HOW DOES THE COMBINATION OF STEADY-STATE AND DYNAMIC CHARACTERISTICS OF BUSINESS MODEL AFFECT CORPORATE PERFORMANCE: EVIDENCE FROM THE CHINESE SMEs

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Abstract - The evolutionary of the business model shows the characteristics of punctuated equilibrium and externality which is the important source of enterprise competition heterogeneity. Thisstudy aims to reveal the impact of the steady-state and dynamic transition characteristics of business model on the corporate performance, and the impact of business model externality on corporate performance sustainability. According to the dynamic capability theory in competitive heterogeneity and the punctuated equilibrium characteristics of business model evolution, this study proposes that the characteristics of steady-state and dynamic transition in the evolution of business models, introduces the externality of the business model which impacts the corporate external market performance. It conductsmultiple regression analysis and structural equation analysis to test the hypotheseswith the data of 330 Chinese SMEs.This study empirically shows that the dual impacts of business models on corporate market performance and operational performance. The steady-state characteristic of business model mainly affects the operational performance through the market performance, while the dynamic transition characteristic of business model affects both the market performance and the operational performance.Environmental turbulence hasa significant and different moderating effect on the relationship between thetwo typesof the business model characteristics and the corporate performance.This study distinguishes business model heterogeneity into steady-state and dynamic transition characteristic which influence the corporate performance differently. It alsoreveals that business model heterogeneity affects firm performance through two paths including the external market performance and operational performance. And that influence will be different due to the environmental turbulence. It provides important clues for further business model innovation and design.

Keywords - Business Model, Steady-State and Dynamic Transition Characteristic, Corporate Performance

I. INTRODUCTION

With the appearance of innovative application digital network technology and the resulted changes in time and space, as well as changes of emotions and data (Feng Hua and Chen Yaqi,2016), the business model, as a new value creation method (Johnson，Christensen and Kagermann， 2008), has become a new important source of competitive advantage for enterprises (Amit and Zott， 2011; George and Bock, 2011; Wirtz et al., 2016; Foss and Saebi, 2017; YangJun et al., 2018), and has developed into a widely accepted unit (Bader-fuller， 2013) that is different from strategic management and industrial organization theory. The influencing mechanism of business model heterogeneity on corporate performance has become an important theoretical and practical issue for the sustainable development of company.

The business model describes the business causal logic of an enterprise, which is an activity system (Zott and Amit，2008；Lepak et al.，2007；Osterwalder，2010) structure connecting the internal and the external of an enterprise to create, transmit, and obtain values, and also a cognitive map (Demil-Lecocq ， 2015 ； Mikhalkina ， 2015 ； Baden-Fuller and Mangematin，2015；Furnari，2015) for external stakeholders of the enterprise, or a "business playscript" (Jacobides,2010； Yao Xiaotao， 2017）) for business "ecosystem". Therefore, the business model not only directly affects the business performance of the company through value proposition, system solutions, operating system, and profit model, but also indirectly influences the business performance of the company through external stakeholders' cognitive recognition of business logic of the company affecting external value network and integration of resources.

Existing researches have explored the impact of business model heterogeneity on business performance from the perspective of the activity system of business model's composition, types, and themes, but consensus has been reached (Zott, 2011; Malone,2006;Casadesus， 2007; Cheng, Yu et al., 2012). Some studies have analyzed the externalities of business model from the perspective of network effects, destructiveness, social responsibility, and legitimacy (Feng, Hua and Chen, Yaqi, 2017), but the research on the evolution of business models and the sustainability of business performance has basically excluded the externalities (Yun et al.,2013； Wei etal.,2015). On the other hand, the business model of company presents the dynamic characteristics of intermittent equilibrium (Li Dong， 2013), that is, the business model of a company has been broken from the previous equilibrium state and dynamic

transitioned to another matching equilibrium state. Therefore, by analyzing the influencing mechanism of business model's characteristics of steady-state and dynamic transition on the sustainable development of a company, this paper helps to reveal the micro mechanism of business model's effect on corporate performance under different weighting factors, and then provides a consistent framework for theoretical interpretation.

