

The Effect of National Export Promotion Programs on Export Performance with the Mediating Role of Marketing Planning Capability: An Empirical Study on Exporting Companies in Algeria

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Abstract:

The objective of this study is to analyze the effect of national export-promotion programs (NEPPs) on the export performance (EXP). This study used the resourcebased view (RBV) and the Institutional-based view (IBV) theory to provide a holistic understanding of the issue. we developed model include the NEPPs as an independent variable, EXP as dependent variable, and the Marketing planning capabilities (MPC) as an intermediary variable. the study tests the direct and the indirect effect for the model variables Using a partial least-squares equation model (PLS SEM) method to analyze 47 samples collected from 2022 randomly by accessing Algerian's export managers in the Algerian's food industry companies. The results confirm and show the significant direct and indirect effects of Financial aid–related national export promotion program on the export performance, and the indirect effect of Information-related national export promotion program on the export performance through the Marketing planning capabilities.

Key words:

National export promotion program (NEPPs), Export performance (EXP), Marketing planning capability (MPC), Resource based view (RBV), Institutional-based view (IBV). **JEL Classification Codes:** M160, F23, L250, C120

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Introduction:

Many companies usually manufacture at home and choose the export method as a mechanism to serve their foreign markets, typically exporting is the best market entry method of choice. (Schlegelmilch, 2016), The fundamental reason for exporting in most companies is to make money. Usually a mixture of factors results is pushing or pulling companies to foreign markets. They are differentiated into proactive and reactive motives. Proactive motives represent stimuli to attempt strategy change, based on the company's interest in exploiting unique competences (e.g. a special technological knowledge) or market possibilities. Reactive motives indicate that the companies react to pressures or threats in its home market and adjusts passively to them by changing its activities over time (Hollensen, 2014) The risk is usually low in this entry mode because the exporter does not required making any large financial commitments in export operation and there are many benefits of internationalization through export that the company can avail like a production location of the exporter remains in the home ,the export can achieves economies of scale which eventually help in increasing profit volume through reduced cost of production, take advantage of its existing home country facilities and gets encouragement from home government through various policy decisions (Gautam, 2016). The increasing opportunities in the global market are usually accompanied by increasing and tough competition this has also meant that most companies need huge resources to continually develop their products, services and the ways of doing foreign business, also the customer focus and identifying and exploiting appropriate market segments in order to meet the intensified competition in the export markets. (Gerald Albaum, 2011) entry barriers are more costly for companies represented in entry barriers, the customs barriers (tariff and non-tariffs) customs procedures and government regulations of business, capability to access achieve manufacturing technology and processes transportation costs are obvious obstacles to entry into the foreign countries and usually are making the export process more costly and complicated (Johansson, 2009). The companies are looking for more resources to face the obstacles of internationalization and entry barriers to foreign markets, may national export promotion program are among the best options to achieve their export goals. the resource constraints mean companies must prioritize their options by planning to make the right step and moving forward in the foreign market to operating in countries that offer the greatest return with the least risk. (John D. Daniels, 2015). In other hand the importance of export is not limited to companies only, but rather extends to the overall aspect of the economy, the exports are among the main factors in



economic growth, and their impact varies from country to country. (GITANA DUDZEVIČIŪTĖ, 2017) A number of studies have identified In particular the export growth increases investment in the home countries and bring to it a comparative advantage, also an increase in exports usually increasing national output and raising the rate of economic growth. the exportation is an important resource to inflows of foreign exchange, and permits the expansion of imports of services and capital goods to the home country, which are important in increasing productivity and economic growth in general. (Athanasia Stylianou Kalaitzi, 2020). Given the great importance of the exports for companies and countries alike, many countries have developed national programs to promote exports in order to support their local companies in the foreign markets and to push them forward to enhance their international entrepreneurial initiatives and expand internationally successfully. (Alexis Catanzaro, 2020) The current author's common definition of national export promotion programs includes those governmental schemes, or actions, or financial and non-financial subsidies, which promote and help firms to enter foreign markets (Coudounaris, 2012). Many researchers are interested in the effectiveness of national export promotion program as a decisive factor for the company's success in the international market and improving its export performance (Leonidas C. Leonidou, 2014) those researchers concerned differ in terms of the nature of the variables, and theories that explain the models, and they are not unanimous regarding the effectiveness of these programs on export performance, and the empirical results are inconclusive or contradictory (Alexis Catanzaro, 2020) These conflicting results in previous studies require us to further research the subject, by examining the direct and indirect effects between national export promotion program and export performance. (Leonidas C. Leonidou, 2014) (Alexis Catanzaro, 2020) As many previous studies indicate that there is a research gap on the subject, especially in developing countries, (Mohamed Yacine Haddoud, 2018) so we suggested that we fill part of this research gap by studying the subject where we adopted the resource-based view theory, which says that the national export promotion programs are complementary to the company's capabilities and resources which has been proven by many researchers such as (Leonidas C. Leonidou D. P., 2011).

Based on a resource based view, this study develops an integrative model highlighting the mediation's role played by planning capabilities between national export promotion programs and export performance for the Algerian's food industry companies.



Overall, the purpose of this study is, firstly, to determine and explain the role of the national export promotion programs on the companies planning capabilities and export performance, secondly, As the study is set in an Algerian context the results add value on the theoretical and empirical knowledge on the effectiveness of national export promotion programs and export performance in developing countries in general.

