

# Factors Affecting the Intention to Expand The Business Scale Associated with the Short Supply Chain of Agricultural Products of Vietnamese Farmers

Thi Thu Thuy Nguyen<sup>1</sup> Huu Quan Do<sup>2</sup> Trung Ha Do<sup>2</sup> Xuan Hung Nguyen<sup>2\*</sup>

1. School of Economics and Management, Hanoi University of Science and Technology, 01 Dai Co Viet, Hai Ba Trung, Ha Noi, Vietnam

2. School of Trade and International Economics, National Economics University, 207 Giai Phong, Hai Ba Trung, Ha Noi, Vietnam

\* E-mail of the corresponding author: [hungnx@neu.edu.vn](mailto:hungnx@neu.edu.vn)

## Abstract

The article was studied with the aim of identifying and considering the extent of the influence of factors on the intention to expand the business scale associated with the short supply chain of agricultural products of Vietnamese farmers. Based on the planned behavioral theory model, the authors used a combination of qualitative and quantitative research methods such as measuring reliability testing through Cronbach's Alpha coefficient, EFA discovery analysis, correlation analysis, multivariate regression model analysis through data collected and surveyed with 486 observations. in Vietnam in 2022. The results showed that the intention to expand the business scale of agricultural producers is influenced by factors such as subjective norms, attitudes, perceptions of behavior control, business conditions, possible consequences. Since then, the article proposes to the state in supporting producers to develop a short supply chain model of agricultural products.

**Keywords:** Short supply chain, Agricultural products, Planned Behavioral Theory, expansion, business scale.

**DOI:** 10.7176/EJBM/14-10-05

**Publication date:** May 31<sup>st</sup> 2022

## 1. Introduction

Short Food Supply Chains have been quite popular in developed countries and the European Union (EU) since the early years of the 21st century (Nguyen An Ha, 2021). The concept of short supply chain of agricultural products or food (SFSC) has been developed in Europe and has become a remarkable phenomenon both from a theoretical to practical perspective (Aubry et al., 2013). According to EU Regulation No. 1305/2013, "the short supply chain of agricultural products is a supply chain with a minimum number of economic agents, a commitment to cooperation, local economic development and a close social and geographical relationship between producers and consumers".

In the context when the problem of dirty food, hygiene insecurity takes place more and more...Concerns about food safety and hygiene have also increased. Up to 83.8% of consumers surveyed said that current goods do not guarantee food safety. Therefore, the short supply chain of agricultural products has been receiving more attention because of the benefits it brings. Specifically, the short supply chain of agricultural products allows consumers to get a more comprehensive assessment of the product, from how the product is produced to where the product comes from (Kneafsey et al., 2013). In addition, in the form of direct sales, products of a local nature and minimizing intermediaries have created great conditions in building trust with consumers (Aggestam et al., 2017). However, Hinrichs (2003) argues that the purchase of products as well as the attractiveness of the short supply chain of agricultural products are only chosen by some consumers. It is still just a niche market and has not really developed yet (Beckeman, 2011). From there, it can be said that the scale of the current short chain has not had much impact on economic efficiency. Despite this, the number of consumers interested in short supply chains is still increasing, leading to manufacturers needing to expand their business. To expand the size of a business in a certain industry, it means the investment of more equipment and machinery, increasing the number of employees to increase the level of production and sales (Jenemy, 2022). Or to put it more specifically, the expansion of the scale related to the short supply chain of agricultural products will cause production households to sacrifice more than their resources. As the market along with the benefits are expanding. From there, the producer has to choose between whether or not to scale up his or her scale.

In recent years, the supply chain disruption, as well as the restriction of imports of commercial goods in general and agricultural products in particular by the governments of many countries around the world, have been causing significant impacts on Vietnam (Bui Viet Hung, 2020). Thereby, it can be seen that the dependence of Vietnamese agricultural products on the export market is very large, it is necessary to take long-term and sustainable measures. To solve this problem, besides finding and expanding the export market, it is necessary to emphasize the role of the domestic market, and consider this as a top priority. In such a context, expanding the scale of business associated with the short supply chain of agricultural products of farmers needs more attention

from state agencies, local authorities and especially agricultural producers themselves to meet the increasing needs of consumers as well as bring about sustainable development of agriculture, career and rural development.

In the past, there has been much research on farmers' intentions to expand their business. However, the study of farmers' intentions to expand the business of the above studies focused only on the short food supply chain. At the same time, the research is concentrated only in countries with developed economies in Europe. And it is easy to see that in Vietnam the studies of farmers' intentions are quite limited, especially in relation to the short supply chain of agricultural products.

