. An overt "name and shame" strategy can even backfire on a battlefield where reputation is a key weapon. In reality, it might make reputation investments more transaction-specific, solidifying the dedication of offshore centres. Blacklisting should be used, but only in conjunction with other effective countermeasures. The study also makes the case that countermeasures should focus on skimming off the most significant suppliers rather than aiming to attack all market participants equally due to the perverse nature of competitiveness among off-shore centres.

In his 2009 speech, Mainelli (2009) outlined the elements that go into creating a prosperous financial centre. The lecture explores several concepts and their ramifications using the Global Financial Centre Index released by Z/Yen Group as its foundation. It also addresses the intricacy brought on by legislation in Asian nations and the procedure required to modify them.

The report of the High-Powered Committee on Making Mumbai an International Financial Centre (IFC), Ministry of Finance, Government of India, mentions a working paper by the Reserve Bank of India (RBI) on the subject. The idea of the International Financial Services Centre has been discussed in India since 1990 (DEA 2016). In the lack of an international financial centre in India, services are offered to institutions from Singapore, Dubai, London, the US, and other countries, according to the research. It also emphasises the necessity of drafting commercial, tax, and corporate law rules in accordance with global best practises. Infrastructure has received a lot of attention. However, it loses focus on the essential conditions for establishing IFC in Mumbai and covers a variety of macroeconomic issues that need to be addressed. Policymakers were uninterested in the idea of IFSC following the crisis of 1991 and India's currency not being completely convertible.

## RESEARCH OBJECTIVE & METHODOLOGY

The research main objective is to identify key determinants of the success of International Financial Services Centres with special reference to India through factor analysis.

The following sub-objectives were adopted to address the main objective of the research:

**Research Objective 1:** To identify the determinants responsible for the success of International Financial Services Centres (IFSCs) globally, by analyzing the evolutionary trends in the growth of present-day IFSCs and examining the various factors which have contributed to the growth of vibrant financial markets in such IFSCs.

### Methodology

**For the above objective, the following research was carried out:**

Detailed analysis of the biannually published **Global Financial Centre Index** by Z/Yen Group, London since March 2007.

**Research Objective 2:** To identify and investigate the key determinants of success for the International Financial Services Centre in India:

### Methodology

**For the above objective, the following research was carried out:**

Factor Analysis based on the response to the questionnaire by the financial professionals.

### Hypothesis:

**The Following hypothesis were laid down for the research:**

Hypothesis 1: **Regulations** play an important role for the International Financial Centre.

Hypothesis 2: **Business Environment** play an important role in the International Financial Centre.

Hypothesis 3: **City and infrastructure development** is important for the International Financial Centre.

Hypothesis 4: **Financial sector development** is important for the International Financial Centre.

## ANALYSIS

There has always been a centre for international banking, whether it was in ancient, almost mythical depots like Babylon, Samarkand, Constantinople, Marrakech, or Timbuktu, or in modern powerhouses like London, New York, Paris, Tokyo, or Shanghai. But how ought we to contrast them? Should we base our decision on geography (“the Far East against the Near East versus Europe versus North America”) or nation-state (“the United States versus the United Kingdom versus Germany versus Japan”) or culture (“Anglo-Saxon versus Han Chinese versus Continental European versus Arab”) or for Jane Jacobs, the appropriate “unit of analysis” was the city rather than the entire world. The unique urban environment, which combines residential, commercial, industrial, and administrative functions, is what draws so many people to metropolitan areas. Every nation's economy is heavily reliant on its cities. (Jacobs, 1984). A human habitation that can accommodate a considerable population and has attained a level of social or legal significance that distinguishes it from other human settlements is referred to as a “city.”

“The capital that is channelled through financial centres benefits innovation and growth. Having more access to information, knowledge, and capital is economically beneficial for cities with flourishing, competitive financial centres. Although there is strong competition among financial centres, the situation is not “zero-sum.” Whether the economy is domestic, specialised, regional, global, or global in scale, a strong financial centre links the rest of the economy to the world monetary system. Cities that have financial centres that connect them to the world financial network benefit from commerce and economic expansion on a global scale. Greater foreign direct investment flows into financial hub cities, enhancing the local economy and raising standards of living (Roberts 2008).

