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# Analysis of Multiple Effects of Sustainable Poverty Alleviation Relying on Endogenous Power during Transitional Period

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#### Abstract:

To achieve the goal from poverty alleviation to rural revitalization, it is necessary to rely on the endogenous power and take measures of sustainable poverty alleviation. Construct a theoretical model of multiple effects of the endogenous power on sustainable poverty alleviation, and reveal the relationship and operating mechanism. Establish a structural equation model of the relationship between factors of the endogenous power, and get a standardized path for poverty alleviation, furthermore tested the effects based on the development of poverty alleviation counties in Heilongjiang Province. Research shows that the constituent elements of the endogenous power have a traction effect on poverty alleviation, a catalytic effect on stable poverty alleviation, and a leading effect on common prosperity. During the transitional period to achieve the goal of strong, beauty and prosperity on agriculture, rural areas, and farmers, the first is to consolidate the results of poverty alleviation, pay more attention to policy linkage, and maintain the stability of the poverty alleviation object; the second is to expand the results of poverty alleviation, strengthen the connection of motivition, and activate the subject's enthusias; the third is to promote the transition period efficiently, promote the integration of industries, and enhance the integration of poverty alleviation carriers; the fourth is to realize the revitalization of the countryside, improve the planning and connection, and ensure the sustainability of development after poverty alleviation. The first sentence of the Abstract should follow the word "Abstract." on the same line. The abstract should be clear, descriptive, self-explanatory. It should also be suitable for publication in abstracting services. Do not include references or formulae in the abstract. The first sentence of the Abstract should follow the word "Abstract." on the same line. The abstract should be clear, descriptive, self-explanatory. It should also be suitable for publication in abstracting services. Do not include references or formulae in the abstract.

Keywords: Transitional period, Endogenous power, Sustainable poverty alleviation, Rural revitalization

#### I. INTRODUCTION

By the end of 2020, 98.99 million rural poor person get rid of poverty according to the country's current standards, and complete the task of poverty alleviation the on schedule, pave the way for the first

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Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

century goal. In February 2021, the No. 1 policy claimed that "to consolidate and expand the results of poverty alleviation and to effectively connect with rural revitalization", "grasp the rhythm, intensity and time reasonably, realize the transition from centralized resources to support poverty alleviation to comprehensive rural revitalization smoothly" [1]. Nowadays, the people who have been get rid of and on the margins of poverty still have the risk of returning back, and the multi-dimensional poverty will still exist for long [2]. We should continue to strengthen the endogenous power for poverty alleviation, take the measure of sustainable poverty alleviation, and realize the transition from poverty alleviation to rural revitalization smoothly.

The "endogenous power" of the poor is critical to post-poverty development <sup>[3]</sup>. Academia realized that country's economic growth mechanism needs to shift from the "exogenous power" driven by capital investment to the "endogenous power" of factor allocation efficiency <sup>[4]</sup>. Endogenous power refers that one has to actively promote various self-growth, self-development, self-improvement, and independent innovation <sup>[5]</sup>. With the generalized knowledge transformed to autonomous ability in poverty alleviation <sup>[6]</sup>, the connotation and extension of the endogenous power still expanded. In recent years, participation of the poor <sup>[7]</sup>, sense of responsibility <sup>[8]</sup>, family psychological resources <sup>[9]</sup>, individual cognitive ability, etc. are regarded as important factors affecting the endogenous power of poverty alleviation <sup>[10]</sup>, relevant scholars analyzed the influence of the above factors on voluntary poverty alleviation behavior with quantitative methods based on field investigations. Endogenous power usually refers to the force that promotes the movement and development of things <sup>[11]</sup>, which is generated from the internal system to promote self-growth, self-reinforcement and self-increase, emphasizing relying on the internal environment, and cultivated self-development ability from external input factors by making full use, absorption, and digestion <sup>[12]</sup>. Unfortunately, there is no precise definition of the endogenous power for poverty alleviation so far.

