

**THE ARTS SECTOR IN GREECE:  
LITERATURE REVIEW ON REVENUE DIVERSIFICATION**

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**Abstract:** Nonprofits and nongovernmental organisations function in the economy alongside for-profits and governmental ones, competing with them for markets and revenues and thus affect and are affected by each other, posing the question of support quite complicated. Today, the interdependency of these sectors is complex and understanding the various aspects of these ties is critical. Established as a current trend, the enhanced influence of nonprofit organisations can be proven by such indications as the amount of financial and human resources they manage, as well as by the wide range of activities they engage in and of the recipients benefited by them.

## Paper's Purpose

The paper presented originates from the opening section of my Ph.D. thesis and reviews the current domestic and foreign literature on issues addressing state and private funding. With the emphasis put on the operation of the arts sector, setting the framework within which the relevant field of study should follow aims to contribute to the up-to-date academic discussion about the impact of revenue diversification on the performance of cultural organisations. As competition among organisations has been growing setting new standards, the need to attract money is greater today than it has ever been, while the reluctance to donate large or even smaller amounts is more than obvious. Even countries with a proud tradition of subsidy seek funds more widely. The challenge is particularly acute in the cases where the state once had sole responsibility for their funding. Especially in Greece, sustainability and profitability are considered issues of utmost importance at the present circumstances. In addition to the economical, legal restrictions regarding the tenure status of Greece's arts sector organisations prevent them from successfully dealing with contemporary challenges and easily adapting to the public's emerging needs. This ailing condition becomes even more accentuated when juxtaposed with the corresponding data from abroad.

## Conceptual Framework

### *Forms of Organisations*

During the past years, a solid background has been set for "social economy" to emerge, following on public and private economy and establishing the "third sector" in-between the state and the market. The actual term describing this interval is the so-called "civil society".



Distancing themselves from the state and its political parties in the 1980s followed by undertaking public responsibility for action in the 1990s and subsequently by citizen involvement in public issues in the 21<sup>st</sup> century, NGOs have come a long way (Sklias 2002). Nongovernmental organisations bear the notion of "social economy" and are considered representative forms of "civil society". Interestingly enough, this diagrammatic correlation may also be applicable on the field of arts in general and the role of artists in particular.



This paper's study includes profit / nonprofit, government / nongovernmental organisations and the combinations resulting from them. The element the first duality is established on is clearly economical and is set by the non-distribution constraint. The other distinction is based on organisational criteria regarding the administrative relationship of each organisation with the government and the absence of its dependence in budgeting. The matrix resulting from the aforementioned four characteristics depicts the three types of organisations addressed to the arts sector the current study intends to examine.

	<b>PROFIT</b>	<b>NON PROFIT</b>
<b>GOVERN MENTAL</b>		museums
<b>NON GOVERN MENTAL</b>	galleries	unions

According to its form, an organisation may depend on one or more of the following revenue sources to support its mission-related work:

- government funding (domestic, international)
- private contributions (donations, grants)
- commercial activity (goods, services)

### *Revenue Strategies*

Two of the major issues affecting organisations' financial strategy are diversification and commercialisation. The first is a preventive measure of protection; the latter is a side effect that must be taken into consideration.

Any organisation depending on its external environment for a large proportion of a critical resource, such as funding, is subject to external control. The objective of financial autonomy is, therefore directly related to the resource dependence theory. The basic idea behind it is that -in order to survive- an organisation should be able to acquire and maintain resources, which inevitably leads to a dependence relationship between suppliers and users. The degree of dependence is determined by the importance and concentration of the resources provided (Froelich 1999). One approach to manage the dependencies is by providing for alternative resources. Multiple revenue sources enable organisations to protect themselves from the turbulence of a single revenue source (Yan 2009). The move towards diversification may be perceived as a way to reduce resource dependence on a single revenue source and preserve organisation's autonomy (Chang 1994).

The potential to seek alternative ways of financing may sometimes constitute a result of need rather than a product of decision. Many scholars have examined changes in one source of financing that affect the rest, one way or the other. Four behavioural models are proposed by Sokolowski (2012) formulating four hypotheses:

- no net effect (null hypothesis)
- crowding in (positive) effect
- crowding out (negative) effect
- displacement (negative effect across different subsectors)

Taking into account all the combinations results in forming the following matrix where certain references present evidence in support of some of them.

	HIGH PUBLIC	LOW PUBLIC	HIGH PRIVATE	LOW PRIVATE	HIGH COMMERCIAL	LOW COMMERCIAL
HIGH PUBLIC			Heutel Weisbrod	Borgonovi Weisbrod		
LOW PUBLIC			Weisbrod		Kerlin Weisbrod	
HIGH PRIVATE		Heutel	Weisbrod			
LOW PRIVATE					Kerlin	
HIGH COMMERCIAL						
LOW COMMERCIAL						

*High Public* → *Low Private*: Increased public subsidy might suggest that the organisation in question is less needy, motivating donors to shift their giving to those not receiving any public funds. Thus, government support has the effect of lowering the marginal utility an organisation gets from other donations (Borgonovi 2004). Increased governmental spending results in crowding out of donations (Weisbrod 1988).

*High Public* → *High Private*: Government grants crowd in private donations (Heutel 2009). An increase in governmental spending can serve as an indicator of governmental confidence and encourage private donations, if private donors see increased governmental expenditures as a sign that a particular area is more deserving of a private support than had previously been recognised (Weisbrod 1988).

*Low Public* → *High Private*: Cuts in government support trigger efforts to find private sources of revenue (Weisbrod 1988).