Theoretical Background and Research Framework

This study draws upon a dual-approach, the first one is the resource-based view theory (RBV) this theory considers that resources and capabilities are the main drivers of companies in the market, and that owning and controlling strategic assets enables companies to achieve competitive advantage and profits in the market. (Jieke Chen, 2016) Key strategic resources can be sources of strategic competitive advantage if they are scarce, difficult to imitate, non-substitutable, and value (Barney, 1991) Resources are defined as stocks of knowledge, physical assets, human capital, and other tangible and intangible factors owned or controlled (Juan Manuel Ramon-Jeronimo, 2019) Many researchers adopt the resource based view theory as a driver for the company's export performance. Jieke Chen, Carlos Souza and Xinming He conducted a study on the research's conducted on this topic during the period from 2006 to 2014 and found the following results: Among the 124 reviewed studies, 15 papers do not provide information about the underlying theories. The remaining 109 papers consider 41 theories (or paradigms), the most widely used being the resource-based view (RBV) (50 studies) (Jieke Chen, 2016) However, we consider that the export performance is not only determined by company's resource, but also influenced by the external market and environmental forces which it faces in the home country (Peng, 2008) which the environmental factors in the home country can play an important role in the company's success or failure in the foreign market (Altun, 2017) so the institutional-based view (IBV) focus the importance of institutional environment, and suggests that institutional forces shape companies' strategic decisions and determine their export performance (Jieke Chen, 2016) and the strategic choice that companies make is inherently affected by the formal and informal constraints of a given institutional framework (PENG, 2002) Particularly relevant to studying national export promotion programs, the IBV theory provides a strong theoretical background to explain the enhancing role of institutional interactions on companies' export performance , Thus far, it has been well acknowledged that national export promotion programs give hand to companies in improving both internal and external resources to work together (Mohamed Yacine Haddoud, 2018)



Given the capabilities and limitations of both views, the integration of multiple theories provides a better explanation and interpretation of the export performance of companies, it can be seen that by integrating IBV and RBV, the complex and changeable relationships between companies and institutions can be captured, and a better explanation of the export performance (Lipuma, 2013) As such, we posit that while export performance is contingent on firm-specific capabilities, home-country institutions will exert an indirect influence by affecting companies probability to enter to foreign markets. (Krammer, 2017) so supposed the RBV needs the IBV in accompaniment for success (Mark William Cawman, 2020)and this is the starting point of this study.

1. Literature review and hypothesis:

National export promotion programs and export performance

The new international trade environment as well as downtums and the increasing competition in the world have prompted several countries to establish trade policies. To do so, the National export Promotion Programs have been designed to assist companies to better export performance, (Spence, 1999) Enhancing export performance is crucial for developing countries-based companies that view the global marketplace as a means to ensure growth (Jalali, 2012) These NEPPs may be addressed to either national companies or foreign companies producing locally (Seringhaus, 1991) the NEPPs are important governmental tools that motivate companies to consider exporting and to achieve better export performance, (Valeska V. Geldres-Weiss, 2016) Since a large financial budget in the form of different promotional programs are provided by governments in developing countries to facilitate international expansion and improve export performance, it is important to understand through which mechanisms such national export promotion programs might impact of internationalization (Angulo-Ruiz, 2018) The domain of NEPPs includes giving export information and advice, marketing support, financial support and guarantees, and promotional activities abroad (Imiru, 2021) These support services are divided into a group of sections, which are information, operational and financial support (Leonidas C. Leonidou D. P., 2011) NEPPs are therefore designee to overcome some of constraints, such as shortages of



informational and financial resources, when these companies are faced with the opportunity or the need to expand internationally. (Spence, 1999), In this study, we distinguish two types of supports services provided by National Export Promotion Programs, Financial aid–related national export promotion programs (Fa.NEPPs) and Information-related National export promotion programs (Inf.NEPPs).

Exportation involves new costs to the companies including researching overseas target markets, adapting products and packaging, transportation costs, additional taxes, and so on. the easy way to access to financial resource facilitates the foreign business and ultimately a good export performance. (Imiru, 2021). there are multiple various Fa. NEPPs for exporters can assist them by lessening the financial pressures. For instance, export credit guarantees against high political/commercial risk in a specific foreign market, preferential loans to exporters at low interest rates and/or credit quotas for selected countries, as well as assist the movement of funds across countries, some countries also offer a foreign exchange retention scheme, undertakes to compensate the exporter with part of the taxes paid in connection with the production or sales of products that are oriented to foreign markets. (Leonidas C. Leonidou S. S., 2014) Numerous previous studies have shown that Companies with a low level of adoption of the Fa. NEPPs are constrained in deploying their resources in order to transform export marketing strategy into realized actions. Access to financial resource amplifies the complementary effect of entrepreneurial and market orientations on the success of export.(Joana Ribeiro, 2020)

H1: Financial aid–related national export promotion programs have a direct effect on marketing planning capabilities (a), export performance (b)

Inf.NEPPs, provided by NEPPs include: conferences, seminars, meetings, foreign language support, training sessions providing market information about specific foreign markets and their related risks, foreign market opportunities, market studies and knowledge about specific needs of customers abroad, export practices, and detailed documentation (Alexis Catanzaro, 2020) generally ,The information support programs



could provide companies with the necessary information to keep expanding abroad, help them understand the requirements of their target export markets and monitor changes of international business environment to achieve better export performances (Xiaoting WANG, 2017) With the assistance of the Inf.NEPPs, managers get a better understanding of resource demands regarding target foreign market, which contribute to configuration of organizational resources for implementing decisions with effectiveness and efficiency (Xiaoting WANG, 2017)