This study is structured into 5 parts: (i) Introduction, (ii) Research overview and theoretical basis, (iii) Research methodology, (iv) Research results and discussion and (v) Conclusions and recommendations

## 2. Literature review and theoretical basis

### 2.1. Study overview

In the world, the short supply of agricultural products is diverse in both nature and practice, existing and maintained in a multitude of different forms of human daily life, developing both in the commercial and non-commercial sectors. Nowadays, there has been a lot of research and research about this supply chain in many different angles. In general, we can group studies of short supply chains or short supply chains of agricultural products into four groups.

The first group approaches from the perspective of building and developing short supply chains. This group emphasizes the content of building models and solutions that help guide development for short supply chains (*Balazs Balint, 2012; Konrad KISS, 2018; Zein Kallas, 2019; Cao Thuy Linh, 2020; Hoa Huu Luan, 2021; Huu Cuong Flower, 2021*). Building a model of a distribution intermediary, the model of the group of farmers taking a large area farm as the center. Solutions to help develop short agricultural supply chains include promoting supportive policies, developing product marketing strategies, strengthening connectivity between producers and consumers, and developing information technology infrastructure systems.

The second group approached from looking at consumer perceptions as well as behaviors and intentions in the short supply chain (*Elisa Giampietri et al., 2018; Elisa Giampietri et al., 2016; D'Amico Mario et al., 2014; Ioan - Sebastian Brumă, 2021; Nguyen Van Phuong et al., 2021*). The theory used is mainly the theory of planned behavior. This approach explores consumer attitudes when shopping at short supply chains by having articulated the role of trust, concerns about food sustainability and safety that have a positive impact on consumer intent. In addition, D'Amico Mario et al. (2014) stated the importance of demographic characteristics to consumer behavior and direct marketing as an effective tool. Ioan - Sebastian Brumă et al., (2021) said buying behavior is becoming positive and requires the SFSC market to become more mature to meet consumer preferences and values, and that changing consumer behavior primarily from people who are married by families plays an important role in personal responses to covid-19 crisis.

Next up is the third group exploring producers in the short supply chain (*Anna Dunay et al., 2018; Chrysanthi Charatsari, 2019; Noémi Ványi and János Felföldi, 2021; Meng Wang et al., 2019; Nguyen Van Phuong and Bui Thi Nga, 2021*). Refers to the attitude of producers with participating in production and business associated with short supply chains. These studies have raised economic issues such as income growth, non-economic (traditional, consumer relations, local values) and society as the driving force behind their participation and the SFSCs. In addition, this approach has also indicated the effect of competence (management, entrepreneurship, marketing, networking and collaboration) on readiness to participate in SFSC and participation in SFSC has increased the demand for the types of competencies mentioned above.

The fourth group has emerged in recent years, emphasizing the effects of short supply chains (*Henk Renting, 2003; F. Galli, G. Brunori, 2013; Terry Marsden et al., 2000; Lucian Tanasa, 2014; Bui Thi Nga, 2021; Bui Thi Nga and Nguyen Van Phuong, 2020*). This approach focuses on the benefits of short supply chains: Rural development, tourism development and sustainable development because these aspects of the short chain model all have a positive impact. Specifically, the environment, the economy and society. Geographical narrowing and minimal number of intermediates of short supply chains have contributed to reducing emissions during food transportation as well as limiting the huge amount of packaging in traditional chains, avoiding adverse environmental impacts (Belletti and Marescotti, 2012). Economically, SFSC helps improve local sustainability by promoting the income cycle of the community, creating jobs for farmers when faced with unexpectedly difficult situations (Sini, 2014). In addition, social values are also promoted, typically the connection, trust and cohesion in the community as well as the elimination of doubts and worries about consumers' information with agricultural products (Bullock, 2000). These studies also show that the short supply chain provides a reliable alternative to the conventional supply chain, as the products offered to consumers through the short supply chain reflect outstanding characteristics such as: "local", "natural", "healthy" and "reliable" (Hoa Huu Cuong, 2021).