II. LITERATURE REVIEW AND HYPOTHESES

2.1 Characteristics of business models and sustainable development of enterprises

In terms of the overall functional characteristics of the business model, Zott and Amit (2011) proposed the novelty and efficiency of business model design theme for the first time, and conducted empirical operations on these two characteristics to analyze the relationship between the two characteristics and market strategies and corporate performance. On this basis, scholars at home and abroad have explored the relationship between some characteristics of business models and competition strategies and corporate performance. Johnson et al. (2008) proposed the interdependence of business models, that is, the complicated and independent relationship between the four components of business models. Casadesus-Masanell and Ricart (2011) found that good business models share some common features: be consistent with corporate goals, self-enhancement, and high steady-state. Morris et al. (2013) proposed the basic characteristics of business models, such as uniqueness, innovation, comprehensiveness, and internal consistency. Zott and Amit (2007) found that corporate performance is a function of matching specific business model design theme and the business strategy. ChengYu et al. (2012) confirmed that the integrated effects of Chinese companies' business models that use business innovation as the theme have a significant mediating impact on corporate performance.

Studies of business models have been gradually deepening into the dynamic characteristics such as shaping and evolution. Sosna et al. (2010) believed that the evolution of business models is a gradual exploration process. Johnson (2008) and Ramon Casadesus-Masanell (2011) summarized the characteristics of business models such as interdependence, self-enhancement, and hard-to-imitate, from a dynamic perspective, and believed that the shaping and evolution of business models have the intermittent equilibrium characteristics. Tushman and Romanelli (1985) found that in the evolution of organizations, the periods of preservation and the periods of radical change are alternated. Li, Dong (2013) believed that the business model is featured by a dynamic process with multi-stage intermittent equilibrium due to the unbalanced development of activity system and the limited cognition ability of managers: (1) In a certain period of time, it shows a matching equilibrium state. When improved complementary products and services or other relevant innovations emerge, the balance will break and jump into another matching equilibrium; (2) The factors of business model is following a cyclical evolution process, that is, local breakthrough --- test advancement --- module shaping --- overall matching --- (a new round of) local breakthrough.

This article will discuss the influencing mechanism of the steady-state and dynamic transition of business model on corporate performance. The dynamic transition refers to the characteristic that the business model can dynamically adjust to achieve a new equilibrium when the system external environment or commercial internal factors change.

2.2 The business model's characteristic of steady-state and corporate performance

The business model is a cognitive map that integrates the resources and activities across the boundaries of an enterprise, which is a system of activities that jointly create values by multiple participating entities. Magretta (2002) clearly pointed out that a good business model should take into account the motivations and needs of all stakeholders, and design a variety of cooperation and transaction mechanism to meet the needs of all entities. Chesbrough (2002) also mentioned that value is the core of business model, and value includes not only customer value, but also the value of business partners. The business model, as a value-creation system, needs to effectively integrate multiple resources and powers to jointly create customer value. At the same time, it needs to provide attractive returns for all entities involved in value creation. Ramon Casadesus-Masanell and Feng Zhu (2013) discussed the impact of competitive imitation on corporate performance in business model innovation. Teece (2010) pointed out that it is difficult to effectively protect the basic core "creativity" of business model because the basic idea and business logic of the new business model is not under the effective protection of intellectual property. Since the business model has multiple constituent elements and these elements are highly complementary to each other, just as Morris et al. (2005) pointed out that the continuity of business model needs these elements to be consistent. Johnson et al. (2008) also emphasized that the effectiveness of business models depends on the complicated and independent relationship between these constituent elements. Therefore, this article holds that the steady-state of business model refers to the characteristics of business models' value creation and acquisition at the stage of intermittent equilibrium, including the novelty and efficiency of business models, co-creation, imitation, and sustainability, etc

(McGrath, 2010; Zott and Amit, 2010). Due to the externality of the business model, it is also necessary to analyze the impact of the business model's market performance on the corporate performance from the perspective of stakeholders (Kim and Min, 2015; Cucculelli and Bettinelli, 2015; YangJun et al., 2018;). Therefore, this article proposes the following hypotheses:

H1: The stronger the steady-state of business model, the higher the corporate performance;
H1a: The stronger the steady-state of business model, the higher the market performance of the company;
H1b: The stronger the steady-state of business model, the higher the operational performance of the company;
H2: The higher the market performance of the company, the higher the operationalperformance of the company.