*Low Public* → *High Commercial*: Cutbacks in federal funding lead to seeking new revenue by engaging in commercial activities (Weisbrod 1988). Declines in government funding are behind an increase occurring in commercial revenue, suggesting that organisations may use sales income as a replacement for lost public revenue (Kerlin 2011).

*High Private* → *High Private*: There may well be a demonstration effect of giving, such as an increase in individual's willingness to contribute based on the amount contributed by others (Weisbrod 1988).

*High Private* → *Low Public*: Private donations crowd out government grants (Heutel 2009).

*Low Private* → *High Commercial*: Declines in private contributions are behind an increase occurring in commercial revenue, suggesting that organisations may use sales income as a replacement for lost private revenue (Kerlin 2011).

Due to the external environment, many organisations may be forced to adopt business orientations in order to compete more effectively and thus transform themselves into companies driven by competition, neglecting their original missions in the pursuit of financial security and resulting in goal displacement (Mitchell 2012). The background as described above rises the issue of commercialisation, which in this context can be understood as a propensity to rely less on donative sources of income and focus more heavily on fees and sales of goods and services, along with other forms of earned rather than contributed income (Toepler 2006). A more business-like approach to nonprofit management is seen as resulting in greater efficiency as well as in innovative

ways of addressing protracted social problems. Another view of commercialisation holds that the opposite is true. The core argument here is that a decline of private and public contributed revenues has forced organisations to seek recourse to commercial-like income sources in order to sustain growth and meet societal needs. In doing so, however, organisations face significant threats. When developing commercial activities and revenues, the self-generation of income may become an end itself, organisations may get distracted from their pursuit of the mission and its original goals may get displaced (Camarero 2011).

The interrelations between various sectors and markets are more complicated than expected. One of the key issues regarding interdependency between different types of organisations is the degree of similarity between publicly and privately provided activities. Governmental and nongovernmental, profit and nonprofit giving could be either substitutes or complements in the sense that an increase in one would cause a decrease -the substitute case- or an increase -the complementary case- in the other (Weisbrod 1988). Substitutes, complements or unrelated, the effect of one field of action on the other will differ. This interplay of economic fields makes the development of a strategy far more complex than had they been independent. Consequently, one sector's expansion into new activities brings it in competition with the other. This is the reason organisations come into a growing conflict as a result of changes in the financing.

## **Intentions & Constraints**

### *Greece's Arts Sector*

Revenue alternatives followed by the commercialisation possibility are directly related to the legal status of cultural organisations. As far as private firms are concerned, the framework is clearly set, in line with the market rules. When it comes to state organisations, though, things become more complicated regarding Greek reality, as various forms are recorded ranging between private and public (Sklias 2002). Any cultural organisation of the broad public sector can be classified on the basis of the sequence below:

- State owned in the strict sense, meaning that they form part of the state and are not separate legal entities. They are governed and subsidised by a ministry.
- Public, which belong to local authorities or other public organisations such as universities and are regulated financially and administratively by the state.
- Private, which may be autonomous but are controlled by public-interest nonprofit organisations and are subject technically to scientific control by the state.
- Certified and acknowledged private institutions, supervised by the ministry which has the authority to revoke their license if they cease to meet the requirements for their operation.

Granted with administrative and financial independence from the state and freedom of action, government organisations try to adjust to new operating conditions focusing on selected target groups and to improve competitiveness, taking into consideration the increase of private resources acquired and the reduction in public expenditure (Pachaki 2000). This trend fits into a wider frame of public administration reformation, reflecting ongoing changes in the attitude towards the role of the state and in the perception of its organisational forms. It is interesting to watch the state being transformed from the producer itself to a guarantor of public goods and services provided, as a new result-oriented administration model is been introduced in the public sector based on market economy procedures (Voudouri 2003).

Supporting de-concentration and public sector's shrinking coupled with cutback in public spending and heightened competition in leisure-time market sector has shifted attention to the visitors, due to reasons of social awareness and financial sustainability. The objectives of extroversion and effectiveness gradually lead to the independence from state administration and its funding, appealing to private law rules and initiatives. Inefficiency is due heavily to the "public legal entity" status along with the associated compulsions and the restrictive procedures imposed by

state accounting laws. The state-owned joint-stock company organisational model upon which the state frequently calls grants flexibility to the organisations adopting it, overcoming obstacles set by public law rules. The establishment of associations, for example, prevents rigidities as in the case of state organisations prohibited from accepting donations due to the fact that they are not separate legal entities (Bitsani 2004).

On the other hand, sponsorship usually does not represent a large portion of total revenues, cannot cover operational expenses and should not be considered as a steady funding resource. Acquiring revenues from commercial activities or sponsorships and depending solely on them poses problems in meeting the general public interest objective, leading the organisation in goals and means confusion and in deviating from its orientations and priorities (Skaltsa 1992). Privatisation of the cultural industry promotion risks being subject to market economy rationale, surrendering itself to the profit aspirations of private pursuits. Many scholars argue, though, that the culture - commerce juxtaposition reflects an outdated notion of contradiction between culture and social lives, disregarding the complex nature of such products and mass-consumption contribution to the prevalence of the democratisation sense. Converting a cultural asset to a consumer good serves democratisation by rendering it equally accessible and by overriding its supremacy and therefore consumer ranking (Voudouri 2003).

Ensuring independence over the state and the market and improving effectiveness not only in cultural organisations' financial management, but also in their multidimensional mission fulfilment require funding diversification. Autonomy is not essential when an organisation depends entirely on state expenditures. If it is itself unable to undertake certain initiatives in order to cover a significant amount of its expenses, its autonomy is merely on paper and on theory.