H2: Information-related National export promotion programs have a direct effect on marketing planning capabilities (a), export performance (b)

Despite the great importance provided by NEPPs and their impact on export performance, there are some conflicting results in previous studies on this topic. (Valeska V. Geldres-Weiss, 2016) This contradiction in results may be due to differences between the quality or the volume of NEPPs from one country to another, in the other hand Since export promotion programs goals are usually measured in terms of the international companies' capabilities and their export performances, so the national NEPPs effectiveness should be directly positively associated with both the marketing planning capability and export performance. Hence, we expect that:

H3: marketing planning capabilities have a direct effect on export performance

Mediating role of Marketing planning capabilities

The NEPPs are an external resource to improve the company's performance, It can be achieved by improving the capacities, resources, knowledge, experience, strategies of the companies, and it general capabilities, which in turn, positively influences export performance (Jorge Mota, 2021), The NEPPs affect the level of commitment and development of export-related resources of export companies (Malca. O, 2019) thus the NEPPs complement managers' information and knowledge capabilities by providing managers with relevant export information and experience, making them aware about the opportunities and challenges in the foreign markets to achieve a high export performance, (Revti Raman Sharma, 2018) some researchers consider that export



capabilities or any form of strategic capabilities such as planning or organizing have a beneficial effect on export performance. (Jalali, 2012), Planning becomes especially relevant for complex business operations with ambiguous inputs and outputs (Shahin Assadinia, 2019), capabilities are complex bundles of skills and knowledge embedded in companies processes, where marketing capabilities can be included (Samuel Afriyiea, 2018) marketing capabilities are very important to the export companies, in its absence, the companies cannot convert resources into offers in the foreign market (Imiru, 2021) the previous studies suggest that the effective implementation of marketing planning is a key driver of companies performance (Neil A. Morgan & Constantine S. Katsikeas, 2011) Previous studies examined the mediating role played by "marketing implementation Capability (Imiru, 2021) Export marketing strategy (Leonidas C. Leonidou D. P., 2011)" between NEPPs and export performance.

H4: Marketing planning capabilities mediates the effect of Fa.NEPPs (a), Inf.NEPPs (b) on export performance

Based on the aforementioned information, we view national Export Promotion Programs as supplying companies with external resources; the companies then use this resource to raise and develop their planning capabilities. The outcome of such resources and capabilities utilization will elevate the level of the export performance. Figure 1 depicts the proposed research model. It shows how National Export Promotion Programs increase companies' planning capabilities and also that increases the export performance.

The definitions of the key variables and relationships among the variables will be discussed in the next section.



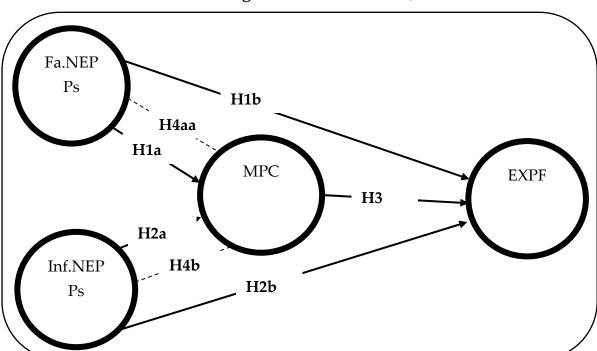


Figure 1. Research model;

Source: Author

Note: Inf.NEPPs refers to Information-related National export promotion programs, Fa.NEPPs Financial aid–related national export promotion programs, MPC refers to Marketing planning capability, EXPF refers to export performance

2. Research methodology:

To test the research model in an empirical manner, we employed partial leastsquares structural equation modelling (PLS SEM) by used (Smart pls 3), as a method for structural equation modeling that allows estimation of complex effect relationships in path models with multivariable. (Joseph F Hair, 2017)

Data collection

The data were collected using an online survey, as majority of the previous studies used mail surveys for data collection (Sousa, 2004), this was distributed to a sample of a group of exporting food industry companies through the export department manager, following the simple random sampling method, through the database of the National Trade Promotion Agency. from a total of 251 export companies, the response rate was considered representative, as 47 of the 251 questionnaires sent were answered, i.e. a response rate of 19%. the food industry export sector chosen to include all companies



(whatever the size) that likely to seek assistance from government organizations during their export activities.

measures

To measure the variables of the model, we distributed a survey consisting of 14 questions divided into five variables, and the answer is through a five-point Likert scale, where previous studies were used to determine the expressions of each items as shown in the table below

we used the subjective indicators to measure the company's export performance, the subjective indicators are based on perceptual values (e.g. the manager's perception of success and satisfaction with export sales). the indicators that we have been using are composite and multidimensional, have a frame of reference, i.e. to be benchmarked against domestic market performance, competitor's performance or prior performance, assessable over time, i.e. expressed in absolute, as well as relative terms. (Beleska-Spasova, 2014). The reason for choosing subjective indicators is due to the difficulty in obtaining quantitative information about the number of turnover achieved in foreign markets achieved by Algerian companies.