The “traffic” between the home economy and the international financial community determines the success of national economic systems. Contrary to popular belief, the domestic financial industry's primary purpose is not to benefit the domestic financial sector as a whole, but rather to serve the requirements of the domestic economy wherever and however they might be served. Because of this, a key performance metric is how well financial hubs provide diversity and access to global financial services. This indicator makes it crystal clear that domestic financial actors who benefit from legal protections are a burden on the economy. Effective links to international financial markets are encouraged by competition. The world of international finance is not a zero-sum game; rather, several global centres perform certain tasks, from being a regional player (like Sydney) to a global player (like London and New York City) to a specialty specialist (like Hamilton in the insurance industry).

“The Global Financial Centres Index was developed by the City of London Corporation and Z/Yen Group” to shed more light on what makes a successful financial centre (GFCI). Since its initial release in March 2007, GFCI has undergone biannual updates. The GFCI gives ratings for financial institutions based on a “factor evaluation model” that incorporates both instrumental variables and responses to an online survey provided by financial services experts (the assessments of financial centres). The ratings of financial centres are produced by the GFCI by combining instrumental elements with the answers provided on an online survey by financial services experts:

### There are two different sets of input:

1. **Instrumental Factors (IF)** – A range of comparable sources are used to get objective evidence of competitiveness.

- 138 Instrumental Factors are used (GFCI 2020)
- Data for IFs collected from secondary sources e.g. World Bank, Economic Intelligence Unit, OECD, Global Competitiveness Index, etc.
- Important variables include the business environment, infrastructure, reputation, human capital and development of financial sector.

2. **Financial Centre Assessments:** From 2007 to 2020, online surveys with 8549 respondents produced 54,509 reliable evaluations of 111 financial centres assessed (Table 2).

## INSTRUMENTAL FACTORS

A variety of comparable sources are examined by the Global Financial Centres Index (GFCI) to obtain unbiased proof of competitiveness. Data from 62 external sources are analysed by GFCI over five competitiveness characteristics. For example, buildings survey and an occupancy cost index might shed light on how competitive a

financial hub's infrastructure is. An indicator of a just and equitable economic environment can be found in the perception of corruption indexes, opacity indices, etc.

## FINANCIAL CENTRE ASSESSMENTS

Professionals in the international financial services industry evaluate the financial centres they are familiar with and provide their opinions on them in a continuous online survey that is incorporated into the GFCI. The GFCI is constantly updated with people's evolving opinions to the online survey that is open and available at all times. Time is the only factor taken into consideration when weighing responses, therefore newer ones carry greater weight. Table 1 shows the 25 best financial hubs (ratings are out of a potential 800 points) covered in GFCI 28 report September 2020:

*Table 1: The top 25 financial centres*

FINANCIAL CENTRE	RANK	RATING
New York	1	770
London	2	766
Shanghai	3	748
Tokyo	4	747
Hong Kong	5	743
Singapore	6	742
Beijing	7	741
San Francisco	8	738
Shenzhen	9	732
Zurich	10	724
Los Angeles	11	720
Luxembourg	12	719
Edinburgh	13	718
Geneva	14	717
Boston	15	716
Frankfurt	16	715
Dubai	17	714
Paris	18	713
Washington DC	19	712
Chicago	20	711
Guangzhou	21	710
Amsterdam	22	701
Stockholm	23	700
Vancouver	24	698
Seoul	25	695

**Source: GFCI 28 report, Sep 2020**

The top two global financial centres, according to GFCI Report 28 (Table 1) are New York and London, which are nearly 20 points ahead of the next two centres. Shanghai and Tokyo are ranked third and fourth, respectively, although rivals Hong Kong, Singapore, Beijing, and San Francisco are just behind them. Despite the repercussions of the credit crisis on the entire world, London and New York are still fiercely competitive and supportive of one another. The future of financial hubs can be boosted by well-considered policy initiatives. Classifications made by Z/Yen are broken down into five distinct competitiveness categories, or "decisions about," each of which is represented by a different factor.