### *Research Methodology*

Published works in Greece concerning revenue strategies in the arts sector is limited and fragmented. Although there are few books on museums' private fundraising and some on public funding in general, a lack of specialised references occurs, making processed relevant data hard to locate and raising the need to address directly to formal sources of evidence, such as state archives or national statistical service, and to browse through government budgets or organisations' balance sheets over the years. According to the literature available, even in times when cultural activities prospered, state expenditures in support of the arts sector remained low (Bitsani 2004). In addition, sponsorships are far off from being a widespread practice, especially when compared with their British counterparts (Skaltsa 1992). Given such a background, progress in this particular field still remains to be made.

Depending on the nature of each organisation and the limitations in accessing it, three kinds of research are meant to be applied. First, an investigation in the state archives via the website or officially published data is necessary for collecting statistical information and financial results to be used in the case of public museums. Secondly, regarding the cultural unions, primary research at the district court archives -where all formal associations are registered- can assist in making the proper comparisons and drawing useful conclusions. Finally, on site interviews should be conducted with managers of selected private galleries in Thessaloniki for a full insight on their financial structure and performance.

### **Conclusion**

Gone are the days when organisations could expect funding just because they have gotten it in the past. As they are increasingly being driven by the twin demands of prioritisation and accountability, the requirement to be measurably accountable for the funding they receive is more and more common. The focus of government decision making and accountability has shifted away from preoccupation with the activities undertaken to the results of those activities (Falk 2006). Within

that context, the issue of autonomy along with that of certification is high time being applied in Greek cultural organisations. The “state-owned joint-stock company” model is called upon to provide with the optimal solution by counterbalancing the organisation’s needs, public’s expectations and market conditions. Crisis in the traditional forms of public administration, blurring of the existing boundaries between public and private, advancing shrinking of the state and intensified exploitation of cultural heritage aimed at mass-consumption and based on profit-making criteria lead to the development of such kind of an industry. The correlation between funding and R.O.I. is worth being put on investigation. Further research should concentrate on examining the affect of choosing a certain revenue strategy on the organisations’ financial performance indicators.

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# The determinants of households' savings during recession: Evidence from Greece

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## Abstract

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*Background:* The fiscal policy measures due to the financial crisis have potential long term savings consequences on the households. This study aims to investigate the determinants of consumers' saving behaviour in two different regions of Greece, in particular in the island of Crete and in Athens.

*Methods:* Data were drawn from 800 responders through a field survey in 2011 using the random stratified sampling technique. The empirical analysis was based on the estimation of OLS, 2SLS and Tobit regression models. Following strategies of cross section data, an anonymous structured questionnaire including information on personal and family characteristics was distributed.

*Results:* In particular, three categories of independent variables were used in this paper, namely: a) demographic characteristics, b) economic variables and c) psychological factors. It was concluded that income is the most significant variable for saving. Furthermore, the results suggested that other statistically significant variables are marital status, educational level, type of employment and economic situation. More specifically, gender was found to be associated with the level of savings. Men were found to save more money than women. It was also estimated that more educated consumers save more. In addition, married consumers save less money while employers of the private sector used to save more money than other professional categories. Basically, this is implied because their income had not decreased this period due to the fiscal measures. Finally, psychological parameters as the consumers' feelings of inability of covering their expenses and the pessimistic attitude about the future influence the behaviour towards households' savings.

*Conclusions:* Strong associations were found between demographic, socioeconomic and psychological parameters and consumer attitude in saving experimentation.

**Keywords:** Consumers' savings, disposable income, educational level, pessimistic, family size.



## 1. Introduction

In the literature of economics, private savings are one of the most highlight issues that researchers have tried to analyze. Consumers' decision for saving depends upon the level of income they receive during their life [13]. Fluctuations of earnings are linked to consumers' uncertainty and during periods of high uncertainty savings rise (precautionary savings motive) [4,7,14,17,26,28]. Other studies have focused on the correlation between macroeconomic factors and private savings [3-4,19,21-22,32].

From a microeconomic perspective, several studies have been conducted on the issue of various determinants of savings such as socio-economic and demographic factors [2,5-10,12,14-18,20,23,25-27,29,31-32]. Family income and education are the most important factors of households' savings. Furthermore, place of residence, employment status, age, gender, the previous rates of savings and the expectations of future income seem to influence significantly the level of private savings.

The aim of this study is to investigate the determinants that effect consumers' saving behavior in the current period of financial crisis in Greece. For this purpose, we employed cross-section data from the largest Greek island, Crete and the capital city, Athens. During 2011 the Greek government in cooperation with the EU and Troika were taking new budgetary measures continuously, in order to achieve their targets. These measures influenced consumers' behavior and their savings respectively.

This paper proceeds as follows: Section 2 presents the methodological issues and the data used in the empirical analysis. Section 3 presents the empirical results while the conclusions of the analysis, policy implications and limitations are discussed in Section 4.