As for the use of Export Promotion Programs, this study focuses on the financial and information-aid of National Export Promotion Programs. The financial aid of national Export Promotion Programs included here are, namely, export credit guarantees, export loans, direct subsidy on exporting (Xiaoting WANG, 2017). the information aid of national export promotion programs included here are about the information about foreign market opportunities, provision of marketing information/advice, Organization of export seminars/conferences (Leonidas C. Leonidou D. P., 2011)

Table 1. Measurement items.

Please rate your firm's marketing planning capabilities, and export performance relative to your major competitors (in this export market) in the following areas: fivepoint scale running 1 (Much Worse than Competitors) to 5 (Much Better than Competitors).



Measurement Variables (Abbreviations)	Items	Reference		
Financial aid–related national export promotion	Q1 Export credit guarantees	(Xiaoting WANG, — 2017)		
programs	Q2 Export loans			
Fa.NEPPs	Q3 Direct subsidy on exporting	_		
Information-related National export promotion	Q4 Information about foreign market opportunities	(Leonidas C. – Leonidou D. P.,		
programs	Q5 Provision of marketing information/advice	2011)		
Inf.NEPPs	Q6 Organization of export seminars/conferences	_		
Marketing planning capabilities	Q7 Export marketing planning skills	(Neil A. Morgan & – Constantine S.		
MPC	Q8 Formulating creative export marketing strategies	— Constantine S. Katsikeas, 2011)		
	Q9 The ability to identify potential market	_		
Export performance	rmance Q10 Export sales growth			
EXPF	Q11 Export intensity growth	— 2014)		
	Q12 New consumers acquisition	_		

Source: Xiaoting WANG, 2017, Leonidas C. Leonidou D. P., 2011, Neil A. Morgan & Constantine S. Katsikeas, 2011, Beleska-Spasova, 2014

Sample characteristics

The study returned 47 completed and usable survey. This is considered representative since it represents around 18,9 % of the total population of food industry existing exporters in Algeria (251). The characteristics of the sample are presented in Table II.

Table II: companies' characteristics

Characteristics	frequency	%
Companies' size (employees)		
1 - 9	18	38.3 %
10 - 49	5	10.6 %
50 - 250	9	19.1 %
251 - 500	7	14.9 %
More than 500	8	17 %

Companies' export experience (year)



1-5	16	34 %
5 - 10	9	19,1 %
10-15	15	31,9 %
15 - 20	4	8,5 %
More than 20	3	6,4 %

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Source: survey output

The table II shows that around 38.3 % employed between 1 and 9 employees, 10.6 % employed between 10 and 49 employees 19.1 % employed between 50 and 250 employees, 14.9 % employed between 251 and 500 employees, 17 % employed more than 500 employees

As for companies' export experience, the table II shows that 34% of companies have between 1 to 5 years' export experience, 19.1% between 5 to 10 years, 31,9% between 10 to 15, 08.5% between 15 to 20, 06.4% more than 20 years of export experience.

3 Result and findings:

The evaluation of the model

The evaluation of measurement model had been testing by two stages, the first stage is the Model estimation (evaluation reflective measurement Model), and the second stage is the (evaluation of the Structural Model), Model estimation delivers empirical measures of the relationships between the indicators and the constructs (measurement models), as well as between the constructs (structural model). (Joseph F Hair, 2017)

Evaluation reflective measurement Model

The results report for reflective measurement model assessment are doing by three steps:

The first step is **The Internal Consistency Reliability test** includes Cronbach's Alpha (A) test and Composite Reliability (CR), the second step is **The convergent validity test**, so to evaluate convergent validity of reflective constructs, we consider the outer loadings of the indicators and the average variance extracted, the third step is **The**



Discriminant validity test, the best method to evaluate Discriminant validity is by use the cross-loadings test, The Fornell-Larcker criterion test, and the heterotrait-monotrait ratio (HTMT) of the correlations test. (Joseph F Hair, 2017)

The Internal Consistency Reliability test

To evaluation reflective measurement model at first order level, we tested the Internal Consistency Reliability and the convergent validity test following the PLS approach was conducted. (Joseph F Hair, 2017)

To check the Internal Consistency Reliability of all indicators, we used Cronbach's alpha and CR test. Cronbach's alpha is a commonly used index for measuring internal consistency reliability, (Todd C. Headrick, 2013) with acceptable value above 0.70. (Imiru, 2021) for CR value varies between 0 and 1, with higher values indicating higher levels of reliability, values between 0.70 and 0.90 can be regarded as satisfactory. Values above 0.95 are not desirable (Joseph F Hair, 2017). Table III shows that all indicators of the Cronbach's alpha and CR test posit acceptable values exceeding the cut-off thresholds, (A: Fa. NEPPs 0.864, Inf.NEPPs 0.904, MPC 0.921, EXPF 0.902), (CR: Fa. NEPPs 0.917, Inf.NEPPs 0.939, MPC 0.950, EXPF 0.937)

The convergent validity test

To evaluate convergent validity of reflective constructs, we consider the outer loadings of the indicators and the average variance extracted (AVE). a common rule of thumb is that the outer loadings should be 0.708 or higher, and the AVE should be 0.50 or higher (Eijaz Ahmed Khan, 2016). The results suggest in the table III that all constructs satisfy the recommended thresholds, (AVE: Fa. NEPPs 0.786, Inf.NEPPs 0,839, MPC 0.863, EXPF 0.832), (outer loadings: Fa. NEPPs (0.846, 0.920, 0.893), Inf.NEPPs (0.969, 0.965,0.805), MPC (0.930, 0.950, 0.907), EXPF (0.905, 0.917,0.915)