2.3 The business model's characteristic of dynamic transition and corporate performance

Since the shaping and evolution of business models have the characteristics of multi-stage intermittent equilibrium. The characteristic of dynamic transition is the key factor affecting the corporate performance. Klein (2008) believed that the scalability is one of the five aspects of BOP business model quality. The business model confined to a specific geographical area or a low-level business model cannot create an economic driving force for the company. Therefore, the scalability of business model has become an important factor. The scalability refers to the potential scale and scope (Hancock, Proctor and Csaki, 2003; Uvin et al.,2000) of a business model to grow. This requires the ability to serve more needs at low cost, quickly, and without degrading performance so as to achieve economies of scale and scope. And integrating more stakeholders into the development process will result in greater impacts on economy, society, and environment. The scalability of business model can be measured by some criteria such as the type of scalability, scalability time, scalability cost, and reliability of scalability.

The scalability of business model needs to be created by constantly obtaining low-cost capitals. Companies may acquire resources by establishing links with other entities (London and Hart， 2004). The partnership or outsourcing can reducethe self-owned capital needs of business model expansion (Hagel， 2002), though this resource dependency may also hinder the scalability of the business model (Klein， 2008). Penrose (1959) proposed that resources themselves do not create value but the services provided by resources can create value. Therefore, the business model, as a system of activities for value creation and acquisition, is the key factor in supporting the expansion of business scale as expansion potential.

The business model, as a value activity system across organizational boundaries faces the constraints of social systems. The degree of legitimacy of the business model is a prerequisite for the activity system getting access to and mobilizing various economic resources. The flexibility of the business model is an important basis for the expansion during the unbalanced period of the discontinuous equilibrium. XiaQinghua and LouHuiyang (2004) distinguished the subjective rigidity of business model's subjective cognitive barriers and the objective rigidity of internal and external enterprises, and discussed the impact of rigidity of business model on the competitiveness of enterprises. Therefore, this article believes that the dynamic transition characteristics of the business model include the scalability, legitimacy, and flexibility, and proposes the following hypotheses:
H3: The stronger the dynamic transition of business model, the higher the corporate performance.
H3a: The stronger the dynamic transition of business model, the higher the operational performance of the company.
H3b: The stronger the dynamic transition of business model, the higher the market performance of the company.

2.4 The moderating effect of environmental turbulence

The interaction between environmental turbulence and business model characteristics affect firm performance and transformation (YangJun et al., 2018).As the complexity, ambiguity, uncertainty, and rapid change of the corporate environment have increased, it becomes more difficult for companies to be aware of the environment and predict the future (XiYouminand Zhang Xiaojun, 2012). The effectiveness of strategic management based on causal logics and perception of the future is significantly reduced, while the importance of the theory of "effectuation" of "crossing the river by feeling the stones" is becoming more and more important (Saravanthy，2001). The business model is initially established in an environment of uncertainty, ambiguity, and full of ignorance. The initial market process is full of ignorance. In an open dynamic process of continuous learning, discovery, creation, and complexity, market participators use the alertness to allocate their attentions and correct the dominant logics, so as to reduce the degree of mutual ignorance, continue to discover, create, and use opportunities, thus transiting the disequilibrium to the equilibrium (Kirzner, 1992). As the environment becomes more turbulent, stakeholders in the business model will overestimate the steady-state characteristics of the business model and underestimate the role of dynamic transition characteristics, thereby strengthening the impact of steady-state on the market performance of the company and reducing the impact of dynamic transitionon the market

performance of the company(Casadesus-Masanell and Zhu, 2013; Brea-Solís Casadesus-Masanell,2015; Yang Jun et al., 2018). In the turbulent environment, the steady-state of business model is not conducive to the continuous improvement of the company's operational performance, while the impact of dynamic transition on the continuous improvement of the company's operational performance will be enhanced. Therefore, this article proposes the following hypotheses:

H4a: The stronger the turbulence of the external environment, the smaller the positive impact of the steady-state on the operational performance of the company.

