

Research on the Impact of Chinese Elements on the Export Performance of Chinese Animated Films

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Abstract. With the rapid development of the economy, the cultural industry has attracted much attention, and animated films have a very important position in the cultural industry. However, the export performance of China's animated films is not ideal. This paper makes an suggest admit the China's animated films.

Keywords: animated films;export performance;Chinese elements;Overseas box office

1. Introduction

In recent years, animation film plays an important role in the cultural industry. However, the export performance of Chinese animated films is not ideal, and there is a trade deficit in foreign trade of Chinese animated films. The main reason for this situation is that China's animation film enterprises do not understand the international market's preference for animation film content, and pay attention to the animation film industry relatively late^[1].

After reading the existing literature, only a small part of the previous studies on the elements of Chinese style have been studied, and most of the existing studies are based on the case study of a certain film (J Cao, L J Li, B Q Zheng, 2022; M Y Li, 2022). Most literatures have studied the influence of different factors on export performance, but there is relatively little research on the influence factor of Chinese element.

With the rise of the cultural industry, the study of Chinese-style animated films is extremely necessary. This paper aims to improve the export performance of Chinese animated films by studying the influence factors of Chinese elements, Chinese style forms of expression, content quality, visual effects and Chinese-foreign co-production, so as to export Chinese culture while developing economy.

2. Overview of Chinese-style animation film export

2.1 Definition of Chinese-style animated films

This study tries to make a new interpretation of the concept of Chinese-style elements. The

Chinese-style animated film should show the excellent traditional Chinese culture, transmit the mainstream values, and make excellent content to achieve the important breakthrough of cross-cultural penetration^[2]. In Chinese animated films, Chinese-style elements generally have three forms of expression: First, mythological characters, such as Monkey King, Nezha and so on. Second, in the visual picture, such as Chinese characteristics of architecture, pandas and so on. Third, the cultural elements, such as Chinese traditional culture, values and so on^[3]. The animated films export Chinese culture through the characters, pictures and culture in the films^[4].

2.2 Analysis of export performance of Chinese-style animated films

Chinese-style animated films account for a relatively small proportion of the export of animated films, averaging only one or two per year. The box office performance fluctuates greatly, and the box office fluctuates due to the excellent or lack of performance of a certain animated film^[5]. The score of Chinese-style animated films is between 6-7 points, which is 1-2 points higher than that of animated films without Chinese-style elements. Animated films with Chinese-style elements generally have higher scores, which shows that Chinese-style elements are very popular with overseas audiences^[6].

3. Empirical Analysis

3.1 Variable selection

The dependent variable of this paper is the export performance of Chinese animated films, expressed by overseas box office (EP). The core explanatory variable is Chinese style elements (CSE), and according to Chinese style expression forms, there are Chinese style mythological characters (MF), Chinese style artistic modeling (AM) and Chinese culture (CC). The control variables were content quality (CQ), visual effect (VE), and Chinese-foreign co-shooting (CFC), as shown in Table 2.

Table 1 Variables define measurements and basis

Variable type	Variable name	Variable symbol	Calculation mode	Reference source
Explained variable	Export performance(EP)		Total export box office = Overseas box office (USD) × Sino-US exchange rate of the year × CPI of the year (unit: RMB)	Jiayu Han(2016)
Core variable	Chinese style element(CSE)	+	Whether there is Chinese wind element: Yes =1, no =0	Jingni Zhang(2021)
		+	Whether the representation is a	Jingni Zhang(2021)

	Chinese style mythological figure(MF)		mythical figure: yes =1, no =0	
	Chinese style artistic modeling(AM)	+	Whether the form of expression is artistic modeling: yes =1, no =0	Jingni Zhang(2021)
	Chinese culture(CC)	+	Whether the expression is Chinese culture: yes =1, no =0	Jingni Zhang(2021)
Control variable	Content quality(CQ)	+	Film rating (10-point scale)	Meiling Wu(2021)
	Visual effect(VE)	+	The technology of film visual production: 3D= 1, 2D=0	Matthew Rampley(2005)
	Chinese and foreign co-production(CFC)	+	Whether the director is Chinese: Yes =1, no =0	Lei Chen (2013)