Table III: The Internal Consistency Reliability and The convergent validity test

Latent Variables and Items		The Internal Consistency Reliability		convergent
	CR	Α	AVE	outer loadings
Financial aid-related national export promotion programs Fa.NEPPs	0.917	0.864	0.786	١
Q1 Export credit guarantees		1		0.846
Q2 Export loans				0.920
Q3 Direct subsidy on exporting				0.893
Information-related National export promotion programs Inf.NEPPs	0.939	0.904	0.839	١
Q4 Information about foreign market opportunities				0.969
Q5 Provision of marketing information/advice				0.965
Q6 Organization of export seminars/conferences				0.805
Marketing planning capabilities MPC	0.950	0.921	0.863	١
Q7 Export marketing planning skills		•		0.930
Q8 Formulating creative export marketing strategies				0.950
Q9 The ability to identify potential market				0.907
Export performance	0.937	0.902	0.832	
EXPF	0.507	0.302	0.002	Υ.
Q10 Export sales growth		•	•	0.905
Q11 Export intensity growth				0.917
Q12 New consumers acquisition				0.915

Source: Author via smart-PLS outputs

The Discriminant validity test

Discriminant validity is the extent to which a construct is distinct from other constructs, Thus, establishing discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model. usually, researchers have relied on two measures of discriminant validity, the cross-loading and The Fornell-Larcker criterion, the heterotrait-monotrait ratio test. (Joseph F Hair, 2017)



In the cross loading test, items load on their variables and cross-loadings with other variables they are not meant to measure should be markedly, to mean that intended loadings should be greater than .7 and cross-loadings should be under 4, (Garson, 2016). The table shows that the EXPF items here still has substantial cross-loadings with the items for MPC.

Variables	Items	EXPF	MPC	Inf.NEPPs	Fa.NEPPs
EXPF	Q11	0.917	0.632	0.285	0.026
	Q12	0.915	0.663	0.428	0.006
	Q10	0.905	0.426	0.178	0.195
MPC	Q8	0.561	0.950	0.314	-0.312
	Q7	0.640	0.930	0.488	-0.134
	Q9	0.624	0.907	0.247	-0.289
Inf.NEPPs	Q4	0.348	0.374	0.969	0.335
	Q5	0.358	0.380	0.965	0.270
	Q6	0.224	0.211	0.805	0,332
Fa.NEPPs	Q2	0.126	-0.234	0.250	0.920
	Q3	0.003	-0.255	0.392	0.893
	Q1	0.033	-0.202	0.234	0.846

Table IV: The cross-loading test

Source: Author via smart-PLS outputs

The heterotrait-monotrait ratio (HTMT) test is one of the common test of discriminant validity test and it's defined as the mean value of item correlations across constructs relative to the mean correlations for items measuring the same construct, value above 0.90 would indicate that discriminant validity does not exist. (Agus Purwanto, 2021). The table shows that HTMT test values are acceptable and their value does not exceed the threshold of 0.90, and this indicates that the model contains a good discriminant validity and there is no overlap between the items.



Latent Variables	EXPF	Fa.NEPPs	Inf.NEPPs	MPC
EXPF				
Fa.NEPPs	0.113			
Inf.NEPPs	0.349	0.383		
MPC	0.701	0.294	0.382	

Table V: The heterotrait-monotrait ratio test (HTMT).

Source: Author via smart-PLS outputs

Fornell–Larcker criterion also be used to establish discriminant validity, to achieve the discriminant validity by this test it should the square root of AVE for the latent variable should be higher than its correlation with any other latent variable. (Garson, 2016) This was achieved in this study through the outputs of the table VI.

Table VI: The	Fornell-Larcker	criterion test
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Latent Variables	EXPF	Fa.NEPPs	Inf.NEPPs	MPC
EXPF	0.912			
Fa.NEPPs	0.064	0.887		
Inf.NEPPs	0.348	0.332	0.916	
MPC	0.666	-0.261	0.365	0.929

Source: Author via smart-PLS outputs

Assessment of structural model (hypotheses testing):

Following the validity tests on the reflective measurement Model, we performed an assessment of the structured model. figure II summarizes the structural model tested via a SEM-PLS analysis. The figure II presents the path coefficients and the R² values;



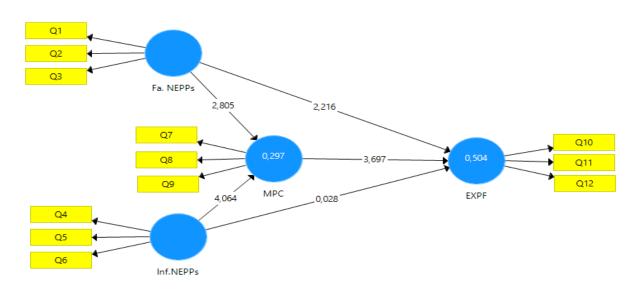


Figure II: Path coefficients test (Direct effect)

Source: Author via smart-PLS outputs

The figure II shows the direct effect between the exogenous and endogenous variable, and the table VII shows the path coefficient (β) and the t-values produced and the p-values, applying the bootstrapping technique. Through the results of the table VII, hypothesis (H1a) shows that the Fa.NEPPs have a direct negative effect on MPC (β - 0.430, p 0.005), and (H1b) have positive direct effect on EXPF (β 0257, p 0.027). while hypothesis (H2a) shows the Inf.NEPPs have positive direct effect of the Inf.NEPPs on the EXPF. The hypothesis (H3) confirm that there is a positive direct effect of the MPC on the EXPF (β 0.735, p0.000).