- **People:** Access to qualified workers, a versatile labour force, sound educational and vocational programs, and the cultivation of valuable "human capital"
- **Business Environment:** There needs to be less government interference in the form of red tape, taxes, bribery, and so on, allowing businesses more leeway to operate freely
- **Infrastructure:** Logistics (air, sea, and land), communications, property and rental rates, and office space availability and pricing

- **Market Access:** What are the securitization rates, trading volumes, and values; what kinds of international financial transactions are taking place; and what kinds of financial services are available to people?
- **General Competitiveness:** factors that contribute to a city's positive "brand," quality of life, and general vibes”

Global Financial Centres Index (GFCI) ranks and evaluates global financial hubs based on their potential for future competitiveness.

More than one hundred different instruments go into making the GFCI. Among the many institutions that publish such statistics are the Economist Intelligence Unit, the Organization for Economic Cooperation and Development, World Bank, and the United Nations. Financial centre rankings provided by survey respondents on the GFCI website are combined with the instrumental variables.

Through their in-depth research, the authors of the GFCI report illuminated the standards by which financial hubs are evaluated and ranked. For a centre to gain popularity and rise in the rankings, it was essential that it excel in the aforementioned categories.

**Table 2: Compilation of GFCI report 1 to 28**

EDITION	DATE	RESPONDENTS	ASSESSMENTS	NUMBER OF FACTORS ASSESSED
GFCI 1	01/03/2007	491	3992	43
GFCI 2	01/09/2007	825	11,685	50
GFCI 3	01/03/2008	1,236	18,878	58
GFCI 4	01/09/2008	1,406	24,014	57
GFCI 5	01/03/2009	1,455	26,629	60
GFCI 6	01/09/2009	1,805	31,497	63
GFCI 7	01/03/2010	1,690	30,170	70
GFCI 8	01/09/2010	1,876	29,044	75
GFCI 9	01/03/2011	1,970	27,995	75
GFCI 10	01/09/2011	1,887	26,604	79
GFCI 11	01/03/2012	1,778	26,853	80
GFCI 12	01/09/2012	1,890	24,780	86
GFCI 13	01/03/2013	2,307	23,043	96
GFCI 14	01/09/2013	2,786	25,749	102
GFCI 15	01/03/2014	3,246	25,441	103
GFCI 16	01/09/2014	3,633	29,226	105
GFCI 17	01/03/2015	3,527	28,494	105
GFCI 18	01/09/2015	3,194	28,676	110
GFCI 19	01/03/2016	2,765	28,734	102
GFCI 20	01/09/2016	2,493	23,006	101
GFCI 21	01/03/2017	3,008	23,406	101
GFCI 22	01/09/2017	3,159	23,812	102
GFCI 23	01/03/2018	3353	28599	103
GFCI 24	01/09/2018	3301	31326	137
GFCI 25	01/03/2019	3708	29065	133
GFCI 26	01/09/2019	3478	32227	134
GFCI 27	26/03/2020	5064	37695	138
GFCI 28	01/09/2020	8549	54509	138

**Source: Compilation by the researcher**

While examining the GFCI reports from 2007 to 2020, following important insights were drawn for the research work:

“The GFCI offers financial centre ratings based on a ‘factor evaluation model’ that takes into account two different sets of input:

**Instrumental factors:** A wide range of comparable sources were searched for objective proof of competitiveness. A financial center’s ability to compete in terms of its telecommunications infrastructure, for instance, can be determined using data from the “World Economic Forum’s Networked Readiness Index”, “the World Economic

Forum's ICT Development Index", "the United Nations' Telecommunication Infrastructure Index", and "the Web Index (supplied by the World Wide Web Foundation)". "The World Bank's Ease of Doing Business Index", "Government Effectiveness Rating", and "Corruption Perceptions Index" are just a few of the sources used to support the claim that the regulatory environment is business friendly. GFCI 28 uses 138 instrumental elements in total, 62 of which have been revised since GFCI 27.