H4b: The stronger the turbulence of the external environment, the greater the positive impact of the steady-state on the market performance of the company.

H5a: The stronger the turbulence of the external environment, the greater the positive impact of the dynamic transition on the operational performance of the company.

H5b: The stronger the turbulence of the external environment, the smaller the positive impact of the dynamic transition on the market performance of the company.

III. METHODOLOGY

3.1 Analysis model

Figure 1 presents the logical framework of this study. First, this study will testify the relationships between the characteristics of business model and the corporate performance. Then it will analyze the moderating effect of the environmental turbulence on that relationship.

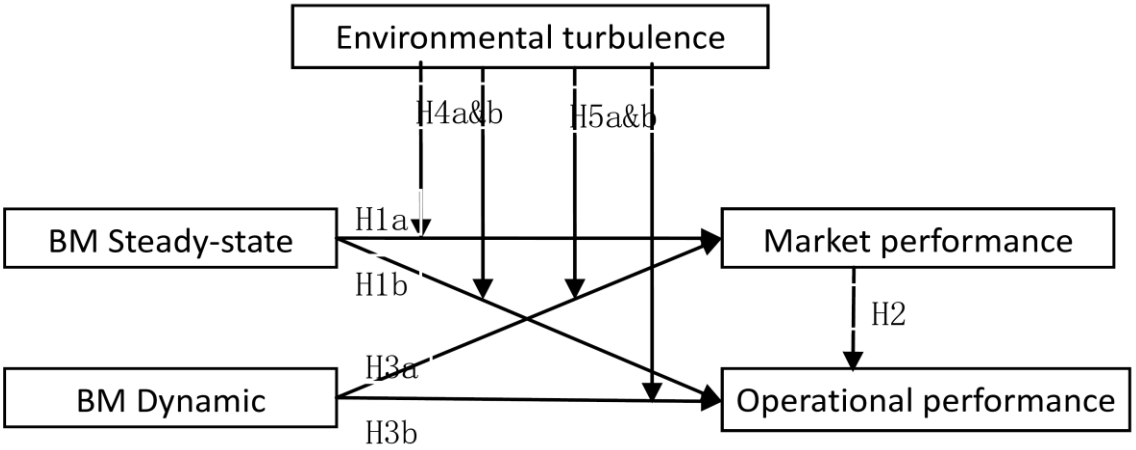


Figure 1. Empirical model for the impact of the steady-state and dynamic transition characteristics of business model on corporate performance

3.2 Data source

The questionnaire is based on the existing research to analyze the business model and its characteristics. It defines the characteristics of the typical business model from an overall perspective. The questionnaire uses the five-point Likert scale to design the initial questionnaire on the basis of discussions on the characteristics of typical business model by individual interviews and group talks. 143 MBA students and EMBA students were selected for the test survey. Their feedbacks were used for revising the initial questionnaire and finally developing the formal open questionnaire. Questionnaires were sent out to senior managers of Chinese SMEs. In four months later, a total of 640 questionnaires were distributed and 378 questionnaires were recovered. And the invalid questionnaires and the questionnaires with missing information exceeding 5% were excluded. For the questionnaires with missing information less than 5%, the mean value substitution method was used to complete the filling of missing values. And the final valid sample was 330.

3.3 Measurement of variables

The steady-state characteristic (SE) of business model includes four variables of value, co-creation, continuity, and hard-to-imitate. According to the empirical research on the characteristics of business model(Chesbrough , et al., 2011; Osiyevskyy and Dewald, 2015), this article used 14 items to measure these variables. The variable of valuewas measured by 4 items related to efficiency and novelty（Zott and Amit 2007）. The variable of co-creation was measured by 3 items related to openness and cooperation. The variable of continuity was measured by 4 items related to relationship, resources, process, and interest distribution. The variable of hard-to-imitate was measured by three items related to uniqueness and replication.

