

The Influence of the Disney Theme Park in Shanghai Related Industries

Songxiaoxiao

School of Management
Shanghai University of Engineering Science
Shanghai, China

Abstract

Disney is in itself a variety of industrial agglomeration, it settled in Shanghai in Shanghai industry undoubtedly have a significant impact, this article mainly through theoretical analysis and empirical research, through the questionnaire survey calculated projections for the Shanghai tourism, then ARMA model is set up for Shanghai and forecast analysis on real estate investment in fixed assets, it is concluded that only ticket sales every year can be created in Shanghai 25-3 billion yuan, fixed assets of Shanghai, and the effect of 9.42% of real estate investment.

Keywords: Disney theme park; industries; influence

1. The Introduction

Disney theme park in contains rich Disney behind the economy. Disney economy like a huge magnet attracting people, logistics, capital, to finance, tourism, transportation, catering, advertising, telecommunications, hotels, decoration and other service industries to create economic opportunity. Almost completed the first phase of the Disney theme park will promote the tourism industry in Shanghai, the real estate industry, exhibition industry, business and the rapid development of modern service industry and other industries, and bring huge economic benefits.

2. The Tourism Industry

Disney World for tourism to drive is very obvious, Shanghai Disneyland is the first mainland Disney project, filled the gap of lack world theme park. Relying on the rapid development of China's tourism market, and good geographic location, transportation is convenient, the advantages of the regional economy developed, Shanghai large potential tourist market. East China will be the core of the Shanghai customers, but through the convenient aviation and rise of new high-speed rail network, Shanghai tourism also can effectively cover the entire country. In addition, Shanghai Disneyland, larger area has a lot of amusement facilities, also combine with east China tourism resources, are also more attractive for tourists.

2.1 The Disney Project in Shanghai is a Major Opportunity for Shanghai Tourism in Line with International Standards

Of course, the most direct benefit is tourism. As a high-end tourism project of the Disney theme park has a long industrial chain, industrial convergence and related industry, high-end features. Tourism has two distinct industry characteristics: on the one hand, tourism have longer industry chain and numerous support, assist, related industry. Tourism activities from the beginning to the end of many industries to provide products and services need to complete support, which includes both and tourism activities directly related to provide "food, accommodation, transportation, traveling, shopping, entertainment," the core of the service sector, including provide protection and support for the core department of normal operation of auxiliary industries and departments, core services constitute the tourism industry chain, form the industrial chain of auxiliary industries and departments support, related industry. Tourism, on the other hand, there is a strong industry integration, interaction can and a lot of industry development and formation of new forms of tourism, the new product. Tourism activities can interact with a variety of other industry activity, so the tourism industry has a strong industrial integration, with many industries development, form a new forms of tourism, tourist products. Industrial tourism, agricultural tourism, exhibition, sports, health care, education, tourism, and other new forms have been developing fast in recent years.

2.2 Shanghai Disney Theme Park Will Stimulate Tourism Consumption, Increase Tourism Revenues

Relying on the huge mainland market and the Yangtze river delta in the local market, after the completion of Shanghai Disney will quickly become a tourist hot spot, the effect of the morning after a period of time, is expected to be similar to the Shanghai world expo, visitors optimistic estimates that could reach thousands of level in a year. There will be a long-term continuity and Disney effect, will bring new development opportunities for Shanghai modern service industry, it will also increase the competitiveness of the east China tourism.

Through the latest survey and visit shows: first, the visitor is looking forward to Shanghai Disney theme park is built; Second, 46.03% of visitors a year after the completion of the Disney theme park in Shanghai to play; Third, the Shanghai Disneyland theme park in the gardens was the choice for 73.02% of visitors a day and don't stay for the night; Fourth, the tickets for consumption is the main income of Shanghai Disneyland theme park. Content by above knowable, Shanghai Disneyland theme park to meet with the approval of domestic tourists, and has huge potential tourism market.

