

SMALL AND MID-SIZED COMPANIES AND THEIR ROLE IN RENEWING THE ENTREPRENEURIAL TREND TOWARDS THE CRAFTS: A CASE STUDY OF ADRAR - ECONOMETRIC STUDY DURING 2002-2022-

Azizi Ahmed Oukacha¹, Abdessalam Belbali², Belbali Abderrahim³, Laksaci Sid Ahmed⁴.

¹University of Adrar (Algeria), Algerian-African economic integration laboratory,
ahm.azizi@univ-adrar.edu.dz

² University of Adrar (Algeria), Spatial and entrepreneurial development studies laboratory,
abdessalam.belbali@univ-adrar.edu.dz

³ University of Adrar (Algeria), Spatial and entrepreneurial development studies laboratory,
abd.belbali@univ-adrar.edu.dz

⁴ University of Adrar (Algeria), Spatial and entrepreneurial development studies laboratory,
Laksaci79@univ-adrar.edu.dz

Abstract:

This paper sheds light on the shift of the small and mid-sized companies towards developing the crafts in Adrar during 2002-2022. The study variables include the development of the number of small and mid-sized companies and the number of crafts companies. On the practical side, we used the autoregression distributed lag model ARDL to test the cointegration and determine the nature between the study variables in the short and long terms. Findings show that the study variables series are stationned in difference 01 and that there is a cointegration between the two variables. Besides, the changes in the number of small and mid-sized companies have a negative significant effect on the number of crafts companies in the short term. Furthermore, there is a causal relation in one trend between the number of crafts companies and the number of small and mid-sized companies.

Key words: small and mid-sized companies, crafts, local development, ARDL

1. Introduction:

The companies play an important role in the developed and developing economies thanks to their goods and services that satisfy the citizens' needs and reduce the imports. Thus, founding a company boosts the state's economy and improves the living standards. The company is at the heart of the economic activity as it contributes to employment. In this regard, the crafts companies (we shall refer to them as E-ART) develop the economic and touristic sectors and help achieve the local development thanks to their advantages such as the low experience required, the small capital and machines, the fiscal exemptions, etc. These advantages are similar to those of Small and mid-sized companies (we shall refer to them as PME) and, thus, there is a strong correlation between these companies.

Based on what was said, we can say that E-ART is a nexus between the PME and the touristic sector, which attracts the foreign currency. Therefore, it is necessary to focus on the crafts and preserve the cultural heritage of the state. This makes a source of welfare for a specific social category as it yields revenues. Thus, we raise the following problem: "How can PME promote the

entrepreneurial spirit in the crafts industries?” To answer this question, we raise the following sub-questions:

- Does the development of the number of PME affect the number of the E-ART?
- What is the nature of the relation between the development of the number of PME and the efforts that promote the entrepreneurial spirit of the crafts activities?

Hypotheses of the study:

Based on what was said, we hypothesize that:

- There is long-term balance relation between the development of the number of PME and the number of E-ART.
- There is a causal relation between the development of the number of PME and the number of E-ART in at least one trend.

Aim of the study:

This study aims at showing the trend of PME towards the crafts in Adrar during 2002-2022 and the relation between them. In addition, the study shows the various concepts related to PME, entrepreneurship, and crafts.

Axes of the study:

We divided the study into 05 axes. The 1st covers the concepts of the crafts, the 2nd revolves around the nature of the PME, the 3rd is about the entrepreneurship, the 4th shows the strategy of developing the crafts through PME, and the 5th sheds light on the practical study and discussion of the results.

Axis one: the crafts:

Section one: Definition of the crafts:

The Algerian Legislator defines the crafts as any activity, production, innovation, transformation, restoration, repair, or service made manually and is exercised mainly or permanently with a stationed or mobile manner in one of the following fields (Order 96-01, 1996, p. 04):

- The artistic crafts;
- The substance production crafts;
- The service crafts.

They are exercised individually, within a cooperative association of crafts, or within the crafts entrepreneurship.

Section two: Characteristics of the crafts:

According to Hanan (2021, pp. 21-22), the crafts are characterized with:

- The simple materials required for the business, as they need manual work with local materials.
- The low costs of the labor force.
- The individual work and the self-central decisions.