## 2. Methodological issues and data

The research provides insights into the determinants that affect consumers' attitude towards private saving. The empirical analysis is based on a cross-section data set. We carried out an extensive survey of 800 consumers using a random stratified sampling technique<sup>1</sup>. Initially, the empirical results were based on OLS estimator. However, the large proportions of zero savings in our sample mandate a more appropriate treatment for censoring of the dependent variable. In this study, the system of savings is estimated with a way to accommodate censoring to improve statistical efficiency of our parameter estimates. Thus, marginal effects of probabilities ( $E[y=1|x]$ ), conditional levels ( $E[y|x,y>0]$ ) and unconditional levels ( $E[y|x]$ ) are calculated to facilitate interpretation of the effects of independent variables. Savings function is explained as:

$$S_i=f(X_1, X_2, \dots, X_n).$$

Where  $S_i$  is the quantitative dependent variable while  $X_1, X_2, \dots, X_n$  are the regressors. Econometric analysis enables us to measure the impact of each variable on the total amount of

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<sup>1</sup> The sampling procedure is conducted by the author.

consumers' savings. Three subsets of independent variables are used in this empirical analysis, namely: characteristics of representative, economic variables and psychological factors. Therefore, we employed the following expanded specification for a consumer's ability to save:

$$lnsave11 = b_0 + b_1 lnmincome + b_2 gender + b_3 educae1 + b_4 married + b_5 prsector + b_6 dlinsave + b_7 help + b_8 efinabpay + b_9 pryearb + b_{10} efhighcost + b_{11} unempl + u_i$$

where *lnsave11* is a quantitative variable indicating the average monthly savings per person, *lnmincome* is the natural logarithm of consumers' monthly income; *gender* is a dummy variable accounting for 1 if the respondent is male; *educae1* is a dummy variable accounting for 1 if the respondent has completed at least undergraduate studies and 0 otherwise; *married* is a dummy variable accounting for 1 if the respondent is married and 0 otherwise; *prsector* is a dummy variable accounting for 1 if the respondent is working to the private sector and 0 otherwise; *dlinsave* is a quantitative variable indicating the saving rates of the previous years; *help* is a dummy variable accounting for 1 if the respondent has asked for financial help by a relative or by a public organization and 0 otherwise; *efinabpay* is a dummy variable accounting for 1 if the respondent has stated that, given the economic situation, difficulty in financing costs affects his consumer behavior and 0 otherwise; *pryearb* is a dummy variable accounting for 1 if the respondent suggested that the financial year 2010 was less favorable than what s/he expected and 0 otherwise; *efhighcost* is a dummy variable accounting for 1 if the respondent has stated that, given the economic situation, the high cost of borrowing affects her/his behavior and 0 otherwise; *unempl* is a dummy variable accounting for 1 if the respondent has stated that either s/he or one other member in their households is unemployed and 0 otherwise; and *u* is the disturbance term. The empirical results of the equation are presented in section 3 of this study. Table 1 summarizes the expected sign for  $b_i$  coefficients of equation.

**Table 1**

*Expected sign of the variables specified in the empirical analysis.*

<b>Independent variables</b>	<b>Expected sign</b>	<b>Independent variables</b>	<b>Expected sign</b>
<u>gender</u>	+/-	<u>dlinsave</u>	+
<u>educae1</u>	+/-	<u>help</u>	-
<u>married</u>	+/-	<u>efinabpay</u>	-
<u>lnmincome</u>	+	<u>pryearb</u>	-
<u>prsector</u>	+/-	<u>efhighcost</u>	+
<u>unempl</u>	-		

In particular, it is assumed that higher income groups are more able to save more. The expected sign for the previous experience in savings is positive. So, consumers who had positive saving rates in previous economic years are expected to save more at the current time. Moreover, the sign for variables "help", "efinabpay" and "pryearb" which are linked to the consumer's financial situation is negative. There is a relation between the variables, and the consumers' economic and psychological situation. In general, according to previous studies it is difficult to predict the impact of demographic characteristics on the decision to save more. In the next section, the results of model are presented.

### 3. Results

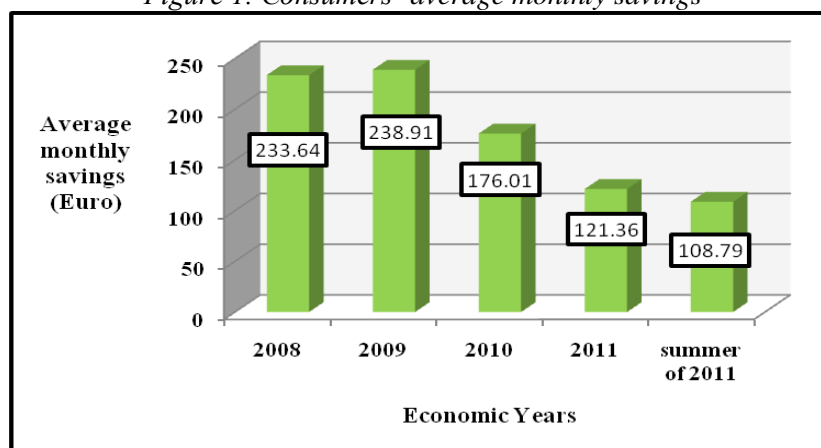
In this section we present the results of the statistical and econometric analysis to estimate the profile of a “saver” person. As “saver persons” we define those people who can save extra for several reasons.

#### 3.1 Descriptive statistics

From the sample of 800 consumers in question, 46.4% is males. As far as the educational level is concerned, 53.3% has received a higher degree of education. 34.1% is married while 32.4% is working in the private sector. Furthermore, the average level of consumers’ monthly income was 886.48 Euro. 62.8% indicates that the previous economic year was characterized as a very bad economic year for them while 45.9% denoted that their income does not satisfy their needs. Finally, 22.2% believes that the high cost of borrowing affects its consuming behavior while 50% of the sample declared that there is one unemployed person in their households.

Savings, according to the respondents' answers, were decreasing over time and especially during the current period of financial crisis in which they declined drastically. These results can be seen on the following figure.

Figure 1. Consumers’ average monthly savings



While consumers used to save monthly 233.64 Euro in 2008 and 238.91 during 2009, after the outburst of the financial economic crisis there is a huge reduction in monthly savings of consumers. This phenomenon is linked to the international experience based on empirical researches. More specifically, the monthly savings of consumers were 176.01 euro during 2010 and 121.36 euro during 2011 when there is a continuous negative trend on private savings as fiscal measures started to be implemented by the government.