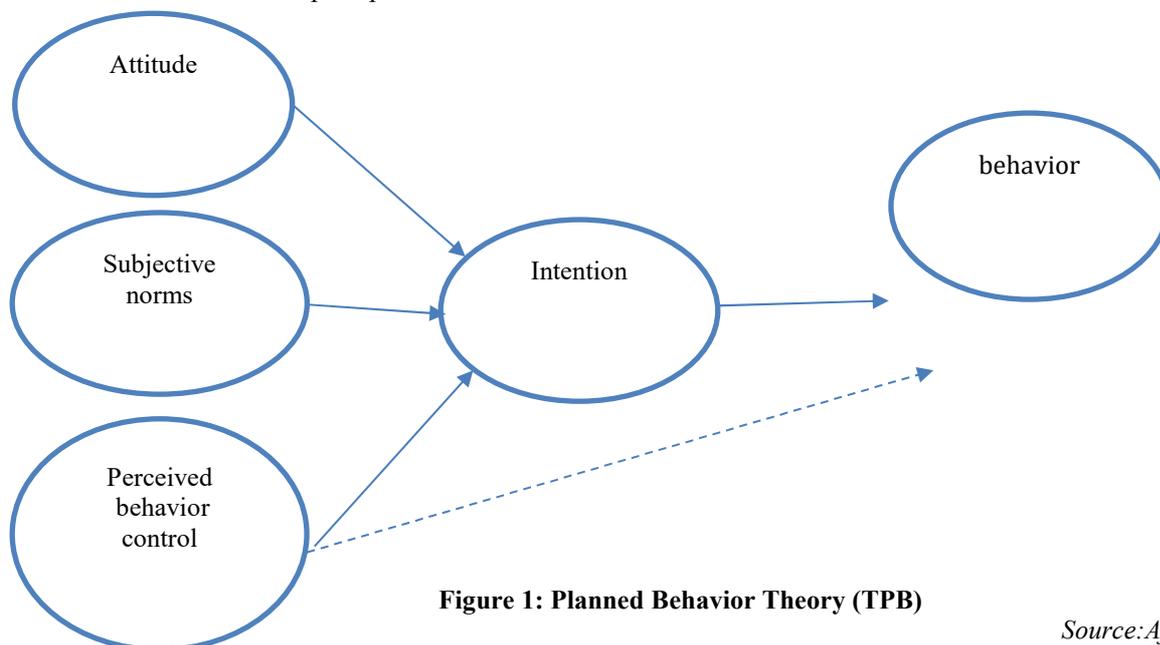
In addition, in relation to the topic of research on the intention to expand the business scale of farmers associated with the short supply chain of agricultural products can be mentioned as: *Borges et al., 2014; gor Senger et al., 2016; Helena Hansson et al., 2008; Eric Nost, 2014; Eva FLEIB et al., 2017; Aggestam et al.,*

2017). In Vietnam, the typical is the study of *Nguyen Van Phuong and colleagues (2021)* so it can be seen that the research related to this topic carried out in our country is quite few and limited. In addition, previous studies have often been of a general nature with few articles addressing the typical problem. There are issues that have been studied such as the intention to scale up in connection with the short supply chain or the recent study of the analysis of the intention to expand the business scale associated with the short food supply chain of farmers. However, it can be seen that there has been no research on the intention to scale up the scale associated with the short supply chain of agricultural products. One of the main commodities of our country's agriculture.

## 2.2. Research theory and hypothesis basis

Ajzen's Planned Behavior Theory (1991) is commonly used by researchers at home and abroad in studies of human intentions and behavior. Studies of the intention to expand the business scale associated with the short supply chain of agricultural products are no exception.

Understandably, planned behavior theory (TPB) is a more developed version of the theory of reasoned action (TRA), a study conducted by Ajzen and Fishbein (1975). In rational action theory (TRA), Ajzen and Fishbein emphasized the role of intent to actual behavior. In addition, human intentions are influenced by attitudes and subjective norms. However, in his 1991 study, Ajzen commented that rational patterns of action were insufficient to account for actual intentions and behaviors as this theory applies only to pre-intended behavior, habitual or inertial actions that are considered unconscious and unexplained by this theory. So the planned pattern of behavioral theory indicated by Ajzen is as follows, that he maintains his position on the mediating role of the element of intent including the motivational factors from which to proceed to actual behavior. According to Ajzen, the intentions indicate the extent to which people try to perform their behavior. The greater the intention, the more likely it is that the behavior to be performed will be. The intention in the rational action model is influenced by two factors: Attitude; Subjective norms. Coming to the planned behavioral theory model (TPB) that has been more specifically explained human behavior is purely due to rational control. The model has shown that human intentions are influenced by three main factors: *attitudes, subjective norms, perceptions of behavioral control*. In addition, the planned behavioral theory model hypothesizes a direct link between behavioral control perception and intent to actual human behavior.



**Figure 1: Planned Behavior Theory (TPB)**

Source: Ajzen, 1991

In addition, business conditions factors have also been added by *Nguyen Van Phuong et al. (2021)* and *Aggestam et al. (2017)* to their research. For the study of *Aggestam and colleagues (2017)* showed that business conditions factors are affecting the intentions of farmers and in the study of *Nguyen Van Phuong and colleagues*, this factor has the most impact in the same direction and strongest mother.

Another point from the two studies above is that the study by *Eva FLEIß et al. (2017)* has allocated an analysis of the possible consequential relationship with the farmer's intentions. However, the study did not have a clear conclusion as to how it had an impact on farmers' intentions, but only highlighted the negative consequences perceived by farmers as not to have hindered the expansion of their business.