**Financial centre evaluations:** the means of an ongoing online survey that has been running since 2007. GFCI gathered 10,328 responses to the survey in the 24 months before to June 2020. Of these 8,549 respondents, gave 54,509 trustworthy assessments of financial centres (Table 2). A financial centre is added to the GFCI questionnaire when it is named five or more times in the online survey's response to the question: "Are there any financial centres that might become substantially more important over the next two to three years?" A centre only earns a GFCI grade and ranking after receiving more than 150 assessments from survey participants based in other centres during the course of the online survey. When the number of evaluations grows or if they do not receive 50 assessments in a 24-month period, centres in the GFCI are withdrawn from the associate list and added to it, accordingly.

Respondents are asked to rank the importance of the competitiveness elements in the GFCI questionnaire. The frequency with which the significant factors identified by GFCI 28 respondents were looked into. The following appeared from the frequency matrix as the main factors mentioned by the respondents:

**Table 3: GFCI Report 28 Competitiveness Areas**

Competitiveness Factors	Business Environment	Infrastructure	Human Capital	Financial Centre Development	Reputation
Number of Mentions	363	383	323	309	338

**Source: GFCI Report 28**

Based on the detailed examination from 2007 to 2020 (28 reports) of the GFCI reports to identify important factors mentioned by the respondents, the following factors emerged as key factors:

**Table 4: Compilation of GFCI Report 1 to 28 – Competitiveness Areas**

Competitiveness Factors	Business Environment	Infrastructure	Human Capital	Financial Centre Development	Reputation
Number of Mentions	7700	8400	8680	8400	7000

**Source: Compilation by the researcher**

The details of the above factors are as follows:

**1. "Business Environment"**

Businesses thrive in environments where the rule of law is upheld, and those that are seen as being tainted by corruption suffer. A collaboration between regulators and market participants is valued, as is consistency in regulation. When nations are at war, peaceful, well-governed states become more desirable.

**2. "Infrastructure"**

The importance of both traditional and digital forms of infrastructure cannot be overstated. There is more to the story than just the built environment for business. In addition, there must be adequate housing, educational, and service opportunities. The city's transportation system is extremely crucial, both inside and externally.

**3. "Human Capital"**

The education system must adjust to reflect the growing importance of digital competence alongside more conventional financial literacy. A shortage of skilled workers is a cause for concern in rising countries. Any financial hub serious about progress should make this a top priority. In regions where the English language is extensively spoken, the presence of bilingual employees is highly valued.

**4. "Reputation"**

The cultural offerings and accessibility of a city, such as its strategic position and means of transportation, contribute to the city's reputation, which is crucial in luring top talent from around the world. Nowadays, there is less of a reputational divide between the world's major cities. However, maintaining a status as a reliable place to conduct business is crucial.

**5. "Financial Sector Development"**

As a result, the user interface supplied by fintech companies is increasingly important, as they need not be in close proximity to their customers. These days, it's as crucial to have a good online reputation as it is to be physically close to your clients.

## FACTOR ANALYSIS

In order to learn more about the variables that are most important in the Indian context for the creation of the International Financial Services Centre, a detailed questionnaire was designed based on interviews with financial services players and regulators. Prior to conducting the final survey, the questionnaire was discussed with selected respondents, so as to modify it suitably. The final questionnaire was sent out to those in the financial services industry in India's IFSC as well as those in Mumbai. The questionnaire results were used to generate the factor analysis model by mapping the factors and replies. The questionnaire was sent to more than 200 database of financial services professionals. The response rate was 50% with 100 professionals replying to the questionnaire. Out of the 100 responses, 80% of the respondents were Male and 20% Female. In the financial services field it is seen that male employees dominate. The respondents were from Banking, Insurance, Capital Markets, Fintech, Fund Management, Broking, Law firms, Consultancy firms, aircraft leasing firms etc. It provided the required diversity in getting the replies. The response to the questionnaire helped in mapping the factors and responses and helped in identifying the key determinants.

A technique called factor analysis aims to reduce a massive number of interconnected variables to a manageable group of unifying elements.

It is a series of strategies that, according to Nargundkar R. (2004), decreases the number of variables to fewer ones that economically explain much of the original data by examining correlations between them.