In recent years, global economic development has shown different states. It is still the main method of international poverty governance that relying on endogenous economic growth. With further research, more and more factors can provide endogenous power for poverty reduction. Mainstream economics believes that different types of capital can play an effective role in reducing poverty when entering the internal circulation system of economic growth. In the 1950s and 1960s, Ragnar Nurkse and Harvey Leibenstein [13] advocated to reduce poverty through capital accumulation as main strategies. Lucas [14] and Romer [15] put human capital, technology and innovation into the economic growth model. In the 1990s, Chambers and Conway established sustainable livelihoods which based on capabilitiesas as an analytical framework, and they believed that livelihood is a way of earning a living based on capacity, assets (including reserves, resources, claims and rights) and activities [16]. This framework highlight "the link between the micro-level livelihood system and the macro policies that affect livelihoods" [17]. As the theory of sustainable livelihoods entered the field of poverty reduction research, taking the sustainable development of the poor as the goal of poverty reduction, it has promoted the formation of more operable poverty control programs. In order to enhance the role of internal economic system, the sustainable livelihood frame has become core theories in the field of poverty reduction [18].

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

Combining China's poverty reduction practices, the transition from poverty alleviation to rural revitalization is also a sustainable process from poverty to prosperity. In this process, what factors constitute the endogenous power for poverty alleviation? What is the relationship between the levels of endogenous power and the stages of poverty alleviation? During the transition period, how to enhance the endogenous power for poverty alleviation? How to achieve sustainable development after poverty alleviation? In-depth thinking on the above issues will help clarify the endogenous power of poverty alleviation and sustainable operating mechanism at the theoretical level, and enhance the endogenous power in poverty alleviation practice for the transition from poverty alleviation to rural revitalization. Above all, this article attempts to define the concept of endogenous power and sustainable development in poverty alleviation, construct the operating mechanism of the endogenous power of poverty alleviation, and analyze its multiple effects on sustainable poverty alleviation.

## II. ENDOGENOUS POWER AND MULTIPLE EFFECTS OF SUSTAINABLE POVERTY ALLEVIATION

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- 2.1 Definitions of Endogenous Power of Poverty Alleviation and the Sustainable Poverty Alleviation
- 2.1.1 Endogenous power of poverty alleviation

The endogenous power of poverty alleviation is a movement and development force that is governed by the subject, to dominates object and acts on the carrier to promote endogenous economic growth stably and continuously. The subject, object, and carrier of the endogenous power are interconnected, interacted, and interdependent, forming an organic system with the function of increasing output and helping the poor get rid of poverty. The endogenous power of poverty alleviation is a system that reveals the principle and conduction process of various forces in the process and economic growth, which also describes the internal connection between power and development. The endogenous power for poverty alleviation can be further decomposed into the pulling power provided by subject, supporting power provided by object and driving power provided by carrie [19]. The endogenous dynamical system for poverty alleviation not only contains explicit material elements, but also contains implicit psychological elements. According to the implementation of China's precision poverty alleviation practice, the endogenous power for poverty alleviation strategy was put forward, the endogenous power has gradually become more prominent in the fight against poverty and the

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

development after poverty alleviation. Based on the growth process of endogenous power, it can be divided into different power levels, just like weak, middle and strong, and different levels have different effects on poverty alleviation and the development after it.

#### 2.1.2 Sustainable poverty alleviation

Sustainable poverty alleviation is based on the endogenous power, which not only meets the needs of regional poverty alleviation in 2020, but also meets the needs of future generations to improve their ability to become rich. Meeting these two needs can promote the continuous dynamic evolution from poverty to common prosperity, and through the transition period from poverty alleviation to rural revitalization. The so-called "poverty alleviation" refers to a development result of the poor people changing from a poor to a non-poverty state [20]. Sustainable poverty alleviation means the coordinated development of human capital and resource endowments in poverty-stricken areas, from the state of just out of poverty to steady development, and finally reach the common prosperity.

Therefore, sustainable poverty alleviation could divided into three stages, the primary stage with the goal of getting rid of poverty, the intermediate stage with the goal of stabilizing poverty alleviation, and the advanced stage with the goal of achieving common prosperity. The victory of the fight against poverty marks the completion of the first stage of sustainable poverty alleviation. Now, China is in the intermediate stage of sustainable poverty alleviation, that is consolidates and expands the achievements of poverty alleviation, which also called transitional period of poverty alleviation. The country's ultimate goal is to achieve common prosperity through the implementation of the rural revitalization strategy, its also the highest stage of sustainable poverty alleviation.