Table VII: Direct effect

١	Hypothesis	Std.bets	T.value	P.value	Status
H1a	Fa.NEPPs -> MPC	-0.430	2.805	0.005**	supported
H1b	Fa.NEPPs -> EXPF	0.257	2.216	0.027*	supported
H2a	Inf.NEPPs -> MPC	0.507	4.064	0.000**	supported
H2b	Inf.NEPPs -> EXPF	-0.005	0.028	0.978	Not supported
H3	MPC -> EXPF	0.735	3.697	0.000**	supported

Note : *p < .05. **p < .01.

Source: Author via smart-PLS outputs



By conducting a mediating analysis, Table VIII indicates that the Fa.NEPPs in hypothesis (H4a) have a negative indirect effect with a mediating role of MPC on EXP (β -0.316, p 0.031). while the Inf.NEPPs in hypothesis (H4b) have a positive indirect effect with a mediating role of MPC on EXP (β 0.373, p 0.019)

Table VIII: Indirect effect

\	Hypothesis	Std.bets	T.value	P.value	Status
H4a	Fa.NEPPs -> MPC-> EXPF	-0.316	2.160	0.031*	supported
H4b	Inf.NEPPs -> MPC-> EXPF	0.373	2.346	0.019*	supported

Note : *p < .05. **p < .01.

Source: Author via smart-PLS outputs

For the total effect, Table IX indicates that the Inf.NEPPs have a positive total effect on EXPF (β 0.367 p 0.003), while there is no significant total effect for Fa.NEPPs on EXPF.

Table IX: Total effect

Total effect	Std.bets	T.value	P.value	Status
Fa.NEPPs ->EXPF	-0.058	0.345	0.730	Not supported
Inf.NEPPs ->EXPF	0.367	2.924	0.003**	supported

Note : *p < .05. **p < .01.

Source: Author via smart-PLS outputs

The coefficient of determination (R2) is a measure of the model's explanatory power, by represents the variance explained in each of the endogenous constructs, (Joseph F. Hair Jr., 2021) The R2 ranges are from 0 to 1. the values above 0.67 are high, from 0.33 to 0.67 are moderate, from 0.19 to 0.33 can be considered weak, while the values less than 0.19 are not taken into account. (Marcoulides, 1998). Turning to the R² values from the table X, the study found that 29,7 per cent of the MPC's variance was explained by the use of Fa.NEPPs and Inf.NEPPs. and 50,4 per cent of the EXPF's variance was explained by the use of Fa.NEPPs, Inf.NEPPs and MPC.



Table X: coefficient of determination R²

Variable	R ²
MPC	0.297
EXPF	0.504

Source: Author via smart-PLS outputs

The Q² test is an indicator of the model's predictive relevance, the quality of PLS path model is evaluated by calculating Q² statistics through blind folding procedures. the Q² value should be above 0 for confirm the model has a predictive relevance, and the closer the Q² indicator value to 1, the higher predictive relevance score of the model. (S Shanmugapriya, 2015) through the table XI result, MPC has a medium predictive relevance (0.239), while the EXPF has a large predictive relevance (0.361), which came in the same R² test context.

table XI: the model's predictive relevance (Q² indicator)

Variable	Q ²
MPC	0.239
EXPF	0.361

Source: Author via smart-PLS output

4 conclusions:

Our study result supports the mediation effect of MPC and better understanding of the relationship between NEPPs and EXPF. and it provides several theoretical and methodological contributions and companies managerial contributions and policy makers recommendations for national export promotion programs. also to invite researchers to highlight some methodological limitations and directions for future study about this subject.

It was found that the Fa.NEPPs have a significant direct effect on EXPF, but there is non-significant direct effect of Inf.NEPPs on EXPF. and the Inf.NEPPs have a significant positive direct effect on MPC, while the Fa.NEPPs have a significant negative direct effect of on MPC.



for the mediation effect of the MPC, there is significant negative indirect effect for the Fa.NEPPs on EXPF through MPC, and there is significant positive direct effect for the Inf.NEPPs on the EXPF through MPC.

For the total effect, the Inf.NEPPs have a positive total effect on EXPF, while there is no significant total effect for Fa.NEPPs on EXPF.

In general, the study highlights the role of national export promotion programs in enhancing the companies export performances. In general, may the effect between the use of national export promotion programs and export performance isn't direct, it can rather have achieved through an enhancement of the companies' capabilities required to get better export performance (Leonidas C. Leonidou D. P., 2011).

So, this study presents conceptual model intended to test the direct and indirect effect of national export promotion programs (NEPPs) on export performance (EXPF) through the mediation role of marketing planning capability (MPC). questions regarding the two types of NEPPs enhancing MPC and the increasing of EXPF were addressed.

The results reveal that the use of national export promotion programs enhances export performance. This supports the institutional-based view that a good institutional environment enables the companies to achieve outstanding export performance (Jieke Chen, 2016) through the national export promotion programs in our study. And the high export performance can be achieved if the resources and capabilities of the companies are well utilized, which can be improved through the support provided by national export promotion programs. (He, 2012)

This study can be considered as one of only a few rare studies that include a marketing planning capability as a mediating variable between the national export promotion programs and export performance

5 Implications:

This study contributes to enriching the issue of improving export performance through national programs to promote exports, especially those related to developing countries,



where we built a model that contains both information and financial aid export promotion programs as independent variables, including marketing planning capabilities as mediating variable, while the independent variable is the export performance. Where this model works to discover the direct and indirect effect between the variables. The results of the study proved that the export promotion programs, whether related to information or financial aid, have either a direct or indirect impact on the export performance through the marketing planning capabilities variable. Where we consider these results a scientific addition to the subject of the study.