The dynamic transition characteristic (EB) of business model includes three variables that is scalability, legitimacy and flexibility. According to the research on the legitimacy, this article used 9 items to measure these variables. The variable of scalability was measured by 3 items related to the

scale, type, and geographical expansion. The variable of legitimacy was measured by 3 items related to institutional norms, social ethics, and public recognition. The variable of flexibility was measured by 3 items related to business operation, stakeholder structure, and process adjustment. The environmental turbulence (En) was measured by 4 items related to market, technology, and policy. The market performance (MP) of the company was subjectively judged from the perspective of stakeholders, including 4 items related to estimated value, willingness to cooperate, social responsibility, and social recognition. The operational performance (OP) of the company was measured by 4 items related to business scale, sales growth, and profitability. The size of the company was used as a control variable.

3.4 Research methods

This study carried out statistical analysis of descriptive statistics, reliability and validity tests, correlation analysis, multiple regression analysis, and path analysis based on the data of recovered questionnaires. The statistical analysis software applied to this study was SPSS 19.0 and AMOS 21.0. And the SPSS 19.0 was used for descriptive statistics, exploratory factor analysis, reliability and validity of variables, and multiple regression analysis. The AMOS 21.0 was used to make confirmatory factor analysis and structural equation analysis to test the hypotheses.

IV. DATA ANALYSIS

4.1 Reliability and Validity

The reliability of variables is measured by the Cronbach's α coefficients (α coefficient above 0.7 indicates that the scale has acceptable reliability). According to the reliability analysis of the scale, if the correlation coefficient between one item and the total is less than 0.4 and the Cronbach's α coefficient is higher after deleting the item, this item should be removed. If the factor load is less than 0.5 after the rotation, or there is a cross-load and the difference is less than 0.2, the item should be removed. Based on the above two criteria, the items of "This business model is easily replaced by other business models" and "This business model can gather a large number of valuable resources (such as users, technologies, capitals, knowledge, information, etc.)" were removed. The final scale to measure the characteristics of business model in this study includes a total of 22 items, as shown in Table 2. The validity is verified by the confirmatory factor analysis. Before the factor analysis, the KMO test and Bartlett's test of sphericity were performed on the sample data to determine whether the data was suitable for factor analysis. The TMO test value of the sample data in this study was 0.805(P=0.000), indicating that the data was suitable for factor analysis. The exploratory factor analysis was performed on the steady-state characteristic and the dynamic transition characteristic, respectively. Based on the criteria of eigenvalues higher than 1, a total of 4 factors and 3 factors with were selected for confirmatory factor analysis and the Varimax was used for rotation to get a factor load matrix. The lowest factor load coefficient of the item in the questionnaire was 0.619, which is higher than the basic requirement of 0.5. The questionnaire has good discriminant validity, as shown in Table 2.

Factor eigenvalue		Items in questionnaire	Cronbach's α and eigenvalue	Factor load	Communalities
Steady-state	Co-creation	In this business model, partners are very close and have all kinds of resources. In this business model, partners share resources and benefits rationally. In this business model, both customers and suppliers participate in the value creation process.	α=0.727 eigenvalue=1.140	0.782 0.778 0.627	0.678 0.708 0.530
	Value	This business model makes transactions more efficient. This business model provides trading participants with novel incentives. This business model can continuously introduce new participants. This business model provides participants with innovative transaction methods.	α=0.753 eigenvalue=4.229	0.669 0.754 0.791 0.728	0.526 0.636 0.646 0.657
	Continuity	In this business model, a long-term and stable cooperative relationship with stakeholders has been established. In this business model, a clear benefit-sharing approach has been reached with stakeholders.	α=0. 716 eigenvalue= 1.728	0.825 0.801 0.748	0.728 0.698 0.649