### 2.2 Multiple Effects Model of the Endogenous Power on Sustainable Poverty Alleviation

### 2.2.1 The operating mechanism between the endogenous power and sustainable poverty alleviation

Improving the level of endogenous power is the basis for achieving sustainable poverty alleviation and rural revitalization. The endogenous power for poverty alleviation from weak to strong, corresponding to different stages of sustainable poverty alleviation. The specific manifestation is as follows, the stimulus of the endogenous power corresponds the traction of cross-line poverty alleviation, the accumulation of endogenous power catalyzes stable poverty alleviation, and the improvement of the endogenous power leads to common prosperity. The theoretical model in figure 1 describes these corresponding relationships and the operating mechanism. When the endogenous power is insufficient, the object helps cross-line poverty alleviation and becomes the support for the initial stage of sustainable poverty alleviation. With the growth of the endogenous power, driven by the subject, the endogenous power catalyzes the realization of stable stage and enters the intermediate stage of sustainable poverty alleviation. When the subject is organically integrated with the object, the endogenous power will become the leading force in the advanced stage of sustainable poverty alleviation with the goal of common prosperity.

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

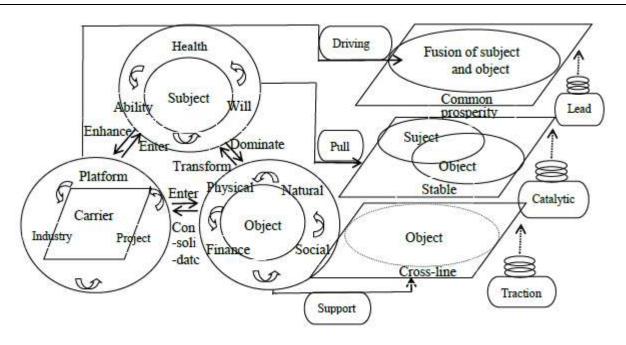


Fig 1: The relationship and operating mechanism

## 2.2.2 Multiple effects on sustainable poverty alleviation

Based on the model above, different combinations of endogenous power factors have multiple effects on sustainable poverty alleviation, which are specifically manifested as follows.

Firstly, the traction effect of weak-level endogenous power for sustainable poverty alleviation. This effect is reflected in the developmental poverty alleviation stage led by the government. The "National Eight-Seven Poverty Alleviation Plan" promulgated in 1994 marked the transformation from relief-oriented poverty alleviation to development-oriented poverty alleviation in China. The strategy at this stage has laid an important foundation for the sustainable poverty alleviation work subsequently.

Secondly, the catalytic effect of the middle-level endogenous power for sustainable poverty alleviation. This effect is reflected in the stage of targeted poverty alleviation guided by the government. In 2013, China proposed a targeted poverty alleviation strategy. On the one hand, livelihood capital in poverty-stricken areas and families should keep accumulating, material capital for poverty alleviation has been effectively used, natural capital has been protected and developed, financial capital has been favored by policies, and social capital has continued to increase too. On the other hand, the human capital has been greatly improved. The subject that controlled resources get organic integration of the object in poverty alleviation, increased the level of economic output, strengthened the endogenous power and played a catalytic role in stabilizing poverty alleviation.

Thirdly, the dominant effect of high-level endogenous power for sustainable poverty alleviation. This effect is reflected in the post-poverty development stage dominated by endogenous power. Through the accumulation of the foregoing stages, the human capital, which is the subject of the endogenous power, has

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

condensed more value under the effects of education, skills, and technological. And the objects which include natural capital, substance capital, financial capital, and social capital, have grown stronger under the guidance and support of the government and self-accumulation. The subject and the object are organically integrated to form a joint force, which provides inexhaustible power for sustainable poverty alleviation. In the new era, the internal logic of poverty alleviation work has undergone a new change, that is, from survival to development, from efficiency to equity, To consolidate and expand the results of poverty alleviation, ensure the continuity and stability of rural revitalization, and achieve the two centenary goals still need to rely on the leading force of the endogenous power, and continue to adhere to the way of sustainable poverty alleviation.