All parties participating in the export process can benefit from the results of this study, whether they are managers or public policy makers, as managers must attach great importance to obtaining and benefiting from national export promotion programs as much as possible, whether related to financial aid or information related programs, because of the important role they play in improving export performance and raising the marketing capabilities of the companies at the international level. However, it is not possible to rely on national export promotion programs in an excessive way by companies so as not to reflect negatively on their performance. Rather, it is better to take advantage of them as a complement to the resources and capabilities of the companies, and to fill the gaps and shortcomings that hinder the companies in providing a high export performance. Also, in order to benefit well from the national export promotion programs and to integrate them with the company's resources and capabilities, the managers must have a good understanding of all export activities and the course of foreign markets in order to put all resources in the service of the goals in order to achieve the maximum amount of outstanding performance, and avoid wasting capabilities and resources outside the underlined goals.

As for the public policy makers, they must coordinate with companies' export managers to discuss export problems and find out the deficiencies in the national export promotion programs, and various programs must be allocated in order to serve all companies in various sectors and to provide different programs according to the nature



of the activity and the nature of the target market in order to achieve the greatest performance for these programs, and it must also avoid randomness in providing these programs and follow up and accompany companies in foreign markets on the one hand, in another hand, hold the beneficiaries of these programs accountable in order to avoid wasting the programs in unprofitable export projects and avoid directing the programs to those who are not eligible.

6 future research directions:

This study has several limitations that further the future studies could address. at the first, the results pertain to food industry exporting companies located in the Algeria, which have their own national export-promotion programs. To confirmed the application of our model, further studies could replicate this model in an anther export sector for example clothing and textile sector, the pharmaceutical sector, and electronics, in order to complete the picture about the feasibility of national export promotion programs. or in some other countries especially developing countries and newly exported countries.

The study model was limited to only one mediating variable represented in marketing planning capabilities. Other future models can test other marketing capabilities as mediating variables, or even combine several mediating variables.

Future studies can also address other national export promotion programs, such as training and consulting programs, logistics and transportation aid programs and many other national export promotion programs.

Referrals and references:

- Garson, G. D. (2016). *PARTIAL LEAST SQUARES regression and structurak equation models*. 274 Glenn Drive Asheboro, NC 27205, USA: Statistical Associates Publishing.
- Gautam, D. (2016). *Global marketing*. Uttar Pradesh, India: Pearson India Education Services Pvt. Ltd.
- Gerald Albaum, E. D. (2011). *International marketing and export management* (7th ed.). Harlow, England: Pearson Education Limited.



- Hollensen, S. (2014). *Global marketing* (Vol. 6th). Harlow, United Kingdom: PEARSON EDUCATION LIMITED Edinburgh Gate CM20 2JE.
- Johansson, J. K. (2009). Global Marketing Foreign Entry, Local Marketing and Global Management. New York, USA: Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies, Inc.
- John D. Daniels, L. H. (2015). *International Business Environments and Operations* (Vol. 15 th). Harlow, England: Pearson Education Limited.
- Joseph F. Hair Jr., G. T. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R.* Gewerbestrasse 11, 6330 Cham, Switzerland: Springer Nature.
- Agus Purwanto, Y. S. (2021). Partial Least Squares Structural Squation Modeling (PLS-SEM) Analysis for Social and Management Research : A Literature Review. *Journal of Industrial Engineering & Management Research*, 02(04), 114-123.
- Alexis Catanzaro, C. T. (2020, 06 04). Export promotion programs, export capabilities, and risk management practices of internationalized SMEs. *Small Business Economics*, 57, 1479–1503. doi:10.1007/s11187-020-00358-4
- Altun, İ. (2017, 03). Determinants of The Export Performance of SMEs: Comparative Analysis of Türkish SMEs Exporting to Middle East and European Regions. *International Journal of Business and Social Science*, 08(03), 75-88.
- Angulo-Ruiz, F. P. (2018). How does home government influence the internationalization of emerging market firms? The mediating role of strategic intents to internationalize. *International Journal of Emerging Markets*, 14(01), 187-206.
- Athanasia Stylianou Kalaitzi, T. W. (2020, 6 11). Exports and Economic Growth: Some Evidence from the GCC. *Springer Nature*, 203 205.
- Barney, J. b. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(01), 99-121.
- Beleska-Spasova, E. (2014). Determinants and measures of export performance: Comprehensive literature review. *Journal of Contemporary Economic and Business Issues*, 01(01), 63-74.
- Coudounaris, D. N. (2012). Effective targeting of national export promotion programmes for SMEs. *Int. J. Globalisation and Small Business*, 4(3), 242-283. doi:10.1504/IJGSB.2012.049253
- Eijaz Ahmed Khan, M. N. (2016). REFLECTIVE OR FORMATIVE MEASUREMENT MODEL OF SUSTAINABILITY FACTOR? A THREE INDUSTRY COMPARISON. *Corporate Ownership and Control Journal*, 13(02), 83-92.
- GITANA DUDZEVIČIŪTĖ, A. Š. (2017, 06 15). Causal Nexus Between Export and Economic Growth. *Montenegrin Journal of Economics*, 13(02), 107 120. doi:10.14254/1800-5845/2017.13-2.6