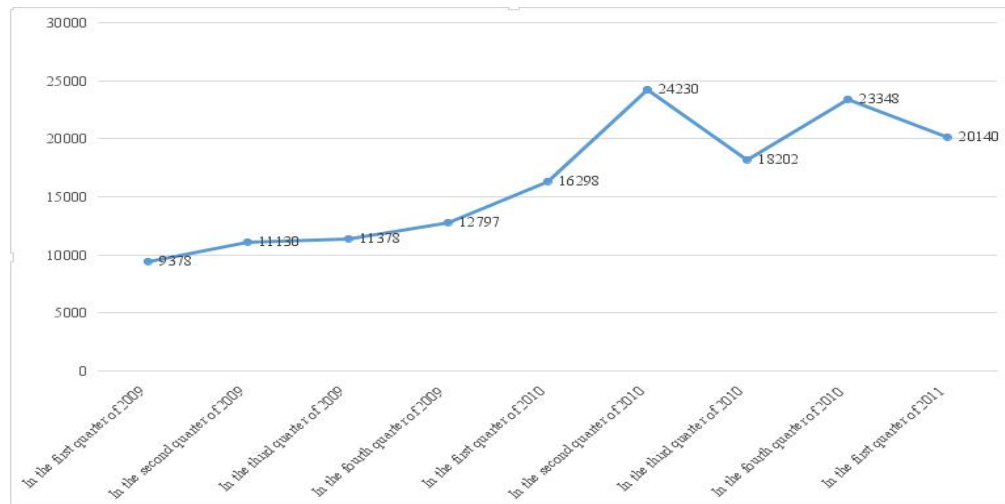
According to the Disney itself popularity and traffic trends of world's Disneyland to estimate, can come to Shanghai Disneyland about should have 10 million visitors a year. , according to domestic prices and income level to Shanghai Disneyland ticket prices should be in 250-300 yuan between, in turn, can calculate again Shanghai Disneyland theme park ticket sales for the whole year will reach 25-3 billion yuan, this means that, in accordance with the normal regions of Disney industrial chain effect, which is 1 yuan tickets for stimulating consumption to calculate 8 yuan, only calculated separately catering accommodation and shopping entertainment consumption, such as Shanghai Disney theme park every year can bring nearly 24 billion yuan output value of service. At the same time, the Disney theme park will pull the hotel industry, catering industry, tourism transportation, entertainment, business, shopping and so on in the development of related industries. According to the world tourism organization estimates that every tourism growth direct income 1 yuan, relevant industry revenue will increase 4.3 yuan, that is, the relevant industry added value of nearly one hundred billion yuan. And Disney theme park will also with long-term follow-up to the Shanghai tourism.

3. The Stimulation of Fixed Assets and Real Estate Development Surrounding

3.1 The Theory Analysis

In the aspect of real estate, Disney project can drive the neighboring area of appreciation. Shanghai Disney theme parks and facilities initially planned development area of 3.9 square kilometers area, investment scale of about 24.5 billion yuan RMB, the huge construction projects will bring huge benefit to the local construction industry; At the same time, the land appreciation also stimulates the local residents of housing and commercial housing demand, promote the local real estate industry flourish.

After the Shanghai Disneyland officially settled in the land, shops in the area of the surrounding rivers sand, the influence of the property market is large, the land and house prices continue to rise. Clinch a deal in the first quarter of 2009, rivers sand plate housing price 9378 yuan/square metre only, in the city in the average price is not high, and in the fourth quarter of 2009, when the Shanghai Disneyland officially settled in Shanghai, the rivers sand plate prices rise almost full, clinch a deal the average rose to 12797 yuan/square meters, the average price clinch a deal in the second quarter of 2010 homes has amounted to 24230 yuan/square meters. In February 2011, the issue of restrictions on making rivers sand clinch a deal the average price of the plates have a period of time, but compared with the first quarter of 2009 prices are at a higher level. Overall, Shanghai Disneyland, has prompted surrounding besides rivers sand plate and chow hong, HuiNa, Ruth chao, zhangjiang, jinqiao plate clinch a deal the average of the commodity residential house appear obvious rise.

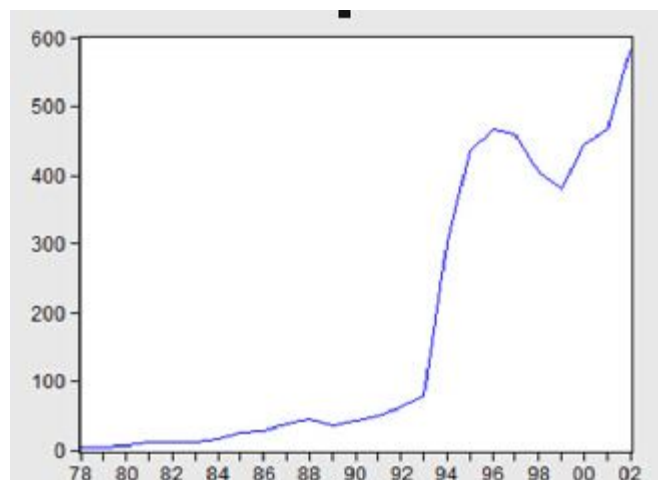
Fig.1: Plate of Chuansha Commodity Residential Transactions Fold