## III. EMPIRICAL ANALYSIS ON THE RELATIONSHIPS OF ENDOGENOUS POWER'S ELEMENTS

## 3.1 Evaluation Index System for Endogenous Power and Sustainable Poverty Alleviation

Because of the lack of micro data, especially the relevant data on endogenous power in poverty-stricken counties, villages, the author took rural households in poverty counties in Heilongjiang Province as the survey object and designed relevant questionnaires based on the elements of endogenous power, and carried out field research activities. 840 questionnaires were distributed, and 822 were collected. After screening and cleaning, 789 valid questionnaires were obtained, which have passed the reliability and validity tests. The main indicators and descriptive statistics are shown in table I.

Table I Indicators and descriptive statistics of endogenous power

constitute	indicator	minimum	maximum	mean	sd	skewness	kurtosis
	healthy	0	4	1.88	0.789	-0.306	-0.281
		-1	2	0.78	0.587	-2.258	4.165
subject	ability	-1	2	0.83	0.511	-2.585	6.324
		0	1	0.20	0.399	1.521	0.314
	will	0	4	1.71	0.810	0.739	0.704
object	physical capital	1	5	1.58	0.787	1.292	1.329
	natural capital	0	300	23.40	28.268	3.881	24.255
		0	3	1.94	0.967	-0.035	-1.642
	financial capital	0	45000	3018.76	5047.385	4.059	23.101
	social capital	0	5	1.12	1.093	0.637	-0.342
carrier	industry	1	3	1.39	0.629	1.364	0.684
<b>-</b>	project	0	4	1.88	0.789	-0.306	-0.281
sustainable	income	10000	50000	27008.87	12306.417	0.43	-0.715
poverty	disposable income	-50000	20000	8279.19	7935.619	-2.058	14.511
alleviation	traffic conditions	0	90	16.59	16.569	2.865	9.497

Based on the research above, the endogenous power can be decomposed into three main latent

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

variables, the subject, the object and the carrier. The indicators of sustainable poverty alleviation are measured by variables such as income, disposable income, and traffic conditions. The indicator system and the code is shown in table II.

Table II Variables and codes of endogenous power and sustainable poverty alleviation

latent variable	code	secondary indicators	code	observed variable	code
		healthy	A1	work capacity	a11
subject of endogenous power				skills training	a21
-human capital		ability	A2	education level	a22
	F1			possessed skills	a23
		will	A3	willingness to get rid of poverty	a33
object of endogenous power		physical capital	B1	farm machinery ownership	b11
-livelihood capital		natural capital	B2	cultivated land	b21
	F2	financial capital	В3	seek loans	b31
				loan amount	b32
		social capital	B4	occupation of relatives and friends	b41
carrrier of endogenous power		industry	C1	work in industry	c11
-industry platform	F3	project	C2	participation in poverty alleviation	c12
				projects	
		income	D1	family income	d11
	F4	disposable income	D2	annual residual income	d12
sustainable poverty alleviation		traffic conditions	D3	distance to nearest town	d13

### 3.2 Relationships between the Elements of the Endogenous Power

### 3.2.1 Model hypothesis

We apply the structural equation model to conduct an empirical analysis of the relationship between the endogenous power for poverty alleviation in Heilongjiang Province. Structural Equation Model (SEM) is essentially a covariance structure model, which is also known as Latent Variable Model (LVM), and it's often used to analyze complex relationships between questionnaire surveys or experimental data. SEM contains two models, respectively are the measurement model and the structural model. Usually the measurement model describes the measurement or conceptualization of the explicit indicators corresponding to the latent variables, and the structural model explains the relationship between the latent variables and the part of the variance that cannot be explained by other variables in the model Before applying the model for empirical analysis, we have to make some relevant hypothesis as follows:

H1: According to Schultz's human capital theory and Amartya Sen's ability poverty theory, it is assumed that the subject of the endogenous power is human capital, which includes health, education and many other factors.

H2: According to the framework of sustainable livelihoods, it is assumed that the object of the endogenous power is composed of natural capital, physical capital, financial capital and social capital.

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

H3: Based on inclusive growth theory and precision poverty alleviation practices, it is assumed that poverty alleviation industries and projects provide a fusion carrier for the enhancement of the endogenous power, and shared platform for the integration of the subject and the object of the endogenous power.