From the above theoretical basis, research hypotheses are formulated and selected as follows:

### *Attitude*

According to psychologists, attitudes are a collection of emotions, behaviors, beliefs directed at an object, person of things, phenomena or events. Attitudes are created in the process of experience and education, it has a huge effect on behavior. Attitudes are long-lasting, but they can still be changed. Attitude to behavior is an individual's assessment of the outcomes of performing a particular behavior, or in other words it evaluates the advantages or difficulties of a behavior (Ajzen, 1991). Previous studies have also shown that attitudes have a positive impact on farmers' intentions to expand their business scale such as researching Nguyen Van Phuong et al. (2021), Aggestam et al. (2017)

**H1:** *Attitude positively affects the farmer's intention to expand the scale of business associated with the short supply chain of agricultural products .*

### *Subjective norms*

Subjective norms are the perception of an individual, with important references of that individual arguing that the behavior should or should not be carried out; influenced by the judgment of other important people (e.g., parents, spouses, friends, teachers) (Ajzen, 1991). Subjective norms show a person's perception of social pressures or their sensitivity in the context of whether or not to scale up their business (Aggestam et al., 2017). Farmers are essentially agricultural producers and have the ability to influence other farmers and everything related to agricultural products (Bruijnij et al., 2014). On that basis, the research hypothesis is proposed:

**H2:** *Subjective standards positively impact the farmer's intention to expand the scale of business associated with the short supply chain of agricultural products of farmers*

### *Perceived behavior control*

Perceived behavior control is an individual's perception of the ease or difficulty of performing specific behaviors (Ajzen, 1991). Perceived behavior control describes the farmer's cognitive ability to be aware of the availability of resources and opportunities to carry out the scale of his or her business. Ajzen suggests that the cognitive factor that controls behavior directly impacts the tendency to perform behavior, and that if the individual is correctly aware of his or her level of control, behavioral control also predicts behavior. That means that when farmers are aware of their behavior in the future, it will increase their intention to scale up their business in a short supply chain (Nguyen Van Phuong et al., 2021).

**H3:** *Behavioral control awareness has a positive effect on the farmer's intention to expand the business scale associated with the short supply chain of agricultural products*

### *Business conditions*

Business conditions are factors representing the business and financial skills of farmers, state support and the needs and weaknesses of the market. Research by Aggestam et al. (2021) has shown that this factor has had the opposite effect on farmers' intentions to expand their business. However, the research of Nguyen Van Phuong and colleagues (2021) has said that when farmers have more technical conditions, capital will intend to expand their business to develop the family economy. These two studies are showing conflicting results, which may be due to the economic characteristics of Swiss farmers and Vietnamese farmers having differences as well as different market approaches to consumers that have led to such results.

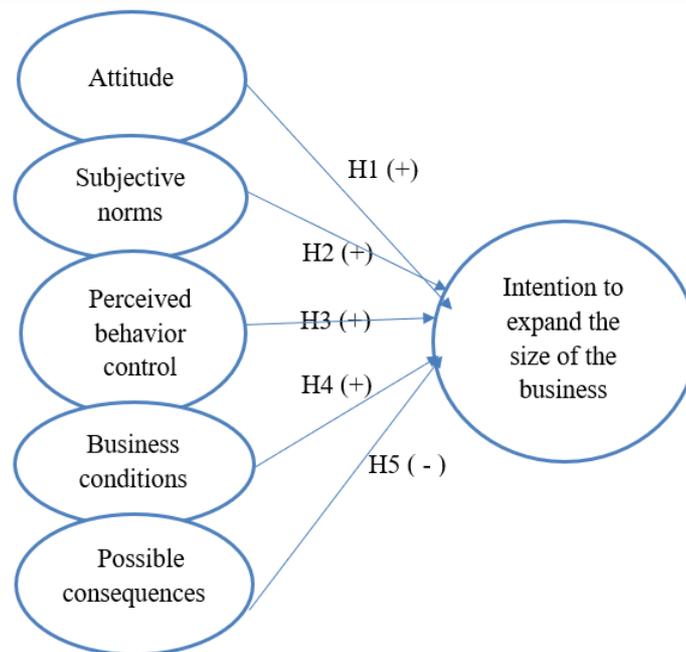
**H4:** *Business conditions positively impact the farmer's intention to expand the business scale associated with the farmer's short supply chain of agricultural products.*

### *Possible consequences*

The probable consequence is to gather all that can happen as the farmer scales up his or her size. These consequences make it necessary for farmers to mobilize more financial resources as well as management skills. However, the expansion of the manufacturer's business scale corresponds to the perception that this choice reduces the likelihood of failure in their business (Eva FLEIß et al., 2017). We can conclude that the consequences can have a positive or negative impact on the farmer's intentions, and it is easy to see that the negative effects are more dominant.