Factor eigenvalue		Items in questionnaire	Cronbach's α nd eigenvalue	Factor load	Communalities
		In this business model, a mutually supportive relationship between customer benefits, ways of making money, and key processes has been developed.			
	Hard-to-imitate	The services or products provided by this business model are very special. Only fewer companies can provide similar services and products. Competitors are less likely to imitate this business model.	α=0.723 eigenvalue= 1.373	0.619 0.867 0.857	0.505 0.768 0.731
Dynamic transition	Scalability	This business model can support the growth of existing businesses. This business model can easily be applied to other businesses. This business model can easily be extended to other cities, provinces, or countries.	α=0.745 eigenvalue= 1.109	0.679 0.804 0.758	0.532 0.673 0.607
	Flexibility	This business model will attract more participants (users, suppliers, other stakeholders) with the expansion of business scale. This business model can be dynamically adjusted (such as transaction methods, partners, etc.) to meet the needs of stakeholders. The key process in this business model is very flexible.	α=0.756 eigenvalue= 1.409	0.676 0.849 0.753	0.555 0.728 0.604
	Legitimacy	This business model meets the requirements of relevant regulatory authorities. This business model meets widely-accepted social values and ethics. This business model is widely known among the people or highly praised in the industry.	α=0.778 eigenvalue= 3.217	0.810 0.841 0.748	0.670 0.746 0.620
Market performance		Compared with peers, this company has gained a higher valuation of institutional investors. Compared with peers, partners are more willing to cooperate with this company. Compared with peers, this company has assumed more social responsibilities. Compared with peers, this company has received a higher degree of recognition from the public.	α=0.773 eigenvalue= 2.573	0.666 0.826 0.864 0.838	0.444 0.681 0.746 0.702
Operational performance		This company's customer satisfaction has been at the leading level in its peers. The profitability of the company's main business has improved continuously over the past three years. The profitability of the company's main business has been at the leading level in the industry during the past three years. The sales growth of the company's main business has been at the leading level in the industry during the past three years.	α=0.714 eigenvalue= 2.445	0.653 0.761 0.861 0.835	0.426 0.579 0.742 0.698
Environmental turbulence		Customers constantly present new requirements for products and services.	α=0.763 eigenvalue=1.965	0.682 0.724	0.465 0.525

Factor eigenvalue	Items in questionnaire	Cronbach's α nd eigenvalue	Factor load	Communalities
	Technology update in this industry is very fast.		0.713	0.508
	Competition is hard to predict.		0.683	0.467
	Industry policies vary widely.			

Table 2. The factor analysis of characteristics of business model (N=330).
a: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

4.2 Regression model

Multiple statistical regression analysiswas performed by SPSS 19.0. The results are shown in Table 3 and 4.

	Model 1a	Model 2a	Model 3a	Model 4a
C	1.376**	0.638*	0.586	0.486**
Size	-0.095**	-0.110***	-0.110***	-0.111**
Environmental turbulence (En)	.007	-0.038	-0.028	
Market performance (MP)	.661***	0.551***	0.552***	0.550***
Steady-state (SE)		0.060	0.582	0.416***
Dynamic transition (EB)		0.298***	-0.188	
Environmental turbulence ×Steady-state (En×SE)			-0.148	-0.102***
Environmental turbulence ×Dynamic transition(En×EB)			0.138	0.87***
R2	0.502	0.551	0.554	0.554
R2-Adjusted	0.497	0.544	0.544	0.547
DW	1.977	1.950	1.942	1.944

Table 3. Results of multiple regression analysis (N=330, dependent variable OP)

Note: (1) a means that the Enter method is used for selection of variables; b means that the Backward Stepwise method is used for selection of variables;

(2) *** means significant at the 0.001 level; ** means significant at the 0.05 level; * means significant at the 0.10 level.