- This sector goes hand in hand with the tourism. The development of tourism develops the crafts. In this regard, 50% of the revenues of tourism come from crafts according to the World Tourism Organization because the tourist takes keepsakes with him when he leaves the visited country. Thus, the crafts boost the economy and improve the balance of payments through the hard currency.
- It is hard for the crafts to meet the international quality standards.
- The crafts rely on intensive labor force, more than the machines.
- The crafts reflect the heritage and are passed down from one generation to another (Mohamed, 2019, p. 112).
- The crafts are generally characterized with high flexibility and rapid change that help the fast response to new demands.
- The crafts require neither training on specific skills in the official institutes nor official education (Abdel Karim, 2017, p. 162).
- They employ various social categories, including women who can balance the housework with economic activity. Thus, they can manage small businesses thanks to governmental support that includes marketing and media support and fiscal facilitations (Mammo, 2021, p. 34).

Section three: the importance of the crafts:

- They widen the fiscal pot and make a new source of income for the budget.
- They create a complimentary industrial structure that can attract local and foreign investments.
- They create job vacancies, improve the living standards, and boost the economy.
- They support the economic, social, and political stationarity.

Thus, the crafts play an important role in the economic development through limiting poverty, meeting various social needs, and preserving the heritage (Mohin, 2019, p. 12).

Axis two: The conceptual frame of PME:

Section one: definition of PME:

These companies have various definitions:

1- Definition of the Algerian Legislator: Article 05 defines PME, regardless of their legal nature, as an independent company and/or services that employ from 01 to 250 workers, with a turnover that does not exceed 01 billion DZD. This definition implies (Law 17-02, 2017, pp. 5-6):

-The employees: The number of people that corresponds to the number of the annual working units, i.e., the number of permanent workers in one year. The temporary or seasonal work is part of the annual working units.

- The year considered for PME is one of the last closed accounting activities.

- **The considered limits to renew the turnover:** They are related to the last closed activity 12 months.

- **The independent companies:** Any company that does not own 25% or more of its capital is not a PME.

2. Definition of the World Bank: The World Bank relies on the number of workers in its definition. It seems that the micro companies are those with no more than 10 workers, the small ones are those with 10 to 50 workers, the middle ones are those with 50 to 100 workers, while those with more than 100 workers are big companies (Imen, 2021, p. 371).

3. Definition of the EU: It relies on the capital and number of workers to set the definitions. In this context, the small companies are those with 10 to 99 workers with a capital that does not exceed 9 million USD. On the other hand, the micro companies have less than 10 workers. Finally, the mid-companies have less than 250 workers with a turnover of less than 40 million euros (Fatma, 2014, p. 05).

4. The Japanese definition of PME: The 1963 law of PME, amended in 1999, is the constitution that ended the obstacles that face these companies and reduced the gap between them and the big companies. In Japan, PME is the basis of economic growth. They are defined as companies whose workers do not exceed 300 and whose turnover does not exceed 300 Million Japanese Yen (Abdelkader, 2017, p. 123).

5. Definition of the UN: In its study of the accountancy in PME, it relied on the labor force and size and found out there is no common definition for these companies. Thus, it divided them into (Al Said, 2021, p. 371):

- Micro companies: they employ 10 parts with simple activities and easy administration.
- Small companies: they are independent and employ 50 parts with a turnover of less than 07 million Euro and an annual budget of less than 05 million Euro.
- Mid-sized companies: they are independent and employ 250 parts with a turnover of less than 40 million Euro and an annual budget of less than 27 million Euro.

Section two: The characteristics of PME:

- They reduce unemployment.
- They are easily founded with small capitals.
- The decisions are independent.
- They encourage innovation and collective and individual initiatives.
- They achieve the economic development through satisfying the needs of consumers.

Nevertheless, these companies face some challenges (Naradda, 2019, p. 12):

- The low funding due to the risks.
- The weak use of modern techniques.
- The competition of the big companies.
- The changes in the consumers' tastes.

Axis three: entrepreneurship

Section one: definition of the entrepreneur:

Entrepreneurship refers to starting a business while the entrepreneur is the one who starts the business and takes the risks. According to Contillion, the entrepreneur is in the center of the industrial and commercial activity. Besides, he is the person who takes the risks resulting from the uncertainty of the environment. This means he faces hardships and can change his activity rapidly

in due time. Besides, J-B sees the entrepreneur as the person who manages and owns the business. He is the median between the various producers and the consumers. He manages the productive factors and works where other people cannot.