- He, X. B. (2012). Resource-Based and Institutional Perspectives on Export Channel Selection and Export Performance pdf. *Journal of Management*, *39*(1), 27-47.
- Imiru, G. A. (2021). The Effect of Export Promotion Programs on Export Performance with the Mediating Role of Marketing Implementation Capability: An Empirical Study on Exporting Companies in Ethiopia. *International Journal of Marketing Studies*, 13(02), 36-52.
- Jalali, S. H. (2012). The effect of export promotion programmes on export performance: evidence from Iranian food manufacturers. *Int. J. Business and Globalisation*, 09(02), 122-133.
- Jieke Chen, C. M. (2016, 03 02). The Determinants of Export Performance: A Review of the Literature 2006 2014. *International marketing review*, *33*(05), 626-670.
- Joana Ribeiro, A. F. (2020, 01 20). Export Promotion Programs: Differences between Advanced and Emerging Economies. *Journal of East-West Business*, 26(03), 213-234. doi:10.1080/10669868.2019.1704338
- Joseph F Hair, J. T. (2017). *A Primer on Partial Least Squares Structural Equation Modeling* (*PLS-SEM*) (Vol. 02). California, USA: SAGE Publications, Inc.
- Juan Manuel Ramon-Jeronimo, R. F.-L.-P. (2019, 06 12). Resource-Based View and SMEs Performance Exporting through Foreign Intermediaries: The Mediating Effect of Management Controls. *Sustainability*, *11*(12), 32-41. doi:10.3390/su11123241
- Krammer, S. M. (2017). The export performance of emerging economy firms: the influence of firm capabilities and institutional environments. *International Business Review*, 27(01), 218-230.
- Leonidas C. Leonidou, D. P. (2011). National Export-Promotion Programs as Drivers of Organizational Resources and Capabilities: Effects on Strategy, Competitive Advantage, and Performance. *Journal of International Marketing, American Marketing Association*, 19(02), 1-29.
- Leonidas C. Leonidou, S. S. (2014, 05 09). Using National Export Promotion Programs to Assist Smaller Firm's International Entrepreneurial Initiatives. *Handbook of Research on International Entrepreneurship*, 233–267. doi:10.4337/9781783471584.00023
- Lipuma, J. A. (2013). The effect of institutional quality on firm export performance in emerging economies: a contingency model of firm age and size. *Small Business Economics*, 40(04), 817-841.
- Marcoulides, G. A. (1998). Modern methods for business research. *Lawrence ERLBAUM* associates, 295-236.
- Mark William Cawman, D. M. (2020). EXTERNAL FACTORS AND RISK CONSIDERATIONS: APPLYING THE INSTITUTIONAL-BASED VIEW OF MANAGEMENT. Academy of Strategic Management Journal, 19(04), 01-16.



- Mohamed Yacine Haddoud, A.-K. O. (2018, 02 07). Investigating the moderating role of Export Promotion Programmes using evidence from North-Africa. *Emerald Publishing Limited*, 14(2), 282-308. doi:/10.1108/cpoib-11-2016-0059
- Neil A. Morgan & Constantine S. Katsikeas, D. W. (2011, 08). Export marketing strategy implementation, export marketing capabilities, and export venture performance. *Journal of the Academy of Marketing science*, 40(02), 271-289.
- PENG, M. W. (2002). Towards an Institution-Based View of Business Strategy. Asia Pacific Journal of Management, 19, 251–267.
- Peng, M. W. (2008). An institution-based view of international business strategy: a focus on emerging economies. *Journal of International Business Studies*, 39(5), 920-936.
- S Shanmugapriya, K. S. (2015, september). Structural equation model to investigate the factors influencing quality performance in Indian construction projects. *Indian Academy* of Sciences, 40(06), 1975-1987.
- Schlegelmilch, B. B. (2016). *Global Marketing Strategy An Executive Digest*. Switzerland: Springer International Publishing. doi:10.1007/978-3-319-26279-6
- Seringhaus, F. a. (1991). Cross-national comparison of export promotion services: the views of Canadian arid Austrian companies. *ournal of International Business Studies*,, 22(01), 115-133.
- Sousa, C. M. (2004). Export Performance Measurement: An Evaluation of the Empirical Research in the Literature. *Academy of Marketing Science Review*, 01-21.
- Spence, M. M. (1999, 06). Evaluating Export Promotion Programmes UK Overseas Trade Missions and Export Performance. London, Middlesex University Business School Middlesex University, England.
- Todd C. Headrick, Y. S. (2013, 01). A PROPOSED MEASURE OF INTERNAL CONSISTENCY RELIABILITY: COEFFICIENT L-alpha. *Behaviormetrika*, 40(01), 57-68.
- Valeska V. Geldres-Weiss, J. A.-R. (2016). Impact evaluation of national export promotion programs on export firms using contrast groups. *Int. J. Export Marketing*, 01(01), 77-95.
- Xiaoting WANG, A. C. (2017). EFFECT OF EXPORT PROMOTION PROGRAMS ON EXPORT PERFORMANCE: EVIDENCE FROM MANUFACTURING SMEs. *Journal of Business Economics and Management*, 18(01), 131-145. doi:10.3846/16111699.2016.1278031