#### 3.2 OLS and Tobit Analysis

Observing the previous figure, it is interesting to interpret the factors that affect this saving behavior. Therefore, several remarkable results are obtained from the empirical estimations using linear and maximum likelihood procedure respectively. Table 2 summarizes the empirical results of the above estimators. Statistically insignificant variables are omitted from

the model. All the estimated coefficients of the explanatory variables presented in this model have the expected sign and are statistically considerable.

**Table 2**

*Estimated linear regression of consumers' amount of savings (column 2) and marginal effects of explanatory variables on probabilities, conditional levels and unconditional levels (columns 3, 4, 5).*

<b>Variables</b>	<b>OLS</b>	<b>Prob.</b>	<b>Cond. level</b>	<b>Unond. level</b>
<b>logmincome</b>	0.163*** (0.0309)	0.036*** (0.008)	0.136*** (0.030)	0.183*** (0.040)
<b>gender</b>	0.344** (0.167)	0.055 (0.035)	0.208 (0.133)	0.281 (0.180)
<b>educaei</b>	0.555*** (0.171)	0.097*** (0.036)	0.365*** (0.135)	0.491*** (0.182)
<b>married</b>	-0.556*** (0.0187)	-0.137*** (0.038)	-0.506*** (0.139)	-0.673*** (0.181)
<b>prsector</b>	0.407** (0.195)	0.079** (0.038)	0.303** (0.150)	0.413** (0.206)
<b>dlnsave</b>	0.415*** (0.028)	0.092*** (0.011)	0.347*** (0.041)	0.469*** (0.056)
<b>help</b>	-1.116*** (0.172)	-0.208*** (0.035)	-0.789*** (0.136)	-1.057*** (0.180)
<b>efinabpay</b>	-0.722*** (0.173)	-0.143*** (0.037)	-0.542*** (0.139)	-0.729*** (0.187)
<b>pryearb</b>	-0.748*** (0.172)	-0.121*** (0.035)	-0.470*** (0.140)	-0.640*** (0.192)
<b>efhighcost</b>	1.031*** (0.213)	0.200*** (0.041)	0.836*** (0.192)	1.159*** (0.271)
<b>unempl</b>	-0.483*** (0.170)	-0.116*** (0.345)	-0.439*** (0.132)	-0.593*** (0.178)
<b>constant</b>	2.386*** (0.261)	-	-	-
<b>Obs.</b>	747	747	747	747

\*\*\*, \*\* and \* indicate significance levels at 1%, 5% and 10% respectively.

Asymptotic robust – heteroskedasticity standard errors in parentheses.

431 left-censored observations.

As expected, per capita income has positive effects on the level of savings, on probabilities of savings, on conditional and unconditional levels [1,5-10,12,14,16,24-25,27,30-31]. Results argue that 1% increase in income tends to raise consumers' savings by about 0.163%. MPS equals 0.163 indicating that 16.3% per portion of total income is saved each month on average during 2011 (it is close enough to the average monthly savings from the descriptive results). Based on Tobit analysis, it can be seen that the magnitude of coefficient is lower indicating that the marginal effect for income on the expected level of savings given that the individual has not been censored is equal to 0.136. What is more, it is observed that an increase in the individuals' income raises the probability of saving by 3.6 percentage points.

The effects of gender are fairly scant. Indeed, while it is estimated that males have higher levels of savings, maximum likelihood estimator indicates the insignificance of this variable. There are a lot of mixed reasons to believe that within a household the members have different preferences concerning savings, as there are differences in life expectancy and in predictions concerning households' members' preferences and portfolio choice [11]. However the sign of the regressor remains the same. This finding agrees with several previous studies [1,6,10,17,25]. The level of education was expected to exert positive impact on consumers' saving behavior. That is largely confirmed by our results. More educated consumers save higher proportion of their income. Highly educated consumers have also higher probability to save by 9.7 percentage points [2,5]. Marital status is one more significant factor that affects

saving behavior of consumers. More specifically, marital status was found to be negatively and significantly correlated with the total amount of savings in a household. They are less likely to be able to save and they have also lower probability of saving by 13.7 percentage points than other categories [18,30-31]. The coefficient of consumers' occupation type (private employee) exhibits a significant positive sign in the savings equations. Private employees save more. Furthermore, as it can be seen from the results, they have higher possibility of saving by 7.9 percentage points than other categories of employment. This can be explained from the fact that during 2011 there were not many fiscal economic measures that had negative impact on private employee's incomes. That confirms that the most negative influences by the fiscal policy which is applied by political parties were on public sector.

Our results identify also a significantly positive relationship between previous saving rates and current consumers' savings. In particular, a direct relationship was found between the previous rates of savings and current consumers' savings [25]. The results suggest that consumers who used to save more in previous financial years are also more likely to save more in current period. In addition, they have higher possibility to save than consumers who had lower rates of savings previous years. On the other hand, consumers who have asked financial help by relatives or by a public organization are less likely to save. They have also lower probability in order to have positive savings by 20 percentage points. Liabilities exhibit a significant negative coefficient in the saving equation, too. Our results show a significantly inverse relationship between liabilities and savings [30-31]. Consumers who are not able to repay their liabilities save less. What is more, financial situation has influence on savings. Consumers who stated that the previous financial year was worst than they expected expressing simultaneously a pessimistic attitude are also less likely to save [17,27].