3.2 The Empirical Analysis

The sixth world Disneyland is expected to formally opened for business in Shanghai at the end of 2015. From Los Angeles Disneyland, Disney theme park in its unique way is becoming expand international exchanges and cooperation, promote economic, tourism, the development of culture and art exchange, etc, but also can create huge economic benefit and social benefit for China, the publicity and expand China's visibility and reputation has an important role. Therefore, this article choose the Disney theme park in Shanghai aspects to analyze the influence of urban economy, the first collection of Shanghai urban residents final consumption, GDP and investment in infrastructure, residential investment, the added value of tourism industry, a total of five indexes of 1985-2013 (due to the limited statistical yearbook data, the index data starting is not necessarily the same year) time series data, with 2002 as the cut-off time sequence, on the basis of the indicators data in 1985-2002, using ARMA model we predict in 2003-2013 the corresponding numerical, contrast each index forecast the difference between data and actual data can be concluded that the Disney in Shanghai to the local economy play a much role, then introduce the effects of growth index, with 2003 to 2013, the actual and forecast growth effect index difference as a measure of the average Disney push effect on the corresponding indicators.

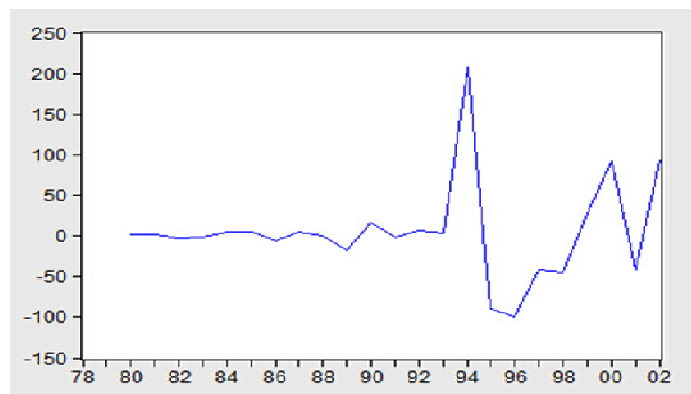
(1) Time series of smooth inspection

ARMA model of the object must be smooth, namely in the short term, the statistical characteristic analysis of time series changes over time, in the long run, the time sequence tends to be constant or linear function. In the Eviews software using 1978-2002 Shanghai residential investment based on the time series data of export linear distribution of residential investment (as shown in figure 3)

Fig. 2: Shanghai Residential Investment Linear Graph

Can see clearly from the figure of Shanghai residential investment variable changes over time, showed a trend of greater volatility, the instability of significant, indicated that the time series is stationary series, therefore, to use ARMA model, must be variable according to certain structure of the sequence, form new stationary time series. In the Eviews software for the Shanghai residential investment difference. After the first one order difference, difference data graph volatile, still has certain nonstationarity. Shall be the second order difference in export, the second order difference figure (pictured), basic stationary time series.

Fig.3: Two Order Differential Diagram



Using ADF (augmented dickey fuller) after the second time difference data unit root test, results in the following table. Because of the absolute value of the absolute value is greater than 3.769597 to 4.835380, so the result on the accuracy of 1% meet the requirements.

Fig.4: Stationary Test Chart

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.835380	0.0009
Test critical values: 1% level	-3.769597	
5% level	-3.004861	
10% level	-2.642242	

(2) identification of the model

Use Eviews to make data after the second differential autocorrelation function and partial autocorrelation function of the diagram below. Within the 95% confidence interval, contains all the autocorrelation and partial autocorrelation coefficient, are not statistically different from zero, can think of this sequence as a stationary random sequence. Sample autocorrelation function and partial autocorrelation function has not been truncated, but show the general attenuation characteristics, both present a trailing properties. Can be thought of as the difference sequence for construct the ARMA model.

Fig. 5: Sequence Correlation Diagram

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
		1 -0.118	-0.118	0.3618	0.547
		2 -0.112	-0.128	0.7072	0.702
		3 -0.091	-0.124	0.9439	0.815
		4 -0.243	-0.301	2.7269	0.605
		5 -0.092	-0.240	2.9988	0.700
		6 0.153	-0.016	3.7892	0.705
		7 -0.182	-0.339	4.9803	0.662
		8 0.198	-0.023	6.4865	0.593
		9 0.024	-0.137	6.5095	0.688
		10 0.026	-0.028	6.5396	0.768
		11 -0.043	-0.168	6.6298	0.828
		12 0.014	-0.051	6.6407	0.880

Using red pool information criterion (Akaike information criterion, AIC) order, and choose the best model. AIC criterion can be based on the model of maximum likelihood, the order of the model and the corresponding parameters at the same time give a best estimate. But it still needs to be based on a smooth sequence of autocorrelation and partial autocorrelation function characteristics, some primary reference order number, and then calculating the number of different order AIC value, select the AIC value to minimize a set order number as the ideal order number.