On the other hand, Schumpeter sees the entrepreneur as the innovative person who finds new syntheses of the production means, integrates new production methods, opens new markets, finds alternative funding sources, and describes a new organizational method. Thus, the entrepreneur is the innovator of all the needed goods and services (Abdelkader, 2021, p. 908). In addition, the EU defined entrepreneurship in 2003 as the ideas and methods that help create and develop an activity through integrating risks and innovation, and/or the creativity and efficiency in the management of a company. Furthermore, economists see entrepreneurship as any beneficial establishment to better understand economic growth. They set 04 roles for the entrepreneur in the economy, namely the risks, the innovation, the opportunity taking, and the coordination of the limited resources. The role of the entrepreneur is believed to be a rational behavior that aims at the maximum profit.

The entrepreneurship is the economic plan or the organized activity that is based on the repetition of activities professionally based on the design and management of the human administration and the other necessary equipment to achieve a commercial, crafts, or service goals (Saida, 2021, p. 279).

Section two: importance of the entrepreneurship:

According to (Ben Harrath, n.d., p. 175), the importance lies within:

- Achieving an economic growth through providing the various goods and services and, thus, self-sufficiency.
- Limiting the rural exodus.
- Contributing to the economic growth thanks to the flexibility and response to the rapid economic changes that may not be faced by the big companies.
- Maintaining the persistence of the competition in the markets and breaking the monopoly exercised by the big companies thanks to the innovative products of entrepreneurship.
- Upgrading the women because the entrepreneurship allows them to show their skills in management and opens horizons for them to contribute to the national economy.

Axis four: the strategy and obstacles facing the development of crafts through PME entrepreneurship:

Section one: the strategies:

Crafts play an important role in local development by providing jobs, meeting social needs, and developing the touristic sector. This can be achieved thanks to the entrepreneurship of PME using different strategies such as:

At the macroeconomic level:

- Surveying all the crafts in each region.
- Diagnosing the status-quo of the activities and their problems.

- Predicting the various needs of the crafts regarding the raw materials, machines, and labor force.
- Making fairs of the crafts and participating in the international fairs to promote for the goods and services.
- Establishing training institutes.
- Encouraging the crafts with the fiscal exemptions and incentives.
- Promoting the old heritage.
- Encouraging the local and external tourism.
- Setting training for the craftsmen on management.
- Improving the quality of the goods and marketing.
- Supporting and promoting the various associations of the field.
- Integrating the technological development to the crafts.
- Accompanying these industries with bodies that fund, habilitate, and train them.
- Setting a legal frame to develop the crafts.

At the microeconomic level:

- Integrating the technological development in the crafts.
- Marketing the products of the crafts inside and outside the state.
- Making the feasibility study about the crafts businesses.
- Innovating new products that include the modern and traditional characteristics.

Section two: the obstacles that face the investment in the crafts:

The main obstacles are (Abdelhakim, 2016, p. 140):

- The difficult funding with the equipments and raw materials.
- The weak financial and fiscal motivation.
- The problematic of marketing the traditional product that is related to the touristic sector.
- The difficulty of exporting the traditional product.
- The lack of studies and researches and the weak and low organizations.
- The organizational instability.
- The youth's refusal of working in the crafts.
- The lack of the vocational centers in the rural areas.

Axis five: measuring and analyzing the relation between PME and the crafts:

Section one: determining the variables:

The model variables are as follows:

- **The independent variable:** the development of the number of PME.
- **The dependent variable:** the number of the E-ART.

Section two: sources of data

We used annual data from 2002 to 2022 obtained from the crafts chamber in Adrar and the website of the Ministry of Industry and Mines. Table 01 describes the used data:

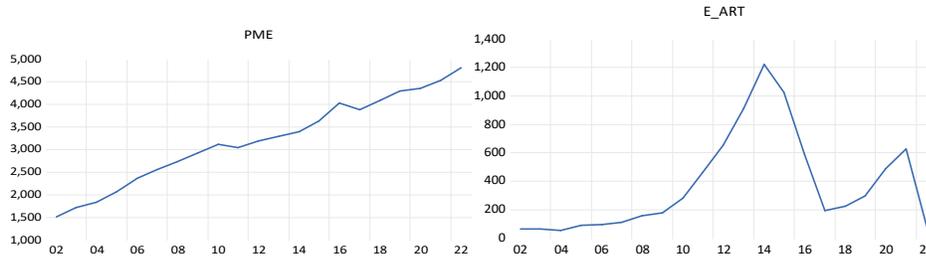
Table 01: description of the used data

	Average	Maximum value	Minimum value	Standard deviation	Views
E-ART	370	1220	53	362.742	21
PME	2985	4305	1508	848.867	21