Examining the full correlation matrix is one way to ascertain if factor analysis is a good fit. Correlations among variables can be quantified using a statistical test called Bartlett's Test of Sphericity (Hair, 2009). It's a way to see if there's any evidence against the possibility that the population-level correlations among the variables are completely zero (Malhotra and Wah 2008). This means that it gives statistical proof that there are substantial correlations between some or all of the variables in the correlation matrix.

### KMO and Bartlett's Test

**Table 5: KMO and Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.748	
Bartlett's Test of Sphericity	Approx. Chi-Square	180.057
	df	36
	Sig.	.000

The above table shows that our sample size is adequate for factor analysis, as measured by the Kaiser-Meyer-Olkin test, with a value of 0.748 (greater than 0.7) and a significance level of less than 0.05.

The research analysed the perception of the respondents based on the following 27 factors identified from the research and based on the feedback:

### Rate the factor below as to how important they are at making GIFT IFSC an attractive location in which to conduct business ("scale of 1 - 5, were 1 being lowest and 5 being highest"):

1. Access to International Financial Services Business
2. Market Growth Potential
3. Liberalised Market
4. Large Country Wealth
5. Favourable Business Environment
6. Depth of Business volume
7. Availability of Skill Manpower
8. Quality of Life
9. Unified Regulator
10. Retail Participation



**GIFT IFSC is aiming to offer the best possible business environment for companies. Please evaluate the importance of the factors that GIFT IFSC offers to the financial services industry (“scale of 1 - 5, were 1 being lowest and 5 being highest”):**

1. Transparent Legal Regime
2. Independent Regulation
3. Competitive Tax Regime
4. Exchange Infrastructure
5. Scale of Banking Business
6. Ease of Doing Business
7. Access to large Market

**GIFT is aware that there will be a number of potential impediments to its progress. Please evaluate the current problems that businesses face in GIFT (“scale of 1 - 5, were 1 being lowest and 5 being highest”):**

1. Rental Cost / Real estate Cost
2. IFSC Regulatory environment
3. Competitive Tax Regime
4. Social Infrastructure
5. Transport Infrastructure
6. City brand and appeal
7. Uncertain political environment
8. Availability of Lawyers
9. City level Infrastructure utilities
10. Food joints

Apart from above, specific response was also sought for familiarity of Asian centres for doing business, the question covered **“Please rank the following financial centres as places where you would want to conduct business if you are familiar with any of them.”** (“scale of 1 - 5, were 1 being lowest and 5 being highest”):

1. Abu Dhabi
2. Astana
3. Bangkok
4. Casablanca
5. DIFC, Dubai
6. GIFT IFSC (Gujarat)
7. Labuan, Malaysia
8. Mauritius
9. Moscow
10. Singapore
11. Seoul
12. Sydney
13. Hong Kong

An additional unstructured comment was requested regarding **“Specific variables that affect the competitiveness of financial centres”** and it asked for the following information in answer (**“on a scale of 1 - 5, with 5 being the highest”**):

- Infrastructure,
- accessibility to clients and suppliers,
- the regulatory and commercial climate,
- taxation,
- the access to skilled labour and the adaptability of the labour markets,
- city reputation and branding, and
- any other aspect you deem significant.

The above was broadly based on the Hypothesis of the research, to access the response of the professionals on the important factors.

## ANTI-IMAGE CORRELATION MATRIX FOR VARIABLES

The factor analysis was rerun, skipping the factors with loadings of less than 0.6 based on the Anti-image correlation, the following factors remain:

1. Access to International Financial Services Business
2. Market Growth Potential
3. Favourable Business Environment
4. Availability of Skill Manpower
5. Quality of Life
6. Unified Regulator
7. Retail Participation
8. Competitive Tax Regime
9. Scale of Banking Business
10. Ease of Doing Business
11. Access to Large Market
12. Social Infrastructure
13. City Brand and Appeal
14. City Level Infrastructure utilities
15. IFSC Regulatory Environment

The following factors with loadings below 0.6 were eliminated from further consideration after a second round of factor analysis.