**H5:** *The consequences can have a negative impact on the farmer's intention to expand the business scale associated with the short supply chain of agricultural products.*

From the theoretical basis and research hypotheses, the proposed research model is as follows



**Figure 2: Proposed research model**

*Source: Proposed research team*

### 3. Research methods

#### 3.1. Data collection

The authors used research data including both primary and secondary data.

Through previous domestic and foreign studies related to the topic along with the preliminary investigation of a group of research subjects and experts in the field, the authors came up with a research model of 5 factors and 22 observed variables used as scales for the parent factors.

Secondary data is collected from previous articles and related studies.

Primary data is collected by online and offline survey methods for households producing agricultural products and farms. With the characteristics of the survey sample as follows:

**Table 1: Characteristics of the survey sample**

Quota	Amount	Percentage (%)
<b>Gender</b>		
South	340	69,9
Female	146	30,1
<b>Age</b>		
18 - 25 years old	47	9,6
25 - 40 years old	98	20,2
40 - 50 Years old	173	35,6
50 - 60 Years old	157	32,3
Over 60 years old	11	2,3
<b>People</b>		
Sutra	475	97,7
Different	11	2,3
<b>Education level</b>		
Primary education	32	6,4
Junior high school	119	24,4
High school	143	29,5
Intermediate/College	95	19,6
University	76	15,7
Graduate school	21	4,4

*Source: Survey Results 2022*

### 3.2. Data processing

With the model used as linear regression, the authors used spss data analysis software version 20 with Cronbach' Alpha tool to measure the suitability of the scale for the variables included in the model, efa factor analysis to test the convergence of observed variables and the separation between independent variables. Linear regression is also used to assess how the effects of independent variables on dependent variables are. The scale used is Likert level which indicates the effect of observed variables on the farmer's intention to scale up the business associated with the farmer's short supply chain of agricultural products with levels ranging from 1 - very weak to 5 - very strong.

## 4. Results of research and discussion

### 4.1. General description

The study conducted online and offline surveys for farmers, households producing agricultural products across the country collected 500 survey samples, of which 486 valid samples were put into processing spss software table data version 20.

### 4.2. Verify the reliability of the scale

Cronbach's Alpha test results do not remove any variables because the total variable correlation coefficient is greater than 0.5 and cronbach's Alpha coefficient is greater than 0.7 and it is suitable for inclusion in further analyses.

**Table 2: Cronbach's Alpha Test Results**

Scale	Number of observed variables		Cronbach's alpha
	Before	Later	
Attitude (ATT)	4	4	0,907
Subjective norms (SNO)	5	5	0,903
Perceived behavior control (PBC)	3	3	0,793
Business conditions (CON)	4	4	0,794
Possible consequences (HQ)	6	6	0,869
Intention to expand the size of the business (INT)	3	3	0,946

Source: Extracted from spss 20

### 4.3. Efa Discovery Analysis Results

**Table 3:KMO and Bartlett's Test Results of Independent Variables**

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.824
Bartlett's Test of Sphericity	Approx. Chi-Square	5269.626
	df	231
	Sig.	.000

Source: Extracted from spss 20

**Table 4: KMO and Bartlett's Test Results of Dependent Variables**

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.774
Bartlett's Test of Sphericity	Approx. Chi-Square	1382.879
	df	3
	Sig.	.000

Source: Extracted from SPSS 20

Results from tables 2 and 3 showed kmo and bartlett's tests with KMO coefficients of independent variables and dependent variables of 0.824 and 0.774, respectively. shows appropriate data in discovery factor analysis. Bartlett's inspection is statistically significant (Sig = 0.000 < 0.005).

Efa factor calculation results produce 5 groups of factors belonging to independent variables, 1 subconservative variable and 25 observational variables.

The scale of independent variables consists of 5 components: Attitudes, subjective norms, Perceived behavior control, business conditions, possible consequences for 25 scales and these scales are satisfactory, converging, representing observed variables. The variable scale depends on the intent to scale the business (3 observed variables) all converge on a column that represents a single dependent variable in the research model.