Source: Made by the authors based on the outputs of Eviews.13

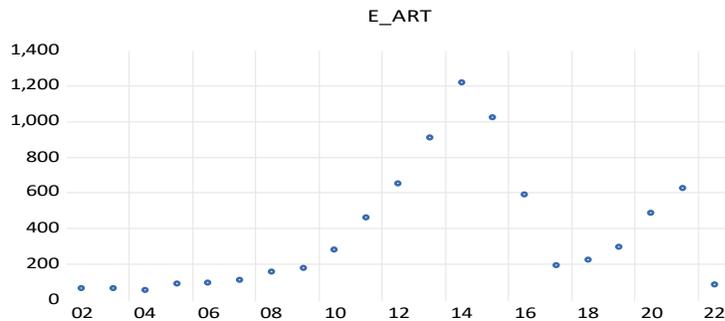
Figure 01 shows the graphical representation of the time series of the study variables

Figure 01: The graphical representation of the study data during 2002-2022



Source: Made by the authors based on the outputs of Eviews.13

Figure 02 shows the point representation of the relation between the variables in the model during 2002-2022.



Source: Made by the authors based on the data and the outputs of Eviews.13

The point representation helps formulate the relation between the two variables through the distribution of the points. If the distribution takes the form of a straight line equation, the relation is linear. On the other hand, if the distribution takes the form of equivalent parts, the relation is logarithm. The graphical representation shows we cannot know whether the relation is linear or not. Thus, we suppose it is linear.

Section three: Methodology of the study:

The study supposes that the number of E-ART is affected by the number of PME. To measure this effect, we take this formula:

$$E_ART = f(PME).....(01)$$

We shall study the stationarity of the time series used in the study and, then, make the cointegration test and estimate the model in the long and short terms. Besides, we shall make Granger causality between the study variables. We shall rely on the significance level 10%, 5%, and 1% regarding the statistical significance and the various tests. In addition, we shall use the econometric software Eviews.13.

Section four: the empirical results:

1. Test of the time series stationarity:

Before studying the cointegration between the study variables, we must make sure of the existence of a trend in the time series. According to the nature of the series growth, we can distinguish the stationed and non-stationed time series of the same trend. The main stationarity test through examining the unit root in all the variables include Dickey Fuller ADF and Phillips Perron PP. The series is stationed if one of the tests proves this. These two tests examine the null hypothesis that the variable includes the unit root and is non-stationed. Table 02 shows the results of the time series stationarity tests:

Table 02: Results of the unit root test using PP

Time series	Level			Difference 01		
	Just fixed	Fixed with one trend	Fixed without trend	Just fixed	Fixed with one trend	Fixed without trend
E-ART	0.4149	0.8318	0.2315	0.2357	0.4719	0.0283*
PME	0.7407	0.2460	1.0000	***0.0004	***0.0013	**0.0537

Source: Made by the authors based on the data and the outputs of Eviews.13

Table 03: Results of the unit root test using ADF

Time series	Level			Difference 01		
	Just fixed	Fixed with one trend	Fixed without trend	Just fixed	Fixed with one trend	Fixed without trend
E-ART	0.1687	0.9809	0.3070	0.0668	0.1196	0.0045***
PME	0.8462	0.2184	1.0000	***0.0006	***0.0037	0.4276

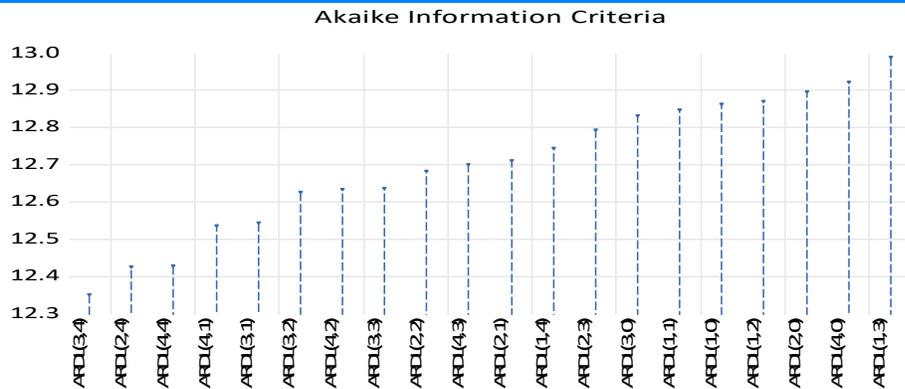
Source: Made by the authors based on the data and the outputs of Eviews.13