1. IFSC Regulatory environment
2. City level Infrastructure utilities
3. Retail Participation
4. Access to Large Market
5. Scale of Banking Business
6. Quality of Life

After removing about factors now the following factors with more than 0.6 loading value were derived

**Table 6: Anti Image Correlation Matrix Anti-image Matrices**

		Access to International Financial Services Business	Market Growth Potential	Favourable Business Environment	Availability of Skill Manpower	Unified Regulator	Ease of Doing Business	Social Infrastructure	Transport Infrastructure	City brand and appeal
Anti-image Covariance	Access to International Financial Services Business	.672	-.229	-.095	-.052	-.003	-.047	-.021	.007	.027
	Market Growth Potential	-.229	.531	-.164	-.130	-.166	-.048	.043	.009	-.002
	Liberalised Market	-.095	-.164	.662	-.149	-.053	-.032	-.053	.063	.050
	Availability of Skill Manpower	-.052	-.130	-.149	.740	.054	.059	.042	.103	-.015
	Retail Participation	-.003	-.166	-.053	.054	.851	-.052	-.096	-.056	.088
	Ease of Doing Business	-.047	-.048	-.032	.059	-.052	.946	.015	.032	.055

**Table 6: Anti Image Correlation Matrix Anti-image Matrices**

		Access to International Financial Services Business	Market Growth Potential	Favourable Business Environment	Availability of Skill Manpower	Unified Regulator	Ease of Doing Business	Social Infrastructure	Transport Infrastructure	City brand and appeal
	Social Infrastructure	-.021	.043	-.053	.042	-.096	.015	.612	-.234	-.264
	Transport Infrastructure	.007	.009	.063	.103	-.056	.032	-.234	.685	-.098
	City brand and appeal	.027	-.002	.050	-.015	.088	.055	-.264	-.098	.696
Anti-image Correlation	Access to International Financial Services Business	.788 <sup>a</sup>	-.383	-.143	-.074	-.004	-.060	-.033	.010	.040
	Market Growth Potential	-.383	.738 <sup>a</sup>	-.276	-.207	-.248	-.067	.076	.015	-.003
	Liberalised Market	-.143	-.276	.812 <sup>a</sup>	-.213	-.071	-.041	-.082	.093	.073
	Availability of Skill Manpower	-.074	-.207	-.213	.813 <sup>a</sup>	.068	.070	.063	.145	-.021
	Retail Participation	-.004	-.248	-.071	.068	.661 <sup>a</sup>	-.058	-.133	-.073	.115
	Ease of Doing Business	-.060	-.067	-.041	.070	-.058	.828 <sup>a</sup>	.020	.039	.068
	Social Infrastructure	-.033	.076	-.082	.063	-.133	.020	.645 <sup>a</sup>	-.361	-.405
	Transport Infrastructure	.010	.015	.093	.145	-.073	.039	-.361	.759 <sup>a</sup>	-.142
City brand and appeal	.040	-.003	.073	-.021	.115	.068	-.405	-.142	.719 <sup>a</sup>	

**Table 7: Communalities**

Communalities	Initial	Extraction
Access to International Financial Services Business	1.000	.547
Market Growth Potential	1.000	.704
Favourable Business Environment	1.000	.584
Availability of Skill Manpower	1.000	.606
Unified Regulator	1.000	.521

Ease of Doing Business	1.000	.596
Social Infrastructure	1.000	.725
Transport Infrastructure	1.000	.617
City brand and appeal	1.000	.615

More than half of the variance in all of the above variables can be attributed to the factors being extracted. To continue with the factor matrix rotation, all communalities must be greater than 0.5.

**Table 8: Eigenvalues and Total Variance Explained for related variables**

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.836	31.507	31.507	2.836	31.507	31.507	2.340	25.997	25.997
2	1.634	18.160	49.667	1.634	18.160	49.667	1.984	22.044	48.041
3	1.046	11.623	61.290	1.046	11.623	61.290	1.192	13.250	61.290
4	.858	9.533	70.823						
5	.668	7.426	78.249						
6	.572	6.354	84.604						
7	.559	6.206	90.810						
8	.449	4.989	95.799						
9	.378	4.201	100.000						

There are a total of three factors out of nine that have Eigenvalues that are greater than 1.0. As a result, the study focused on these three aspects during the investigation. The three factors together explain 61.290 percent of the total variance. The remaining 6 factors were observed as sub-set of main factor. The percentage of the total variation that may be attributed to each individual factor is found by dividing the Eigenvalues by the total number of variables.