**Table 5: Element Rotation Matrix**

Latent variables	Factor				
	1	2	3	4	5
HQ5	0,809				
HQ6	0,807				
HQ4	0,770				
HQ1	0,767				
HQ2	0,756				
HQ3	0,752				
SNO3		0,877			
SNO4		0,860			
SNO2		0,841			
SNO1		0,827			
SNO5		0,820			
ATT4			0,911		
ATT3			0,892		
ATT1			0,891		
ATT2			0,839		
CON1				0,808	
CON3				0,797	
CON2				0,766	
CON4				0,752	
PBC2					0,869
PBC1					0,840
PBC3					0,805

Source: Extracted from SPSS 20

#### 4.3. Correlation analysis

The matrix below the table summarizes the Pearson statistical correlation between the INT dependency variable (Intended to scale a business) with each independent variable: ATT (attitude), PBC ( perception behavior control), SNO (subjective norm), CON (business conditions), HQ (Possible consequences), As well as the correlation between independent variables. The author uses the Pearson coefficient to analyze the correlation between quantitative variables. All correlation coefficients between variables range from -0.097 to 0.593. That demonstrates the distinguishing value achieved, indicating that the relationship between dependent variables (Business Scaling Intentions) and independent variables is statistically significant (Sig. < 0.05). On the other hand, the dependent variable The intention to expand the business scale is also significantly correlated with attitude variables, subjective norms, perceptions of behavior control, business conditions; at the same time there is a opposite correlation with the possible consequence variable. Moreover, the magnitude of the correlation coefficients ensures that there is no multilinear phenomenon. As such, other statistics can be used to test the relationship between variables.

**Table 6: Correlation between factors**

	ATT	PBC	SNO	CON	HQ	INT
ATT	1					
PBC	-0.033	1				
SNO	0.051	-0.097*	1			
CON	0.019	-0.063	0.188**	1		
HQ	0.026	-0.003	-0.007	0.055	1	
INT	0.434**	0.186**	0.371**	0.593**	-0.094*	1

Source: Extracted from SPSS 20

#### 4.4. Linear regression analysis

Linear regression analysis by Enter method with 5 independent variables: ATT, PBC, SNO, CON, HQ and dependent variables is the intention to expand the business scale associated with the short supply chain of agricultural products of farmers producing results as table 7:

**Table 7: Results of multivariate regression analysis  
 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.202	.152		1.326	.186		
ATT	.286	.018	.422	16.173	.000	.996	1.004
PBC	.206	.021	.261	9.974	.000	.988	1.012
SNO	.176	.017	.269	10.114	.000	.955	1.047
CON	.359	.017	.558	21.023	.000	.959	1.042
HQ	-.091	.018	-.133	-5.091	.000	.996	1.004

Source: Extracted from SPSS 20

The regression equation with the standardized Beta coefficient takes the following form:

$$INT = 0,422 * ATT + 0,261 * PBC + 0,269 * SNO + 0,555 * CON - 0,133 * HQ$$

**Table 8: Analysis of ANOVA variance equation regression equation  
 ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	99.089	5	19.818	199.597	.000 <sup>b</sup>
	Residual	47.659	480	.099		
	Total	146.747	485			

Source: Extracted from SPSS 20

**Table 9: Summary of regression analysis  
 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.822 <sup>a</sup>	.675	.672	.31510	1.917

Source: Extracted from SPSS 20

The regression result gives the correct R<sup>2</sup> value of 0.672 which is worth 62.7% of the variation of INT as explained by 5 independent variables ATT, PBC, SNO, CON, HQ; The model has no correlation (DW = 1,917) and multilinear (VIF < 2). At the same time, the sig test value of 5 factors is < 0.05 which means that the factors included in the model are suitable and statistically significant with a meaningful level of 5%. Thus, the H1, H2, H3, H4, H5 hypotheses are all accepted with 95% reliability. Or 5 factors in which *attitudes, perceptions of behavior control, subjective norms, business conditions* have a favorable impact and possible *consequential factors* have the opposite effect with the intention to expand the business scale associated with the short supply chain of agricultural products of Vietnamese farmers.

Specifically, the influence of favorable factors is arranged according to the degree of gradual reduction of the standardized  $\beta$  coefficient as follows: Strongest business conditions ( $\beta = 0.558$ ); Attitude ( $\beta = 0.442$ ); subjective norms ( $\beta = 0.269$ ); Perceived behavior control ( $\beta = 261$ ). And there are possible consequential factors ( $\beta = -0.133$ ) that have the opposite effect on the intention, which is also the lowest impact on the intention to expand the business size of households.

As such, business conditions are the biggest factor influencing farmers' intentions to expand their business and have a favorable impact. This gives the same results as the study of Nguyen Van Phuong et al. (2021). Such a result may be due to the short food supply chain covering the short supply chain of agricultural products so the results are no different because they have a certain similarity.

A major difference in the authors' study is the possible consequential factor. With the opposite effect on intent but the lowest level of impact can show that awareness of the possible consequences of scaling up the business is a problem to face. However, because they are aware that scaling up their business with a short supply chain reduces the likelihood of failure, and that investing in machinery and equipment is a necessity, it is therefore possible to explain why this factor has the lowest impact.