Tables 02 and 03 show that the results of the variables are not stationed at level (0). However, in difference 01, the variables are stationed (just fixed, fixed with trend, and fixed with no trend). Thus, after treating the data considering the difference 01, the study variables are stationed and have no problems with the unit root.

2. Cointegration test using ARDL:

2.1 Determining the suitable lag period:

Figure 03: Results of testing the optimal periods according to AIC:



Source: Made by the authors based on the data and the outputs of Eviews.13

The figure shows that the best model according to AIC is ARDL (4, 3) for E-ART and PME, respectively.

2.2 Results of the bounds method test:

Testing the existence of a long-term relation between the dependent and independent variables using the bounds method takes place by comparing the statistic value of the calculated F to the maximum and minimum bounds. If the value of the calculated F is higher than the maximum bound of the critical values, we accept the alternative hypothesis that states that there is a long-term balance relationship. Besides, if the value of the calculated F is less than the minimum bound, we accept the null hypothesis that states there is neither a long-term balance relation nor a cointegration between the study variables. If the value of the calculated F is between the value of the minimum bound and the value of the maximum bound of the table F value, the results shall not be determined. This means the inability to take decision about the existence of a cointegration between the variables. Table 04 shows the bounds method:

Table 04: The results of the bounds method

ARDL Bounds Test		
Test Statistic	Value	K
F-statistic	7.548012	1
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	3.303	3.797
5%	4.090	4.663
1%	6.027	6.760

Source: Made by the authors based on the data and the outputs of Eviews.13

Table 04 shows the results of the cointegration test using the bound test. Findings show that the calculated value of F-statistic is higher than the maximum bound at significance levels 5%, 10%, 1%, and 2.5%. Thus, we accept the null hypothesis that states there is no cointegration between the variables, and we accept the alternative hypothesis that says there is a long term balance relation between the variables.

3. Results of estimating the Unrestricted Error Correction Model UCEM:

We shall estimate the effect of the development of the number of PME on the number of E-ART using UCEM. The results are shown in table 05:

Table 05: the results of estimating UCEM

Dependent Variable: PME				
Method: ARDL				
Date: 10/24/23 Time: 15:57				
Sample: 2006 2022				
Included observations: 17				
Dependent lags: 4 (Automatic)				
Automatic-lag linear regressors (4 max. lags): E_ART				
Deterministics: Restricted constant and no trend (Case 2)				
Model selection method: Akaike info criterion (AIC)				
Number of models evaluated: 20				
Selected model: ARDL(3,4)				
Prob.*	t-Statistic	Std. Error	Coefficient	Variable
0.4774	0.745322	0.267054	0.199042	PME(-1)
0.2770	1.166589	0.271622	0.316871	PME(-2)
0.2293	1.301579	0.287258	0.373889	PME(-3)
0.0244	-2.766865	0.155576	-0.430458	E_ART
0.5548	0.616375	0.394751	0.243315	E_ART(-1)
0.2354	1.283146	0.483737	0.620705	E_ART(-2)
0.0524	-2.276189	0.401654	-0.914240	E_ART(-3)
0.0816	1.991369	0.242147	0.482205	E_ART(-4)
0.0040	3.984395	176.6663	703.9084	C
3547.529	Mean dependent var	0.990684	R-squared	
731.3315	S.D. dependent var	0.981368	Adjusted R-squared	
12.34976	Akaike info criterion	99.82493	S.E. of regression	
12.79088	Schwarz criterion	79720.13	Sum squared resid	
12.39361	Hannan-Quinn criter.	-95.97300	Log likelihood	
2.282331	Durbin-Watson stat	106.3447	F-statistic	
		0.000000	Prob(F-statistic)	

Source: Made by the authors based on the data and the outputs of Eviews.13

The following lines show the evaluation of UECM results:

3.1 The statistical criteria:

Table 05 shows the quality of the model because the value of the determination coefficient is 0.9906. It shows that the number of PME interprets 92% of the changes in the number of E-ART. Besides, the value of F-statistic of the model significance equals 106.3447. It is significant at significance level less than 1%. Moreover, there is a reverse significant relation between PME and E-ART at significance level 10% with lag periods (1, 4) for PME at significance level 5%.