Model 2 and 4 indicate that the steady-state and dynamic transition characteristics of business model have a significant positive effect on the operational performance of the company, with coefficients of 0.416 and 0.298 (significant at the 0.001 level), respectively. Model 1, 2, 3 and 4 indicate that the market performance of the company has a significant positive effect on the operational performance, with a positive coefficient (significant at the 0.001 level). Model 4 indicates that environmental turbulence has a significant negative regulatory effect on the relationship between the steady-state characteristic and the operational performance, with a coefficient of -0.102 (significant at the 0.001 level). Model 4 also indicates that environmental turbulence has a significant positive regulatory effect on the relationship between the dynamic transition characteristic and the operational performance, with a coefficient of 0.087 (significant at the 0.001 level). The hypothesis H1a, H2, H3a, H4a and H5a is verified.

	Model 1[a]	Model 2[a]	Model 3[a]	Model 4[a]
C	2.779***	1.031***	-0.209	2.060***
Size	-0.236***	-0.216***	-0.218***	-0.217***
Environment turbulence (En)	0.406***	0.252***	-0.605**	
Steady-state (SE)		0.379***	0.338	
Dynamic transition (EB)		0.236**	0.608	0.305***
Environmental turbulence ×Steady-state (En×SE)			0.013	0.075***
Environmental turbulence ×Dynamic transition (En×EB)			-0.106	
R^2	0.209	0.361	0.364	0.351
R^2-Adjusted	0.205	0.353	0.353	0.345
DW	1.815	1.800	1.809	1.709

Table 4. Results of multiple regression analysis (N=330, dependent variable MP)

Note: (1) a means that the Enter method is used for selection of variables; b means that the Backward Stepwise method is used for selection of variables;
(2) *** means significant at the 0.001 level; ** means significant at the 0.05 level; * means significant at the 0.10 level.

Model 2 indicates that the steady-state and dynamic transition characteristics of business model have a significant positive effect on the market performance of the company, with coefficients of 0.379 and 0.236 (both significant at the 0.001 level). Model 4 indicates that the environmental turbulence has a significant positive regulatory effect on the relationship between the steady-state characteristic of business model and the market performance of the company, with a coefficient of 0.075 (significant at the 0.001 level). The hypothesis H1b, H2b and H4b is verified. However, the hypothesis H5b, "The environmental turbulence has a negative regulatory effect on the relationship between the dynamic transition characteristic of business model and the market performance of the company", is not verified.

4.3 Structural equation model

In order to further reveal the influencing mechanism of the characteristics of business model on the corporate performance, this article uses AMOs to conduct the structural equation analysis, and corrects the model's fitting parameters to obtain a modified model. See Figure 2.