## 3.2.2 Model design and test

As an important method of multivariate data analysis, SEM can achieve the fusion of factor analysis and path analysis. According to the components of the endogenous power of poverty alleviation, the subject, object and carrier are used as exogenous latent variables, which closely related to each other. The structural equation model is denoted as SEM1, and the measurement model is as follows:

$$a_{ij} = \Lambda_a F 1 + \delta_a \tag{1}$$

$$b_{ij} = \Lambda_b F 2 + \delta_b \tag{2}$$

$$c_{ii} = \Lambda_c F 3 + \delta_c \tag{3}$$

The structural model is used to describe the relationship between latent variables, and the specific form is as follows:

$$\xi = \Gamma \xi(F1, F2, F3) + \zeta \tag{4}$$

Among them,  $a_{ij}$ ,  $b_{ij}$ ,  $c_{ij}$  represent the vector composed of specific exogenous measurable indicators;

F1, F2, F3 represent the exogenous latent variable;  $\Lambda_a$ ,  $\Lambda_b$ ,  $\Lambda_c$  are factor load on the variable, which represent the relationship between the exogenous measurable index and the exogenous latent variable; Matrix  $\delta$  represents the error of the exogenous measurement equation.  $\xi$  is the exogenous latent variable,  $\Gamma$  describing the relationship between the latent variables, and  $\zeta$  is the residual term in the structural equation model. The advantage of the structural model is to explain the relationship between the latent variables, and the relationship between the multiple factors of the endogenous power is consistent with the above advantage of SEM. Therefore, the structural equation model of the endogenous power is established based on the model hypothesis. Through the application of AMOS software, and combined with field survey data to fit the model, the standardization path is shown in Figure 2.

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

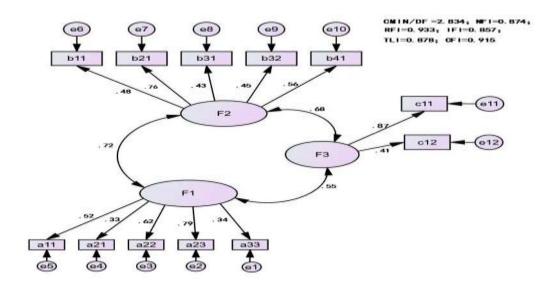


Fig 2: Standardization path of SEM1

In Figure 2, the single arrow represents the direction of influence, the double arrow represents the correlation between two exogenous latent variables, and the value represents the standardized influence coefficient. In the fitting process of the SEM, we used modification index for model expansion, and added the analysis of the correlation between the subject, the object and the carrier of the endogenous power. In terms of model limitations, refer to the critical ratio, we deleted the path between some observed variables and latent variables, which purpose is to reduce the chi-square value of model estimation results, increase NFI, RFI and other fitting indices, Enhance the degree of adaptation between the observation data and the hypothesis. The fit test of the model is related to the estimation method. The integration of all evaluation indicators shows that the overall fit of the model is acceptable, that can be seen in Table III.

Table III Test results of model fit

model fitn	ess index	meaning	standard	check value	fit state
	CMIN/DF	chi-square degree	$1 < \chi^2 / df < 3$	2.834	good
absolute	RMR	mean residual square	< 0.05	0.031	good
fitness index	RMSEA	mean square of approximation error	< 0.08	0.078	good
	GFI	goodness of fit index	>0.90	0.930	good
	AGFI	adjust the goodness	>0.90	0.893	general
value-added fitness index	NFI	standard fit index	>0.90	0.874	general
	RFI	relative fit index	>0.90	0.933	good
	IFI	value-added adaptation index	>0.90	0.857	general
	TLI	non-standard fit index	>0.90	0.878	general
	CFI	comparative fit index	>0.90	0.915	good
simplicity	PGFI	parsimonious fit index	>0.50	0.608	good
fitness index	ess index PCFI adjusted comparative index		>0.50	0.501	good

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

## 3.2.3 Analysis of model fitting results

The measurement model reflects the relationship between the observable variables and the latent variables that constitute the endogenous power. According to the estimation results in Table IV, submodels F1, F2 and F3 can be summarized separately to reveal the relationships among the subject, the object and the carrier of the endogenous power.