3.2 The measuring criteria:

Table 06 shows the results of the measuring tests of the study model.

Table 06: the results of the measuring tests of the study model

Test	Statistic	Value	Probability
Breusch-Godfrey	F-statistic	0.910706	0.4514
Serial Correlation	Chi-Square	3.958877	0.1381
Jarque-Bera	Jarque-Bera	0.294015	0.863288
Heteroskedasticity test: Breusch-Pagan-Godfrey	F-statistic	1.312543	0.3548
	Chi-Square	9.648786	0.2905
Ramsey RESET test	t-statistic	1.092848	0.3106
	F-statistic	1.194317	0.3106

Source: Made by the authors based on the data and the outputs of Eviews.13

Breusch-Godfrey test shows that $\text{prob} = 0.4514 > 0.1$. Thus, the calculated value is less than the table value. Therefore, we accept the null hypothesis that states there is no problem of cointegration in the model. As for the natural distribution of the random errors, the value of Jarque –Bera statistic is 0.294015 with a probability of 0.8632; it is more than the significance level 5%. Therefore, we accept the null hypothesis and say that the random errors are naturally distributed. In addition, results of Breusch-Pagan-Godfrey test show that the probability is 0.3548; it is more than the significance levels 1%, 5%, and 10%. Therefore, we can say that the model does not have problems of different variance. As for Ramsey test, results show that the probability of F-statistic is 0.3106 and is more than 0.05. This confirms the validity and correspondence of the functional shape used in the estimation.

4. Results of the Error Correction Model and the long-term balance:

4.1 The short-term balance:

Table 07 shows that the change in PME has a significant effect on E-ART in the short-term. The parameter of the short-term shows that the increase of the number of PME with 100 leads to the loss of 40 units of E-ART. In other words, the increase of the PME affects the E-ART negatively. This effect is significant and increases with time and, thus, we can say that there is a reverse relation between the number of E-ART and PME in the short-term. Besides, the Error Correction Model results show that the coefficient of the error correction bound lag reveals the speed of the return of the number of E-ART towards its balance value in the long-term. In this

context, the rate of the misbalance from t-1 is 0.57 in each period; it is an acceptable modification coefficient. In other words, when the number of E-ART deviates in the short-term period in t-1 from its balance value in the long-term, around 57% of the balance is corrected in t until reaching the balance in the long-term. The significance of the error bound coefficient at significance level 1% shows a cointegration between E-ART and PME.

Table 07: The results of the ECM and the long-term balance:

Conditional Error Correction Regression				
Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0040	3.984395	176.6663	703.9084	C
0.0649	-2.138820	0.051523	-0.110199	PME(-1)*
0.9922	0.010079	0.151505	0.001527	E_ART(-1)
0.0295	-2.645671	0.261091	-0.690760	D(PME(-1))
0.2293	-1.301579	0.287258	-0.373889	D(PME(-2))
0.0244	-2.766865	0.155576	-0.430458	D(E_ART)
0.4779	-0.744433	0.253441	-0.188670	D(E_ART(-1))
0.1432	1.623096	0.266180	0.432035	D(E_ART(-2))
0.0816	-1.991369	0.242147	-0.482205	D(E_ART(-3))

Levels Equation				
Case 2: Restricted Constant and No Trend				
Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.9922	0.010107	1.370995	0.013857	E_ART
0.0151	3.079814	2074.032	6387.631	C