Borrowing is an alternative way for investing. Generally, an increase in credit supply is expected to reduce saving rates [26]. However, if consumers, who could borrow, believe that interest rates are higher than they expect (asymmetric information), they may decide not to invest, so they save more. It is an index of economic uncertainty. Based on our results, it is noted that consumers who believe that the cost of borrowing is high, they have higher possibility of saving by 20 percentage points. Furthermore, households with at least one unemployed consumer within household save less. It is obvious that when there are unemployed member within a family there exists a dramatic reduction in household's income. Simultaneously, it can be seen that there is not only a decrease in private savings but there exists a decrease in the probabilities to save. In particular, households with at least one unemployed member have lower probability of saving by 11.6 percentage points.

#### **4. Discussion and Conclusions**

In this paper, we tried to analyze the determinants of the consumers' savings. Our empirical results suggested that savings are manipulated due to income. This result is intuitive and supported by previous research. Furthermore, it was estimated that private savings are positively affected by education level but inversely by marital status and female status. A very important and statistically positive significant variable is the previous savings rates. Moreover, this study showed the importance of consumers' attitude on their financial situation. Firstly, consumers who believe that the previous financial year was worst than they expected, they save less. Secondly, consumers who stated that they cannot repay part of their

liabilities saved less, too. Thirdly, consumers who had asked financial help from a relative or a public organization in order to satisfy their needs had fewer savings.

One more but also innovative result was the evidence that consumers saved in order to self-insure against uncertainty of an increase in borrowing cost. Our results revealed that in accordance with this hypothesis, it had a positive and significant effect on consumers' saving decisions. So, we concluded that a significant precautionary component exists in the saving behavior. There are many alternative subcategories of uncertainty. For example, health risk, income risk, longevity risk, default risk might play a significant role in determining consumers' saving behavior. These types of uncertainty need further investigation on Greek data. Turning, finally, to directions for further research, there are a number of determinants that could not be considered in this analysis due to data limitations, and we hope to be able to incorporate these factors in our future research.

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# **Illustrating creativity's role on entrepreneurship intentions in Greece: the female context**

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## **Abstract**

The purpose of this paper is to investigate the impact of creativity on individuals' intentions to undertake entrepreneurial activity. A review in the literature illustrates how two constructs are associated. This study also hopes to examine this relationship for female potential entrepreneurs in the Greek context for first time. An empirical research was conducted in order to provide with empirical results. The methodology design is based on a simple regression analysis and a principal axis factoring. The sample consists of 110 female undergraduate students from different academic fields who attended an educational program on "Entrepreneurship" of Aristotle University of Thessaloniki. The paper ends with discussion of the results and overview of research limitations and some ideas for future research.

## **Introduction**

Over the last decades, entrepreneurship has been recognized as a major topic in the theory of economic development because of the creation of an important portion of new employment by new firms bringing 'productive innovation' (Lee, Florida, & Acs, 2004). Entrepreneurship is also viewed as a means towards nations' socio-economic development (De Bruin, Brush, & Welter, 2006).

Entrepreneurship is considered as a relatively new academic field in the general academic realm of management. Thus, there is a lack of a unifying framework of definition (Kruger, 2004). Entrepreneurship was firstly used as term by Cantillon (1755), who defined entrepreneur based on the French imperative 'entreprendre', meaning 'to undertake'. The term entrepreneurship was systematically developed by Schumpeter (1934) who launched substantially the field of entrepreneurship, defined it in terms of innovation (Amabile, 1997; Nyström, 1993). Later on, Amabile (1997) perceives entrepreneurship as a particular form of innovation. It is in other words "the successful implementation of creative ideas to produce a new business, or a new initiative within an existing business" (Amabile, 1997).

## **Creativity and entrepreneurship**

Sternberg and Lubart (1999) defined creativity as "the ability to produce work that is both novel (original, unexpected) and appropriate (useful, adaptive concerning task constraints). Creativity occurs when we are able to organize thoughts in such a way that drives to a different and even better understanding of a situation (Proctor, 1991). Nyström (1993) argues that creativity contributes to the growth of knowledge and provides a new insight and guidance in the continuously changing environment with a perceived need for change.

Sternberg and Lubart (1999) connected entrepreneurship with creativity as the first consists of a form of the second and can be called as business or entrepreneurial creativity because some new businesses are original and useful, satisfying Sternberg's (1999) definition (in Lee et al., 2004). A first step which can be done by a creative entrepreneur is the recognition of opportunities to create future goods and services or create an entrepreneurship to pursue them (Amabile, 1997; Shane & Venkataraman, 2007). Whereas, Kariv (2013) considers creativity as an 'informal prerequisite' to launch a business and a necessary capability to be implemented at all stages of the venture creation.

Moreover creativity is related to entrepreneurship, as creativity is the ability to recognize in short time the connection between problems and their potential solutions by identifying non-obvious linkages or by redesigning a product and reforming all resources in a non-obvious way (Zampetakis & Moustakis, 2006). Gilad (1984) in his interesting research shed light on the close relationship between creativity and entrepreneurship by arguing that entrepreneurship and creativity share common features, such as unusualness, appropriateness, transformation and condensation. Later, a similar analysis was done by Whiting (1988) who investigated the behavioral characteristics of entrepreneurs and creative people and he found that there are considerable similarities.

According to Amabile (1997) creativity can enter in entrepreneurial activity through different ways such as not only the generation but also the implementation of novel and appropriate ideas to establish a new enterprise. In addition, individuals'

creativity can be enforced in the case people being more intrinsically motivated rather than extrinsically motivated because of the autonomy in the work, a business idea positively challenging and a sense of interest and excitement (Amabile, 1997). Creative entrepreneurs are called “architects of innovation and paradigm pioneers” by Winslow & Solomon (1993) who have the ability to plan effectively, to adjust to and to develop alternative solutions to unexpected conditions.