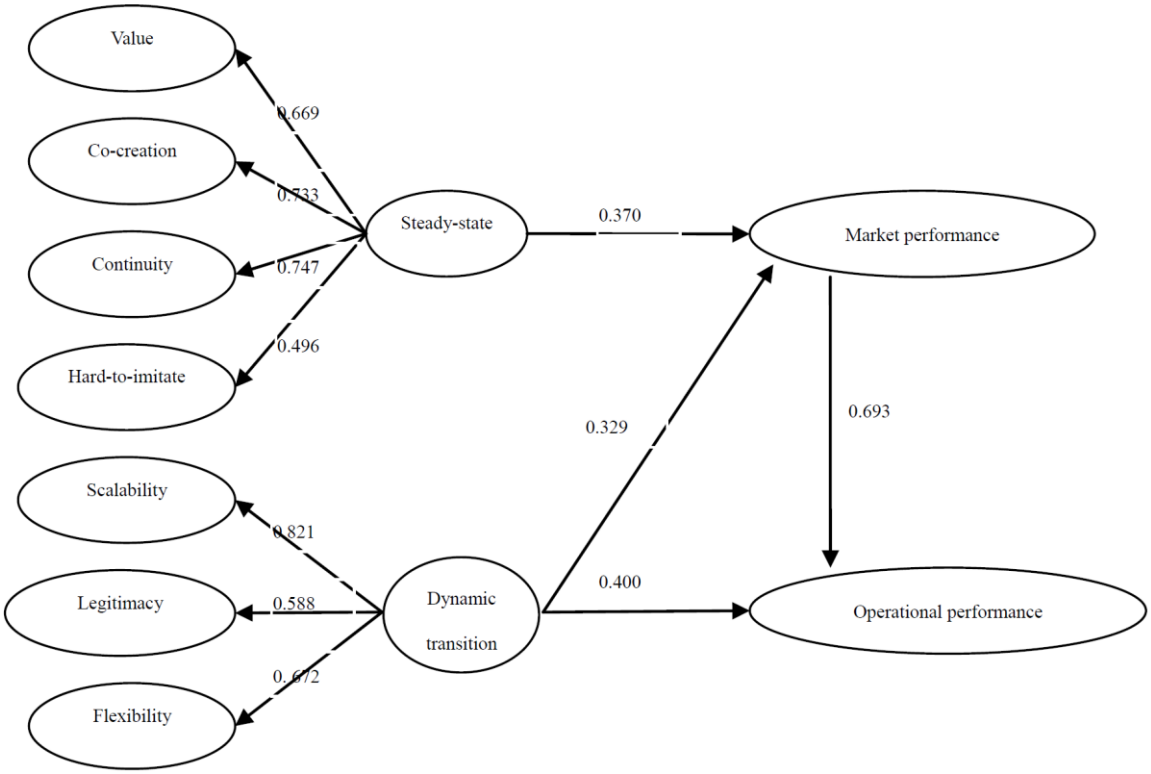


Figure 2. The modified model of the impacts of characteristics of business model on the corporate performance

Test statistic	RMSEA	RMR	AGFI	GFI	NFI	IFI	TLI	CFI	χ2/df	PGFI	PNFI	CMIN/DF
Test standard	＜0.1	＜0.05	＞0.80	＞0.80	＞0.80	＞0.80	＞0.80	＞0.90	＜3	＞0.50	＞0.50	<2
Model indicator	0.05	0.051	0.847	0.872	0.825	0.92	0.900	0.910	1.879	0.534	0.619	1.879

Table 5. Fitting parameters of the modified model (N=330).

The path coefficient of the structural equation model shows that the steady-state characteristic of the business model indirectly affects the company's operational performance through market performance, while the dynamic transition characteristic of the business model have dual effects on both market performance and operational performance. Therefore, the dynamic transition characteristic of the business model deserves more attention.

V. CONCLUSIONS AND IMPLICATIONS

Based on the theory of competitive heterogeneity, this article proposes the steady-state and dynamic transition characteristics of the business model and analyzes their impacts on the company's market

performance and operational performance. An empirical analysis was conducted based on the survey data of executives from 330 Chinese SMEs, and the results indicated that:

(1) Business model is a system of activities to achieve value creation and acquisition across organizational boundaries. The impacts of its characteristics cover two aspects, that is, market performance and operational performance. And the market performance has an important positive effect on the operational performance. Senior managers of companies need to take into account the dual impacts of business models on corporate market performance and operational performance, and cannot be biased.

(2) The steady-state and dynamic transition characteristics of business model have a significant positive impact on the corporate performance. The steady-state characteristic of business model mainly affects the operational performance through the market performance, while the dynamic transition characteristic of business model affects both the market performance and the operational performance. This indicates that in the process of disequilibrium of the business model, the senior managers need to consider both the steady-state and the dynamic transition characteristics of business model design or reshaping.

(3) Environmental turbulence has a significant regulatory effect on the relationship between the characteristics of business model and the corporate performance, and the effect on the steady-state characteristic is different from the effect on the dynamic transition characteristic. Environmental turbulence negatively regulates the relationship between the steady-state characteristic of business model and the operational performance, but it positively regulates the relationship between the dynamic transition characteristic and the operational performance, while positively regulating the relationship between the steady-state characteristic and the market performance. This shows that external environmental changes will affect the effects and even the direction of the characteristics of the business model. For example, the steady-state characteristic of business model tends to be rigid in a specific environment, which will affect the operational performance of the company. At the same time, senior managers need to carefully judge the differences of effects of characteristics of business model on market performance and operational performance under different environments. For instance, in the turbulent environment, the steady-state characteristic of business model has an increasing effect on the market performance, but its direct impact on the operational performance has been weakened.

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