$$EC = PME - (0.0139 * E_ART + 6387.6310)$$

Source: Made by the authors based on the data and the outputs of Eviews.13

4.2 The long-term relation:

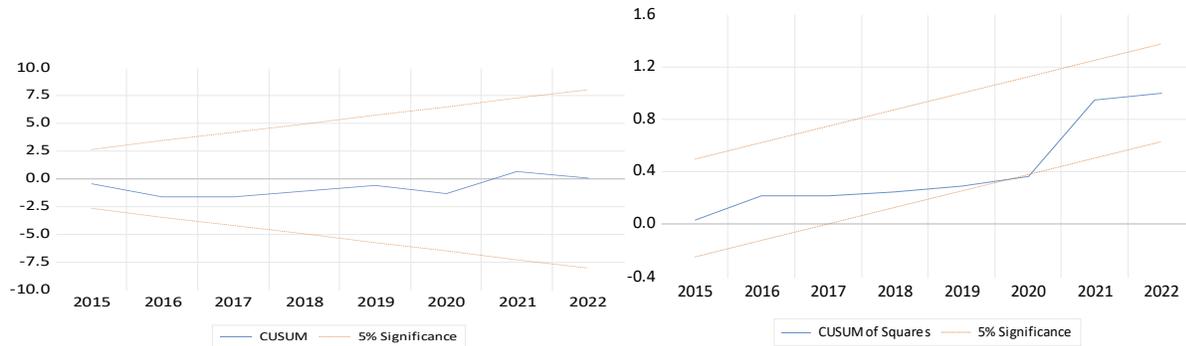
The results of the long-term in the light of ARDL show that the number of PME has no significant effect on the number of E-ART in the long-term. Thus, we can suppose the existence of other factors, not included in the model, that affect the number of E-ART. Besides, the results show that the activities of PME do not affect the persistence of E-ART.

5. Test of the structural stationarity of ARDL-ECM:

To make sure of the absence of structural changes in the study data, we use CUSUM and CUSUM of squares. The structural stationarity of the coefficients of the error correction of ARDL

takes place if the graphic of CUSUM and CUSUM of squares is inside the critical bounds at significance level 5%. We conducted the two tests suggested by Dublin, Brown, & Evans (1975).

Figure 04: The graphical representation of CUSUM and CUSUM of squares



Source: Made by the authors based on the data and the outputs of Eviews.13

6. Results of Granger causality test:

To examine which variable affects the other and know whether the number of E-ART explains the changes in the number of PME, and vice versa, we determine the suitable lag degree. Table 08 shows the lag degrees from 0 to 3.

Table 08: the results of the suitable lag degrees according to AIC

Specification	HQ	BIC	AIC*	LogL	Model
ARDL(3,4)	12.393612	12.790878	12.349765	-95.972999	6
ARDL(2,4)	12.463170	12.816295	12.424194	-97.605651	11
ARDL(4,4)	12.476170	12.917576	12.427450	-95.633327	1
ARDL(4,1)	12.570131	12.879116	12.536028	-99.556236	4
ARDL(3,1)	12.572378	12.837221	12.543146	-100.616740	9
ARDL(3,2)	12.659032	12.968016	12.624928	-100.311890	8
ARDL(4,2)	12.672962	13.026086	12.633986	-99.388882	3
ARDL(3,3)	12.673683	13.026808	12.634708	-99.395015	7
ARDL(2,2)	12.711554	12.976398	12.682323	-101.799742	13
ARDL(4,3)	12.743979	13.141245	12.700132	-98.951121	2
ARDL(2,1)	12.735539	12.956242	12.711179	-103.045022	14
ARDL(1,4)	12.777427	13.086411	12.743323	-101.318248	16
ARDL(2,3)	12.827465	13.136449	12.793361	-101.743571	12
ARDL(3,0)	12.855112	13.075815	12.830752	-104.061390	10
ARDL(1,1)	12.867013	13.043576	12.847525	-105.203966	19
ARDL(1,0)	12.877173	13.009595	12.862558	-106.331740	20
ARDL(1,2)	12.894896	13.115599	12.870537	-104.399560	18
ARDL(2,0)	12.914633	13.091195	12.895145	-105.608734	15
ARDL(4,0)	12.950144	13.214988	12.920913	-103.827758	5
ARDL(1,3)	13.017281	13.282124	12.988049	-104.398418	17

Source: Made by the authors based on the data and the outputs of Eviews.13

The suitable lag degree for the minimal values according to all the criteria in the range 0-4 is 3. The result of Granger causality between PME and E-ART with two lag degrees was as follows:

Table 09: Granger causality test:

Prob.	F-Statistic	Obs	Null Hypothesis:
0.7831	0.24885	19	E_ART does not Granger Cause PME
0.2936	1.33928		PME does not Granger Cause E_ART

Source: Made by the authors based on the data and the outputs of Eviews.13

The results of estimating the short-term causality relation show that F-statistic is 0.24885 with a probability of 0.7831. Thus, we refuse the hypothesis that says that the change in the number of E-ART causes the changes in the number of PME. As for the hypothesis of the existence of a causal relation from the number of PME towards the number of E-ART, results show that the change in the number of PME causes changes in the number of E-ART. In this context, F-statistic is 1.33928 with a probability of 0.2936. Therefore, there is no causal relation in one trend from the number of E-ART towards the number of PME.