3.2 Model Construction

In this paper, cross-sectional data of export performance of 37 Chinese animated films from 2015 to 2021 are selected for research. The cross-sectional data model is established with content quality, visual effects and Chinese-foreign co-production as control variables and Chinese-style elements as core explanatory variables. The expression is shown as follows:

$$EP = c + \beta_1 CSE + \beta_2 CQ + \beta_3 VE + \beta_4 CFC + \mu \quad (1)$$

Among them, there are export performance of Chinese animated films (EP), Chinese element(CSE), content quality(CQ),visual effect(VE), Chinese-foreign co-production(CFC), the intercept term(c), the random error term(μ), the coefficient of the explanatory variable(β).

Since the overseas box office data collected in this paper involves the problem of inflation, the data will be processed to eliminate inflation first, As shown in Table 1.

Next, on the basis of the above models, the expression forms of Chinese elements are studied and the following models are established:

$$EP = c + \alpha_1 MF + \alpha_2 AM + \alpha_3 CC + \alpha_4 CQ + \alpha_5 VE + \alpha_6 CFC + \mu \quad (2)$$

Among them, MF represents Chinese mythic characters, AM represents Chinese artistic modeling, CC represents Chinese culture, c is the intercept term, μ represents the random error

term, α is the coefficient of explanatory variables.

3.3 Model Results

This paper mainly studies the influence of Chinese-style elements on the export performance of animated films from the perspectives of Chinese-style elements, content quality, visual effects, and co-production. The relationship between these four influencing factors and export performance of animated films was analyzed and tested through regression analysis, and the influence of different manifestations of core variables was analyzed and tested on the basis of model 1, as shown in Table 2.

Table 2 Results of model regression

Variable type	Variable name	model 1	model 2
Explained variable	EP	EP	EP
	CSE	0.3565*	
Core variable	MF		-0.0940
	AM		-0.3238
	CC		0.66681**
	CQ	0.1451	
	CQ	1.3222	
Control variable	VE	0.1977	
	CFC	0.7448	
	CFC	1.0334***	0.9758 ***
		3.9625	3.7072

Note: * means significant at the level of 0.1, ** means significant at the level of 0.05, *** means significant at the level of 0.01, the number in brackets is the t value of the variable.

After heteroscedasticity test and modification, the overall fit is good and there is no heteroscedasticity problem.

As can be seen from Table 2, Model 1 shows the regression effect of Chinese-style elements and Chinese-foreign co-production is significant. Therefore the selection of these two variables is effective. Model 2 make deeply studies of the greater influence of Chinese elements. It is concluded that the regression effect of Chinese style artistic modeling is significant.

4. Policy Suggestions

Based on the above research conclusions, China should do the following:

First, at the national level. China's animation film industry is still in the early stage of

development, which needs more policy support from the state. The state should establish and improve laws and policies to promote cultural trade, actively explore the path of high-level opening up, relax the export policy of animated films, let Chinese culture "go out", and improve the country's soft power and international competitiveness^[7].

Second, the industrial level. Co-production with a foreign country has many advantages, not only in terms of capital and technology cooperation, but also to broaden the international market together^[8]. China's animation film industry should cooperate more with foreign experienced directors, and establish stable cooperative relations with foreign distributors^[9].

Third, the enterprise level. First of all, increase the use of Chinese elements. China has a long history and animation film enterprises can make use of more Chinese elements in the production. Secondly, combine traditional culture with modern culture and make continuous innovation. Integrate traditional Chinese culture with modern culture, and make "old" stories "new"^[10].

In short, Chinese-style animated films integrate Chinese-style elements with the values of the new era, so it can gradually be recognized and favored by the international market.

5. Conclusions

By reviewing the writing process of this paper, the following conclusions are drawn:

- (1) People pay a lot of attention to animated films. Therefore, China needs to pay attention to the development of animated film industry.
- (2) Under the background of globalization, animation films should increase the use of Chinese elements, so that Chinese culture can go abroad.
- (3) The empirical results show that co-production is beneficial to the export performance, so animation film companies should cooperate more with foreign animation film companies.

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