## 5. Conclusions and suggestions

### 5.1. Conclusion

Viewed from Ajzen's planned behavior theory (TPB) perspective, the results show that factors such as attitudes, subjective norms, and perceptions of behavioral control all have the same impact on the intention to scale up the

business associated with the short supply chain. This result is similar to the study of Aggestam et al. (2017); Nguyen Van Phuong et al. (2021) or gor Senger et al. (2016). In particular, the study of Nguyen Van Phuong and colleagues (2021) has the same assertion that when considering the factors affecting the same direction, all three factors of attitudes, subjective norms, perceptions of behavior control have the same order of influence on the intentions of farmers. Although the level of impact is in the same order, in the study of Nguyen Van Phuong and colleagues (2021) subjective attitudes and norms, there are not much differences in this topic showing a clear difference in the level of impact of these two factors, this also shows that when the attitude of the production household is positive with the opening. wide business scale associated with short supply chain of agricultural products. The intention also increased significantly. Another difference from the study by Aggestam et al. (2017) is that the attitude factor in this study had the greatest impact on intent.

Next is the business condition factor, in this study it has a certain similarity to the research of Nguyen Van Phuong and colleagues (2021) because the two studies are both geared towards short supply chains. In particular, Nguyen Van Phuong's research on the short food supply chain, and this article mentioned the short supply chain of agricultural products. Therefore, they have a lot of similarities, along with the current context of our country there are no specific policies for supporting farmers to develop chains or clear management policies. As mentioned at the beginning of the article, research by Aggstim et al. (2021) has shown that business conditions also have a negative impact on intent, but it is the lowest. The reason for the difference in such results may be due to the significant differences in market access of Swedish farmers and Vietnamese farmers, as in Sweden prioritises a direct approach to consumers to improve the value of agricultural products while in Vietnam farmers still prioritize wholesale. More merchants.

The probable consequential factor added from previous studies regarding the farmer's intention to scale up the business associated with short chains has had the opposite effect on the intention to scale up. This shows that farmers already feel the risk of expanding their family's business such as the needs for capital, land, public volume, the variety of products they are trading in or they have to sell their products more in the traditional supply chain – it is going against the original goal when selling. Products through the traditional supply chain, the products will not be of high value and especially in the situation of global supply chain disruption, the greater the risk. However, many farmers have thought that another positive consequence that scaling is to reduce the likelihood of failure in their business, precisely because this factor has that the impact of the consequences can occur on the intention is the opposite but the lowest. It is also consistent with the results of Eva FLEIB et al. (2017). This result compared to the research results of Nguyen Thi Phuong Linh and colleagues (2021) is making a huge difference when the cognitive factor of consequences is having a positive impact on attitudes, subjective norms, perceptions of behavior control, thereby indirectly affecting the intention of farmers in the production of agricultural products. organic karma. This shows that the production of organic agricultural products is minimizing the consequences and in particular it meets the demand for clean food from which consumers accept to pay at higher prices, helping farmers have more income and the use of that capital to return to investment to expand the business is not There is also a risk factor when they can be proactive in this regard.

## 5.2. Proposal

With the strongest impact of business conditions factors, the intention to expand the business scale associated with the short supply chain of farmers. Therefore, state agencies need to pay more attention to policies to support farmers in accessing loans, bringing experts to key agricultural areas of the locality to conduct traceability training, organic standard production methods, At the same time, there are specific solutions to the problem of ensuring the consumption of agricultural products for the people, and more importantly, helping farmers to promote their local product brands. In addition, local authorities need to strengthen the propaganda on sustainability and benefits of products from the short supply chain of agricultural products to consumers, supporting resources to help farmers find markets and consumption channels. In addition, farmers and production households also need to increase their learning to improve their production skills, financial management skills and especially effective production and business.

Farmers should step up their business expansion when they are receiving support from those around them, especially friends and family members. Because they are indirect agents of help in the production and business process of farmers, sometimes in addition to supporting with human strength, they can also support in terms of capital in the short term.

In addition, farmers need to be fully aware of the contributions in sustainable development that the agricultural short supply chain brings to the national economy in general and the local economy in particular. From there, there is a broader view because when the economy of the country develops, it will lead to the development of the local economy and indirectly improve the economy for farmers.

Finally, with the awareness of the possible consequences in the process of expanding the business scale, farmers need to be well prepared to take precautions against the potential consequences of expanding their business. Check and carefully consider the resources that you and your family have to serve the process of

expanding your business. The most important thing is to understand the needs of consumers to transform the way of selling more appropriately, along with learning experience in producing new agricultural products from other localities and provinces to be more proactive in diversifying products to meet the market.