Table IV Estimation results of the measurement model

path		standardized estimate			
	coefficient estimate	S.E.	C.R.	p	coefficient estimate
a11—>F1	0.760	0.089	1.514	*	0.518
a21—>F1	0.386	0.009	2.004	**	0.534
a22—>F1	0.899	0.168	1.918	0.205	0.621
a23—>F1	1.088	0.032	9.845	**	0.793
a33—>F1	0.323	0.081	14.287	***	0.342
b11—>F2	0.640	0.326	18.656	***	0.415
b21—>F2	0.866	0.079	4.177	***	0.764
b31—>F2	0.706	0.075	7.078	***	0.429
b32—>F2	0.513	0.118	2.174	***	0.454
b41—>F2	0.477	0.041	6.097	***	0.563
c11—>F3	1.362	0.083	4.177	**	0.872
c12—>F3	0.545	0.013	3.078	***	0.406

<sup>\*, \*\*</sup>and \*\*\*indicate significant at the statistical level of 10%, 5%, and 1%, respectively

The above results reveal the relationship between the latent variables in sub-models F1, F2, and F3. First, the measurement model F1 reflects the latent variables and the observed variables of the human capital of the endogenous power, which namely a11, a21, a22, a23 and a33 (refer to Table II for the meaning of each indicator). The contribution of each observation variable to the subject of the endogenous power are as follows: the ability to work is 0.52, the participation in skill training is 0.33, the level of education is 0.62, the possess skills is 0.79 and the willingness to get rid of poverty is 0.34. This result shows that the skills and education level contribute the most to human capital in the survey samples, and the contribution of the willingness and skills training needs to be strengthened in the process to get rid of poverty.

Second, the measurement model F2 reflects the latent variables and the observed variables of the propor subsistence capital, which namely b11, b21, b31, b32 and b41 (refer to Table II for the meaning of each indicator). The contribution of each observation variable to the subject of the endogenous power are as follows: the ownership of agricultural machinery is 0.48, the amount of arable land is 0.76, whether to obtain loans is 0.43, the amount of loans obtained is 0.45, and the occupation of relatives and friends is 0.56. This result shows that the amount of arable land and social relations have the greatest impact on propor capital in poverty alleviation areas in Heilongjiang Province, while the contribution of other factors is not much different, both are about 0.4.

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

Third, the measurement model F3 reflects 2 observed variables of the endogenous power carrier of the latent variable, which namely c11 and c12 (refer to Table II for the meaning of the indicators). The contribution of each observation variable to the industry sharing platform are as follows: industries engaged in is 0.87, participation in poverty alleviation projects is 0.41. This result shows that the industries currently engaged in have made outstanding contributions to the carriers of poverty alleviation, and participation in specific projects needs to be strengthened.

Correlation coefficient in table V reveals the correlation between the latent variables. The specific results are shown in the table below.

Table V Correlation coefficient estimation results

relationship between latent variables	F1<>F2	F1<>F3	F2<>F3	
estimated value	0.72	0.55	0.68	

The correlation coefficient between F1 and F2 is 0.72. It shows that the subjects are strongly interdependent with the objects of endogenous power of rural households in Heilongjiang Province. The human capital of the subjects can control more pro-poor subsistence capital, they are both important factors of for poverty alleviation, which provides a powerful guarantee for poverty alleviation and sustainable poverty alleviation; The correlation coefficient between F1 and F3 is 0.55. It shows that the degree of integration between the subject and the carrier of the endogenous power is average in Heilongjiang Province. The development of poverty alleviation industries and specific projects need to be more inclined to absorb more labour force of poor households; The correlation coefficient between F2 and F3 is 0.68. It shows that the degree of integration between the object and the carrier of the endogenous power is better than that of the subjectin Heilongjiang Province. It also show that the entry of pro-poor livelihood capital into poverty alleviation industries and specific projects is better than the that of labor power factors with the support of the targeted poverty alleviation policy.

## IV. TEST OF MULTIPLE EFFECTS OF ENDOGENOUS POWER ON SUSTAINABLE POVERTY ALLEVIATION

#### 4.1 Model Building

Based on the concept of sustainable poverty alleviation defined above and the three stages of sustainable poverty alleviation, hypothesis 4 is added on the basis of the endogenous power model.