Use Eviews to test value of each forecast model, found that the ARMA (4, 1) minimum value of AIC, so through the ARMA (4, 1) prediction model fitting

$$Y_n = 2.028135 + 0.147062Y_{t-1} - 0.132788Y_{t-2} - 0.136575Y_{t-3} - 0.425699Y_{t-4} + e_t + 2.001e_{n-1}$$

Using ARMA model to forecast the data from 2003 to 2013, according to projections if Disney theme park in Shanghai, the period 2003-2013 Shanghai residential investment will also increase. So will be 2003-2013, compared with the real value of prediction (see chart), found that Shanghai Disneyland on urban residential investment has played a certain role in promoting.

Tab.1: 2003-2013 Years of the Forecast Value and the Real Value

year	the real value	the forecast value
2003	694.3	604.20
2004	922.61	667.94
2005	936.36	754.07
2006	854.15	893.90
2007	853.13	975.26
2008	871.52	875.75
2009	922.81	975.70
2010	1232.96	1094.47
2011	1403.13	1101.82
2012	1457.64	1332.57
2013	1615.51	1533.77

In order to study the introduction of the Disney project for the size of the influence degree of the Shanghai residential investment, this paper introduced effects of growth index K_{ij} , C_{1j} and C_{2j} represent the first j in Shanghai residents consumption of real value and predicted value:

$$\Delta C_{ij} = C_{ij} - C_{ij-1}, (i=1,2); \quad K_{ij} = \frac{1}{1 - \frac{\Delta C_{ij}}{C_{ij}}}$$

Early to just eliminate some of the world expo, in this paper, after the expo, which is 2011-2013 data of operation results, the following table.

Tab. 2: 2011-2013 Residential growth Effect Index Table

year	K_{1j}	K_{2j}	ΔK_j
2011	1.138017	1.001086	0.136984
2012	1.038849	1.001034	0.038069
2013	1.108305	1.000723	0.107582

According to the above-mentioned results, from 2011 to 2013 K the actual value and predictive value of mean and the mean difference. Available: $K_{1j} = 1.095057$, $K_{2j} = 1.000846$, $\Delta K_j = 0.094211$. We use the mean K represents the growth of residents' consumption index, with the actual average K and expressed by the difference of forecast, Disney pulling effect on residential investment growth. On this basis, we may safely draw the Disney theme park in Shanghai in Shanghai the promoting function of urban residential investment is 9.42%.

3. Conclusion

Fall for Shanghai, the Shanghai Disney theme park is an important opportunity, need careful preparation, the mainest is considered to impact the various problems in Shanghai.

Due to the multinational operation will Disney theme park, are likely to involve the cultural issues, also involve the Disney theme park area's economic problems. Through discussion, this article is a conclusion:

First, through the questionnaire survey is the Disney theme park potentially huge tourist market, and domestic prices and income level, according to the Shanghai Disneyland ticket prices should be in 250-300 yuan between, in turn, can calculate again Shanghai Disneyland theme park ticket sales for the whole year will reach 25 to 3 billion yuan.

Second, in order to meet the arrival of the Disney, Shanghai overall spend a lot of money and manpower to improve urban infrastructure construction and engineering supporting facilities, such as those produced by Walt Disney's investment in Shanghai in recent years made an important contribution of investment in fixed assets. Through the calculation of the author, think Disney from 2011-2013 to the promoting function of residential investment is about 9.42%.

Believe that with the development of technology, the future of Shanghai Disney theme park in more areas and at the same time there will be more personalized experience, constantly make people dream, dream, a dream.

References

- Ma Haiqian. Shanghai Disney project development and transformation of economic development [J]. Journal of Shanghai economic development report 2013.
- Xie Jun. the Disney project construction of pudong economic development to influence [J]. Journal of Shanghai pudong economic development. 2013.
- XiaoDaoGang.. Shanghai world expo based on the theory of the cost a revenue economic impact study [D]. East China normal university. 2008.
- Wang lina,Xiao dong-rong . Based on the ARMA model forecasts for non-stationary time series analysis [J]. Journal of wuhan university of technology. 2004.