Finally, sometimes in the past, entrepreneurship scholars were using alternatively the terms creativity and entrepreneurship. However, this association seems wrong, as innovation is “the process of development and application of an idea” (Van de Ven, Angle, & Poole, 2000, 12), while creativity is the production of new and useful ideas in each field (Amabile et al., 1996). According to Lumsdaine and Binks (2009) creativity and innovation are differentiated by timing. Creativity is needed at the first stage of a product or an idea creation, but innovation is needed later at the stage of spreading and acceptance.

### **Creativity in female entrepreneurship**

The academic interest for the study of female entrepreneurship has been augmented significantly since the beginning of the decade of 2000 (Taniguchi, 2002). In the past, some research tools about entrepreneurship did not take into account the gender (Bruni, Gherardi, & Poggio, 2004), but they perceived it as a personal characteristic among others, such as age and educational level (Ahl, 2006). Recently, female entrepreneurship is recognized as a particular category of entrepreneurship both at the level of entrepreneurship and at the level of individual (De Bruin, Brush, & Welter, 2007).

In the literature, a distinction of creativity characteristics with reference to entrepreneurial undertaking between males and females is evident, such as creative thinking, learning styles, the level of openness to new experience. Females appear generally more active in searching new experiences and also more tolerant to the unknown. Females also appear more self-confident, active and optimistic. Females manifest more positive attitudes towards sectors based more on creativity rather than on innovation. Nevertheless, females show a lag in relation to males regarding risk-taking about entrepreneurial actions (Lau & Li, 1996; Petridou, 2009; Zhao, Seibert, & Lumpkin, 2010).

### **Creativity and entrepreneurial intentions**

At the outset, entrepreneurial activity does not occur in a vacuum, but it is embedded in a cultural and social context (Reynolds, 1992). Potential entrepreneurship arises in an environment characterized as “nutrient-rich” by Shapero (1981, as cited in Krueger & Brazeal, 1994), by meaning as “nutrients” social and cultural support, information and tacit knowledge and some tangible resources. Entrepreneurship research has examined since the last decades the impact of personal history and social context of individuals on their intention to undertake entrepreneurial activity (Hamidi, Wennberg, & Berglund, 2008). Several studies have highlighted the link between entrepreneurial behavior and personality traits (e.g. Caird, 1991; Korunka, Frank, Lueger, & Mugler, 2003).

All entrepreneurial ideas for new products, services and social movements are generated by inspiration, sustained attention and intention (Bird, 1988). “Intentionality is a state of mind directing a person's attention (and therefore experience and action) toward a specific object (goal) or a path in order to achieve something (means)” (Bird, 1988). Over the recent years, intentions are considered by many researchers as antecedents of planned behavior to found an enterprise (Zampetakis & Moustakis, 2006). According to Souitaris, Zerbinati, & Al-Laham, (2007) intentions are best predicted by attitudes. All the other factors such as personality traits, demographics, skills and social, cultural and financial support are viewed by them as exogenous influences which affect attitudes and indirectly intentions and lastly behavior. Thus, intentions play the role of mediating variables between the act to found an enterprise and potential exogenous influences (Krueger & Brazeal, 1994). In Ajzens’s theory of planned behavior, there are three main attitudes that predict intentions: attitude towards the act, subjective norms and perceived behavioral control (Krueger & Brazeal, 1994).

To promote entrepreneurship is needed to explore these exogenous influences and attitudes that affect individuals’ intentions to undertake entrepreneurial action (Zampetakis & Moustakis, 2006). Creativity is a factor that has not examined widely before in accordance with entrepreneurial behavior (Amabile, 1997; Hamidi et al., 2008; Nyström, 1993).

Because of creativity and novel ideas are located at the focal point of entrepreneurial process or they consist of a characteristic of entrepreneurial behavior, the scope of this research is to highlight whether creativity may raise entrepreneurial intentions. There is a tendency in the literature to describe entrepreneurship and innovative business behavior as an act of creativity (Amabile, 1997; Hamidi et al., 2008; Ward, 2004). The logic behind this connection is that the fundamental component of entrepreneurship is newness and novelty. In turn, potential entrepreneurs should come up with creative ideas for new products or services. Feldman & Bolino (2000) based on Schein (1990) typology of five “career anchors” – technical competence, managerial competence, security and stability, autonomy and independence, entrepreneurial creativity – concluded in their empirical research that individuals disposing a high creativity anchor are motivated to become self-employed and in other words to become potential entrepreneurs.

With reference to female entrepreneurs, research reveals that women experience lower intentions to entrepreneurship than men, due to the fact women face some limitations in their attempt to launch a business. The main problem is their conflicting role between their professional and household responsibilities, while their lower prior experience on industry, management, and business start-ups (Buttner, 2001; Cliff, 1998; Crant, 1996; Sexton & Bowman-Upton, 1990). However, when females develop their business ventures show higher creativity and better communicative skills than males entrepreneurs (Buttner, 2001). In addition, females seem to experience more positive attitudes towards entrepreneurship in sectors associated with creativity rather than sectors based on innovation which are male-dominant (Boling & Boling, 1993; Kariv, 2013).

Taking all the above into consideration we can develop the following hypothesis to examine it in our empirical part.

*H: Creativity is positively related to entrepreneurship intentions*

## **Empirical research**

### ***Methodology***

The purpose of this paper is to support and reaffirm the relationship between creativity and entrepreneurial intentions among women and to investigate which entrepreneurial characteristics are more influential on females' entrepreneurial intentions by using GET test.