H4: Different levels of endogenous power affect the stage evolution of sustainable poverty alleviation. The stronger the level, the higher the stage.

$$a_{ij} = \Lambda_a F 1 + \delta_a \tag{5}$$

$$b_{ij} = \Lambda_b F 2 + \delta_b \tag{6}$$

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

$$c_{ij} = \Lambda_c F 3 + \delta_c \tag{7}$$

$$d_{ii} = \Lambda_d F 4 + \varepsilon_d \tag{8}$$

The structural model is:

$$\eta = B\eta(F4) + \Gamma\xi(F1, F2, F3) + \zeta \tag{9}$$

The meaning of each index is the same as the SEM1, is an endogenous latent variable, describes the relationship between endogenous latent variables.

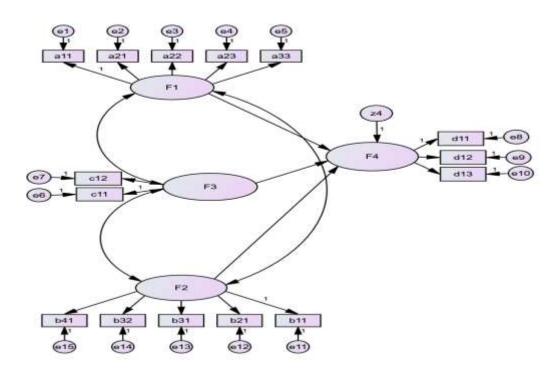


Fig 3: Effect of endogenous power on sustainable poverty alleviation (SEM2)

#### 4.2. Multiple Effects of Endogenous Power on Sustainable Poverty Alleviation

According to the standards of different stages of sustainable poverty alleviation, the survey data is divided into three groups. Refer to the standard of annual income per capita of 2,300 yuan (constant price in 2010), and the average population of each family is 3.6857 (calculated based on surveys), families (total of 132 samples) with an income of 10,000 yuan are classified as the cross-line poverty alleviation group, that have considered the price increase index; Families (total of 467 samples) with incomes of between 20,000 and 30,000 yuan are classified as stable poverty alleviation groups; Families (total of 190 samples)

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

with incomes between 40,000 and 50,000 yuan are classified as the pursuit of common prosperity group. Three sets of data were used to fit the extended SEM2 (Figure 3), and the results were obtained as SEM2-1, SEM2-2, and SEM2-3. The specific measurement model estimation results are shown in Table VI. According to the model results, the multiple effects of various factors about the endogenous power on sustainable poverty alleviation are further analyzed.

Table VI Measurement model estimation results of SEM2

path	SEM2-1		SEM2-2		SEM2-3	
	p	coefficient	p	coefficient	p	coefficient
a11—>F1	***	0.367	***	0.662	0.307	0.524
a21—>F1	***	0.364	**	0.305	**	0.577
a22—>F1	**	0.682	**	0.366	0.205	0.561
a23—>F1	***	0.746	**	0.452	**	0.289
a33—>F1	***	0.446	0.075	0.786	***	0.270
b11—>F2	***	0.708	***	0.407	***	0.351
b21—>F2	***	0.834	***	0.207	***	0.212
b31—>F2	***	0.429	*	0.765	**	0.752
b32—>F2	***	0.387	**	0.347	**	0.783
b41—>F2	***	0.359	*	0.672	*	0.528
c11—>F3	***	0.205	**	0.574	**	0.729
c12—>F3	**	0.397	***	0.458	***	0.824
d11—>F4	***	0.628	***	0.517	**	0.613
d12—>F4	***	0.422	***	0.518	***	0.769
d13—>F4	***	0.419	*	0.534	***	0.439

<sup>\*, \*\*</sup>and\*\*\*indicate significant at the statistical level of 10%, 5%, and 1%, respectively

#### 4.2.1 The traction effect of weak-level endogenous power on poverty alleviation across the line

Correlating the cross-line poverty alleviation group data with the SEM2, the fitting estimation result SEM2-1 shows: Firstly, a23 and a22 have the greatest influence on F1, the coefficient values are 0.746 and 0.682, and other coefficient values observed are nearly 0.3. It means that in this stage, the skills and education level belonged to main labor force in poor families have make outstanding contributions to the subject of the endogenous power in this stage. Secondly, b21 and b11 have the greatest impact on F2, with coefficient values of 0.834 and 0.708, while other index coefficients are relatively low, that are mostly concentrated in 0.4 and 0.3. This shows that the physical capital and natural capital owned by poor families are prominent. Thirdly, the coefficients of c11 and c12 are 0.205 and 0.397, which shows that the participation of poor families in poverty alleviation industries and projects have certain impact on the industry sharing platform. Fourthly, d11 has the greatest impact on F4, with coefficient values of 0.628, and the other two factors, d12 and d13, whose coefficients are 0.422 and 0.419, and their contributions are not so outstanding. This shows that in the stage of cross-line poverty alleviation, the income of poor families contributes the most to the initial stage of sustainable poverty alleviation.