## References

- Nguyen, A. H. (2021), 'Developing short food supply chains in new contexts', *World Economic & Political Issues*, 7(303), 66-77.
- Ajzen, . (1991), 'The theory of planned behavior', *Organizational behavior and human decision processes*, 50(2), 179-211.
- Bálint Balázs, (2012), 'Local Food System Development n Hungary', *nt. Jrnl. of Soc. of Agr. & Food*, Vol. 19, No. 3, pp. 403–421
- Beckeman, M. ( 2011), 'The Potential for mnovation n the Swedish Food Sector € Doctoral Thesis Lund University', Available at: <<https://lup.lub.lu.se/luur/download?func=downloadFile&recordId=41887415&fileId=41939974>>
- Borges, J.A.R., Alfons, G.J.M., Oude Lansink, A.G.J.M., Ribeiro, C., Lutk, V., (2014), 'Understanding farmers' ntenention to adopt mproved natural grassland using the theory of planned behavior', *Livest. Sci*, 169, 163e174.
- Bruijnis, M., Hogeveen, H., Garforth, C., Stassen, E., (2013), 'Dairy farmers' attitudes and ntenentions towards mproving dairy cow foot health', *Livest. Sci*, 155, 103e113
- Bui, V. H. (2020), 'Building a short supply chain of agricultural products: Experience of the French Republic', *Communist Magazine*, June 4, 2020.
- Chrysanthi, C., Kitsios, F. & Lioutas, D. (2019),' Short food supply chains: the link between participation and farmers' compêtnencies', *Renewable Agriculture and Food Systems*, 35(6), 1-10
- D'Amico, M., Di Vita, G., Bracco, S. (2014). 'Short food supply chain and locally produced wines: Factors affecting consumer behavior', *talian Journal of Food Science*, XXVI (3), 329-334
- Eva, F., & Vivianne, A. (2017), 'Key aspects of scaling-up regional food supply chains: A survey on Swedish local food producers', *26.ÖGA-Jahrestagung: Co-operation between Research and Practice - A key to competitiveness and mnovation n agriculture*, Vienna
- Fishbein, M., & Ajzen, . (ed., 1975), 'Belief, attitude, ntenention and behavior: An ntroduction to theory and research', *Addison-Wesley*.
- Giampietri, E., Finco, A., Giudice, T.D. (2015), 'Exploring consumers' attitude towards purchasing n short food supply chains', *Quality - Access to Success*, 16, 135-141
- Giampietri, E., Finco, A., Giudice, T.D., Carfora, V. & Verneau, F. (2018), 'A Theory of Planned behaviour perspective for nvestigating the role of trust n consumer purchasing decision related to short food supply chains', *Food Quality and Preference*, 64, 160-166
- Hansson, H., Ferguson, R., & Olofsson, C., (2012), 'Psychological constructs underlying farmers' decisions to diversify or specialise their businesses an application of theory of planned behaviour', *J. Agric. Econ*, 63, 465e482
15. Hinrichs, C., (2003), 'The practice and politics of food system localization', *J. Rural Stud*, 19, 33e45.
- Hoa, H. C. (2021), 'Implications in the development of agricultural product supply chains in Vietnam', International workshop: "Short supply chain model and short supply chain policy in some European Union countries: Policy implications for Vietnam", *European Research Institute*, Hanoi.
- Lucian, T. (2015), 'Functional Short food supply chains n the field of Romanian rural tourism. Case study: Harghita and neamt counties', *Ecoforum Volume 4*, Special ssue 1, 2015. 210
- Meijer, S.S., Catacutan, D., Sileshi, G.W., Nieuwenhuis, M. (2015), 'Tree planting by small-holder farJ71ers n Malawi: using the theory of planned behaviour to examine the relationship between affitudes and behavior', *J. Environ. Psychol*, 43, 1e12.
- Noémi, V., & János, F. (2021), 'Factors nfluencing the willingness of Hungarian sour cherry growers to operate n a short supply chain', *Society and Economy*, 43 (4)
- Nost, E., (2014), 'Scaling-up local foods: commodity practice n community supported agriculture (CSA)', *J. Rural Stud*, 34, 152e160
- Nguyen, V. P., & Bui, T. N. (2021), 'Analyzing the intention to expand the scale of business associated with the short food supply chain of Vietnamese farmers', *Journal of Commercial Science*, No. 157, 29 - 39
- Renting, H., Marsden, T.K., & Banks, J. (2003). 'Understanding alternative food networks: Exploring the role of short food supply chains n rural development', *Environment and Planning*, 35(3), 393 – 411
- V. Aggestam, E. Fleib, A. Posch (2017), 'Scaling-up short food supply chains? A survey study on the drivers behind the ntenention of food producers', *Journal of Rural Studies*, 4(51), 64 - 72
- Wang, M., Kumar, V., Ruan, X. & Neutzlin, D. (2019), 'Farmers' Attitudes towards Participation n short Food Supply Chains: Evidence from a Chinese field research', *Revista Ciências Administrativas*, 24 (3)