Our survey was conducted on 110 female undergraduate fourth-year students participating to the inter-scientific educational program of 'Entrepreneurship' of Aristotle University of Thessaloniki. The educational program consists of a series of actions, like attendance of seminar courses; participation in laboratory courses; working into groups for the development of business plans; visits in innovative firms/factories; meetings with public and market agencies relevant to entrepreneurship. The duration of the program is an academic year. A significant number of scholars in the literature contend that entrepreneurship education affects positively participants' intentions towards entrepreneurship, by developing the skills, networks and opportunities for successful new ventures' creation (Botha, Nieman, & Van Vuuren, 2007; Mgya & Magembe, 2007).

### ***Measures***

*GET*: General Enterprising Tendency (GET) Test was developed by (Caird, 1991) to measure enterprising tendency through the assessment of five key enterprise characteristics – calculated risk-taking, creative tendency, high need for achievement, high need for autonomy, and internal locus of control. These factors perceived by Caird, based on prior research of Watkins (1976) who concluded that they are the most significant to affect individual's entrepreneurial intentions. GET questionnaire includes 54 items, measured by a Likert scale.

*Creativity*: it was assessed using Zhou & George (2001) scale, consisting of 13 items. An example item is "Exhibits creativity on the job when given the opportunity to". The Cronbach's alpha for this scale was 0.688. The response was a five-point Likert scale with 1 meaning strongly disagree and 5 strongly agree.

*Entrepreneurial intentions*: Entrepreneurial intentions was assessed using Crant (1996) scale, using 3 items. An example item is "It is likely that I will personally own a small business in the relatively near future". The Cronbach's alpha for this scale was 0.670. The response was a five-point Likert scale with 1 meaning strongly disagree and 5 strongly agree.

### ***Analyses***

With reference to Hypothesis test, a Principal Axis factoring was used to confirm constructs' validity and it exported two factors, representing the constructs of creativity and entrepreneurship and all items loaded significantly on their respective factors. A hierarchical regression analysis was conducted to test if our hypothesis is acceptable. At the first step, we entered some control variables in order to examine their impact on dependent variable. At the second step, creativity's impact on entrepreneurial intentions was tested.

In turn, a Factor Analysis was conducted to confirm GET test validity in our sample and to investigate which factors affect more females' entrepreneurship tendency. A principal axis factoring with Varimax rotation method revealed 5 factors, representing the five factors of GET test. The reliability of both constructs was tested, using the Cronbach's alpha criterion and also KMO and Bartlett tests were used to

assess the appropriateness of using factor analysis on data. Both values were acceptable.

## Results

*Table I: Hierarchical Regression Analysis between Creativity and Entrepreneurial Intentions*

	B coefficient	$\Delta R^2$
<i>Step 1. Control Variables</i>		0,34*
Work-Life Balance	0,568***	
Prior contact with business environment	0,202	
Entrepreneurial background in family	0,105*	
<i>Step 2. Main effect</i>		<b>0,32***</b>
Creativity	<b>0,477***</b>	

*Dependent Variable: Entrepreneurial intentions*

*Statistically significant at: \* $p \leq 0.05$ , \*\*  $p \leq 0.01$  \*\*\*  $p \leq 0.001$*

*Table II: Descriptive Statistics of independent and dependent variables*

	Mean	Std. Deviation
Creativity	3,3818	0,60551
Entrepreneurial Intentions	2,9709	0,95874

*Table II: Descriptive Statistics of 5 factor GET tool*

Factors	Mean	Std. Deviation
Calculated Risk taking	2,5909	0,81607
Creative tendency	3,2209	0,64246
High need for achievement	3,5091	0,64602
High need for autonomy	3,1364	0,62776
Internal Locus of Control	3,0636	0,66742

*Table III: Factor Loadings of GET tool*

Factors	Total Eigen values
High need for autonomy	2,419
Creative Tendency	2,089
High need for achievement	1,405
Calculated Risk-taking	1,255
Internal locus of control	1,204

## **Discussion**

The regression analysis conducted supports our hypothesis (H) that creativity is a predictor of entrepreneurial intentions at the statistically significant level of 99% among a sample of female undergraduate students who participated in the program of Entrepreneurship. In addition, although not hypothesized, the hierarchical regression analyses revealed that work-life balance and origin from a family with entrepreneurial background influences statistically significant entrepreneurial intentions.

Creativity appears also as a significant factor of entrepreneurship tendency as it ranks second in our factor analysis. Creative tendency as it is defined in GET test has the second highest mean among factors affecting entrepreneurial tendency. The high levels of creativity among these young females follow the literature trend. The contribution of this research is that illustrates the relationship between creativity and entrepreneurial intentions for first time in the Greek context and particularly in a group of young women potential entrepreneurs who have attended an one year program on entrepreneurship. An implication which can be produced is that the relatively high levels of entrepreneurial intentions of female students may be attributed to the impact of this entrepreneurship program on their attitudes about entrepreneurship.

## **Limitations and Future Research**

The results of the present research face some limitations, though. Our research sample is composed only of students attended this program. A subsequent research could explore attitudes of individuals derive from different environments. A more extended inquiry on the topic could analyze how the impact of creativity on potential entrepreneurship is differentiated by other factors, such as gender, age, social status, entrepreneurial background into the family and income. This research address a general construct of creativity, but in the future a scale of different sorts of creativity can be adopted in order to illustrate how each one affects entrepreneurship potential. Finally a pre- and post- design can be adopted in order to investigate how an educational program on entrepreneurship can change individuals' creative behavior and their intention towards entrepreneurship (like Souitaris et al., 2007).

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