4.2.2 The catalytic effect of middle-level endogenous power on stable poverty alleviation Associating the stable alleviation group data with the SEM2, the fitting estimation result in SEM2-2

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

shows: First, a33 and a11 have the greatest influence on F1, the standardized coefficient values are 0.786 and 0.662, and the contributions of other observed variables are mostly concentrated in 0.3 or 0.4. It shows that the main labor force of poor families has made outstanding contributions to the subject of endogenous power in this stage. Second, b31 and b41 have the greatest impact on F2, with the standardized coefficient values are 0.765 and 0.672, while other indicators are mostly around 0.2 ~ 0.4. It means that the financial capital and social capital owned by poor families play a prominent role in the endogenous power in the stage of stabilizing poverty alleviation. Third, the standardized coefficients of c11 and c12 are 0.574 and 0.458, which shows that the participation of poor families in poverty alleviation industries and projects has a certain impact on the sharing platform in this stage. Fourth, d11, d12, and d13 have little difference in the degree of influence on F4, and the coefficient values are 0.517, 0.518, and 0.534. This shows that at the stage of stable poverty alleviation, there is little difference in the contribution of poor family income and disposable income.

#### 4.2.3 The dominant effect of strong-level endogenous power on common prosperity

Associating the data of the common prosperity group with the SEM2, the fitting estimation result in SEM2-3 shows that: First, a11, a21 and a22 have a greater influence on F1, and the coefficient values are 0.524, 0.577 and 0.561, which are higher than the indicators such as a23 and a33 at this stage. Second, b31, b32, and b41 have a greater influence on F2, and the coefficient values are 0.752, 0.783, and 0.528, which are higher than b11 and b12. Third, the coefficients of c11 and c12 are 0.729 and 0.824, indicating that the participation in poverty alleviation industries and projects have a significant increase compared with the previous stage, and the contribution is outstanding. Fourth, d12 has a greater impact on F4, with a coefficient of 0.769, followed by d11 whose coefficient is 0.613, and the contribution of d13 has decreased compared with the previous stage.

### V. CONCLUSION

Poverty alleviation and rural revitalization have an inherently unified logic. They all aim at the prosperity of the farmers', rural areas and the agriculture, in essence. The implementation of the transitional period of poverty alleviation is to effectively link poverty alleviation and rural revitalization, which to ensure the orderly progress of sustainable poverty alleviation. Relying on the transitional period of poverty alleviation, incorporating sustainable poverty alleviation that centered on endogenous power into the rural revitalization strategy, and constructing forward-looking planning and strategic layout, can not only promote the stable transformation of the national poverty reduction strategy and work system, but also take the shift that in the focus of "agriculture, rural areas and farmers" historically. First, consolidate the achievements, attach inkage to policy, and maintain the stability of the poverty alleviation object. Second, expand the achievements, strengthen the connection, and mobilize the enthusiasm of the poverty alleviation subjects. Third, promote the transition of poverty alleviation and industrial convergence, enhance the integration of poverty alleviation carriers. Fourth, Realize rural revitalization, improve planning linkages, and ensure the sustainability of development after poverty alleviation.

ISSN: 1520-0191

Nov-Dec 2021 Page No. 197-212

Article History: Received: 05 October 2021, Revised: 02 November 2021, Accepted: 25 November 2021, Publication: 31

December 2021

The current comprehensive victory of China's poverty alleviation battle is hard-won, thanks to the policy dividend of precise poverty alleviation. The establishment of the transitional period for poverty alleviation has further laid the foundation for the development and revitalization of rural industries. In the future development process, some relevant elements, operating mechanisms, and empirical effects of rural development need continuous research in a long time. Such as, the accumulation speed of human capital, the continuous accumulation of livelihood capital, the upgrading and development of poverty alleviation industry platforms, and the transition period of poverty alleviation, and so on.

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Nov-Dec 2021 Page No. 197-212

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