Conclusion:

The crafts are a means of exchanging the cultures. They contribute to the local development through the various products such as the house utensils, clothes, and foods. These industries need establishing PME in the light of the entrepreneurship that is necessary for all the world economies because it contributes to the economic diversity and the self-sufficiency. Upon this study, we found out that:

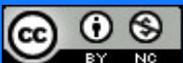
- The crafts are a bridge between the civilizations and cultures.
- The touristic sector relies son crafts.
- There is a criterion between the PME and E-ART because of their similarities regarding the characteristics and goals that include the creation of jobs and satisfaction of the human needs.

Besides the empirical findings of the study can be summed up saying:

- The results of analyzing the stationarity of the time-series of the study variables show that the variables are stationoned with no problem of the unit root at difference 01 according to PP and ADF tests.3
- There is cointegration between the two variables using the bound test according to ARDL as the value of the calculated F is more than the maximum bound at significance levels 1%, 2.45%, 5%, and 10%.
- Granger causality test shows a causal relation between the two variables because the change in the number of PME makes a change in the number of E-ART.

Bibliography list:

1. Telkhoukh S (2021), **accompanying the female entrepreneurship in Algeria: case study of the National Agency of Supporting and Employing the Youth (ANSEJ) and the National Fund of Insurance from Unemployment (CNAC)**, journal of the forum for economic studies and researches, Vol. 05, No° 01.
2. Fatm A (2021), **the reality of entrepreneurship and small and middle-sized companies in Algeria: case study of the companies funded by ANSEJ**, journal of business management and the economic studies, Vol. 07, no° 01.
3. Maatoub A, Mechri I (March 2021), **the reality of the contribution of funding and approval in supporting the establishment and development of small and middle-sized companies: case study of the center of support and consultation for the small and middle-sized companies in Khenchlea**, economic integration journal, Vol. 09, No°. 01.
4. Chenchouna M, Rahal F (2014), **the role of the entrepreneurial accompaniment in supporting the establishment of the micro companies: case study of ANSEJ of Medea**, journal of banking financial economies and business management, Vol. 03, No°. 01.
5. Boutabl A (2017), **the role of ANSEJ in funding the small and middle-sized companies in Algeria: case study of some companies in the city of Mascara**, Motoun journal, University of Saida.
6. Law 17-02 of 10 January 2017 on the guiding law for the development of the small companies.
7. Bourenaz H, Berjam H (2021), **the role of the fair in evaluating the crafts: case study at the crafts chamber**, Annaba, journal of the strategy of the financial and economic investigations, Vol. 03, No°. 01.
8. Ben Kettaf M, Ben Hamouda M (2019), **the crafts chambers and the promotion for the Algerian crafts products**, journal of studies in economics, trade, and finance, laboratory of the crafts at the University of Algiers 03, Vol. 08, No° 01.
9. Karmia A, Al Moumen A (2017), **the crafts companies and their role in the local development: Biskra as a model**, economic development journal, University of El Oued, Algeria, No°. 3.
10. Zirek Sawsen, Ben Harrath, **female entrepreneurship in the sector of crafts: presenting the Moroccan experience**, journal of finance and markets.
11. Chahed A, Ben Laamoudi J (2016), **the strategic importance of the Saharan tourism in supporting the crafts sector in the South: knitting in the region of Tougourt as a model**, journal of the economic development, University of el Oued, Algeria, No. 01.
12. Mohsin, S, Md, Nazirul I S , Liu J, (2019), **Social Network of Creative Firms and Its Effects on Innovation in Developing Countries**, Center for Trans-Himalaya Studies, Leshan Normal University, Sichuan, China.
13. Naradda Gamage, S, K, (2019), **Global Challenges and Survival Strategies of the SMES in the Era of Economic Globalization: A Systematic Review**, Munich Personal RePEc Archive, Faculty of Social Sciences and Humanities, Rajarata University of Sri Lanka,



14. Oluwayemisi A, A, Mammo, M, (2020), *Handicraft small enterprises as an instrument for rural economic growth and poverty eradication*, Problems and Perspectives in Management, Volume 18, Issue 4.