**Table 9: Component Matrix**

Component Matrix	Component		
	1	2	3
Access to International Financial Services Business	.643		
Market Growth Potential	.682		
<b>Favourable Business Env.</b>	.751		
Availability of Skill Manpower			.618
Unified Regulator			.619
<b>Ease of Doing Business</b>			.713
Social Infrastructure		.694	
Transport Infrastructure		.557	
<b>City brand and appeal</b>		.721	

As can be seen in Table 8 the factor structure for the nine variables has been quite thoroughly established, and it consists of three separate groups of variables. The value of 0.5 has been chosen to serve as the interpretation cut-off point for loadings. The first factor has three variables, all of which have large loadings. The second factor comprises of three variables, all of which also have large loadings. The third factor covered three variables having substantial loading. The factor is given a name representing the highest component value for similar variables included in the table. The final analysis showed three different elements in relation to the GIFT IFSC variables. They were the Favourable Business Environment, Ease of Doing Business, and City Brand and Appeal (Table 9).

## **FAVOURABLE BUSINESS ENVIRONMENT**

The success of the financial centre is dependent on the Favourable Business Environment. How it provides access to International Financial Services business and the market growth potential. The unique positioning of IFSC in India being a non-resident zone under the Indian foreign exchange regulations provides a great enabling business

environment free from domestic laws. The analysis suggests that respondents consider business environment a prime factor for entering any financial centre.

## EASE OF DOING BUSINESS

Every developed country in today's competitive global world places a premium on luring foreign investment and boosting economic growth. World Bank's (EODB) index is gaining traction in this regard as it provides a reliable snapshot of the local business environment. From an Indian perspective Ease of Doing Business weighs very high due to its ongoing legacy issues for foreign investors. The success of IFSC in India would mainly depend on the ease of starting a business, ease of doing business and ease of exiting the business. The unified regulator would play key role. Availability of Skill Manpower would be critical for the success of the IFSC in India.

## CITY BRAND AND APPEAL

The success of financial centre in build into the city in which it operates. As noted earlier, the city, rather than the nation, was the proper "unit of analysis" for financial centres. The urban environment is a special one, combining residential, industrial, commercial, and administrative functions, and it is the reason why so many people go to cities. Each country's economy is largely dependent on its cities (Jacobs, 1984). A city is defined as a human settlement that is large enough to support a sizable population and that has achieved some level of social or legal significance that sets it apart from other human settlements. The success of large global financial hubs are mainly due to the global city in which they operates which attracted large foreign universities, foreign talent and provided superior social life for financial services professionals.

The importance of both traditional and digital forms of infrastructure cannot be overstated. There is more to the story than just the built environment for business. In addition, there must be adequate housing, educational, and service opportunities. Within a city, transportation is crucial, as is its connectivity to other modes of transportation, such as trains and planes.

**Based on the findings of the factor analysis, the following hypothesis are confirmed:**

**The study supported the following hypothesis:**

- Regulations, according to Hypothesis 1, and the business environment, according to Hypothesis 2, both play important roles in the growth of international financial services centres.

- The growth of international financial services centres is supported by the following hypotheses:

Hypothesis 3: City and infrastructure development is important;

Hypothesis 4: Financial sector development is important.

## CONCLUSION

While using the two analytical method viz. Global Financial Centre Index Analysis in global context and Factor Analysis in Indian context this paper has identified the key determinants for the success of International Financial Service Centres. Although first ever IFSC has started operations in India, now the question that needs to be addressed is how to make it more competitive and successful globally. Based on statistical analysis and the research, this paper finds that IFSC in India, though being a new financial service centre, can certainly increase its competitiveness and become a sustainable successful financial centre more quickly by focusing on the factors identified in this study.

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