Received: 27 April 2019 | Revised: 24 February 2020 | Accepted: 18 June 2020

DOI: 10.1002/ijfe.1841

RESEARCH ARTICLE

WILEY

Nowcasting the Greek (semi-) deposit run: Hidden uncertainty about the future currency in a Google search

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Abstract

We investigate whether Greek depositors' uncertainty about the future currency contains information for the observed acute depletion of deposits in the Greek banking system. We conduct a *Nowcasting* exercise using the Google search intensity for the term «Drachma» and document that higher search intensity leads to higher Total deposits outflows, which are primarily driven by outflows in Time deposits. We also find that the Google search intensity for the term «Drachma» exerts an asymmetric impact across One-Day deposits and time deposits. In addition, the asymmetry is also present between firms' deposits and households' deposits. These findings support that 'a flight-to-safety' behaviour caused by uncertainty about the future currency accounts for the erosion of deposits in Greece.

KEYWORDS

bank deposits, depositors sentiment, Drachma, Google trends, Greek banking system, Nowcasting

JEL CLASSIFICATION

C22; C51; G21

1 | INTRODUCTION

Private sector deposits to the Greek banking system in January 2010 stood at approximately EUR 237 bn and by December 2016 had plunged to just over EUR 126 bn, experiencing a staggering 46.85% drop. Consistent and acute deposits depletions of this sort typically reflect a 'flight-to-safety' motive (Bernanke et al., 1996) due to a lapse of depositors' confidence. The root causes of such a lack of confidence can be traced to the banking system itself, but they may well mirror macroeconomic risk hitting the banking sector, insofar deteriorating macroeconomic conditions are perceived by depositors as a visible threat for the value of their deposits. Two typical cases of such threats can stem from sovereign and/or currency risks (Levy-Yeyati et al., 2010). Withdrawals due to sovereign risk take place because of the expected inability (a) of the state to perform its explicit (and implicit) deposit guarantor role for insuring deposits, and (b) of the central bank to either offer emergency liquidity lines or act as a lender of last resort. In the eventuality of a currency risk, depositors withdraw their funds from domestic banks if convertibility to a foreign currency is expected to be restricted.

Strictly speaking, currency risk should not be an issue for Greece since it is a Eurozone member and participation to the European single currency is considered to be an irrevocable decision. However, during the period

'The likelihood of a country ***other than Greece leaving the European Union's single currency area*** *remains very low'* MOODY'S INVESTORS SERVICE, Global Credit Research—07 March 2017.[11]

under scrutiny a recurring theme of the national, and quite often the international, public discourse is the possibility of Greece leaving the Eurozone and adopting a national currency (the «Drachma»). Thus, the eventuality of Greece exiting the Eurozone is a factor that attenuates uncertainty about the future currency.

Having these as a springboard, our core research question is whether uncertainty about the future currency stemming from the possibility of Greece exiting the Eurozone, affects depositors' behaviour. We propose a way to tackle this issue by utilizing data from ***Google Trends*** regarding the search intensity of the term ***«Drachma»*** (***'Δραχμή'***, in Greek) by Greek users, as a proxy of this uncertainty. As we will show later, during the period under scrutiny, the Google «Drachma» search intensity was quite high, reflecting economic agents' concern about the issue of currency adoption.

Hence, our prior belief is that higher uncertainty induces a 'flight-to-safety' by depositors whose aim is to protect their assets (deposits). Such behaviour leads to deposit withdrawals with the aim to alleviate the adverse effects of uncertainty regarding the future currency. Moreover, we test for the presence of potential asymmetric impacts of the intensity of the ***«Drachma»*** search term across different types of bank deposits and depositors (agents). In particular, apart from the total deposits, we consider the impact of the ***«Drachma»*** Google search term on its two major constituents namely Time deposits and One-Day deposits. Our prior is that Time deposits will be more affected (exhibit higher withdrawals) since this type of deposits imposes a higher restriction to depositors and therefore depositors are more vulnerable to a possible change in the currency adopted.

In addition, we investigate potential asymmetries between the two major types of depositors, namely firms and households. We expect that firms would exhibit lower sensitivity since they use deposits for their operations such as payroll payments and working capital that typically are serviced through bank accounts. In contrast, households due to the lack of such restrictions are expected to react more vigorously in the event of higher uncertainty.

These priors can be operationalized in the following three testable implications:

- ***H1****: higher Google search intensity for the term «Drachma» leads to negative deposit flows (withdrawals)*,
- ***H2:*** *higher Google search intensity for the term «Drachma» is expected to have a greater impact on Time deposits versus One-Day deposits (the composition of total deposits tilts in favour of One-Day deposits)*
- ***H3:*** *firms' deposits are less sensitive than households' deposits*

The remainder of the paper is structured as follows. In Section 2, we make a brief review of the literature. In Section 3, we describe the data and the variables used. In Section 4, we present the baseline econometric models, the empirical results and the sensitivity analysis conducted. Finally, Section 5 concludes.

2 | A BRIEF LITERATURE REVIEW

Although the use of web search intensity data, to the best of our knowledge, is employed for the first time in such a context, it is not new since *Nowcasting* has been used in other economic issues before. Essentially, since 2009 when Google provided public access to its users' search queries, near real-time data collection is possible that have a distinct time and cost advantage over institutionally released and survey-based data. Using standard economic models that rely on variables usually made public with a non-trivial delay one must compromise with their impaired ability to mirror current circumstances, and therefore their potentially limited practical use for forecasting. A similar problem arises when the potential drivers of a certain economic variables of interest are measured less frequently. For instance, as in our case, while data on deposits are available at least on a monthly frequency, several of their drivers are available at best on a quarterly basis.

Askitas and Zimmermann (2009) were the first who employed data from Google trends in order to investigate whether there is any relationship between the unemployment rate in Germany and internet searches. After that a growing literature has emerged that relies on Nowcasting for several economic issues as Choi and Varian (2009a) had predicted. For instance, Nowcasting models have been constructed for unemployment claims in the United States (Choi and Varian, 2009b), for private consumption in the United States (Penna and Huang, 2009), for growth cycle analysis in Israel (Suhoy, 2009), for consumption in Germany (Schmidt and Vosen 2011, 2012), for automobile purchases in Chile (Carriere-Swallow and Labbe, 2011), for youth unemployment in France (Fondeur and Karamé, 2013), for volatility market phases (Hamid and Heiden, 2015) and for house sales in the United States (Wu and Brynjolfsson, 2015). In addition, Penna and Huang (2009) developed a new consumer sentiment index by employing data from selected Google searches. Moreover, Takeda and Wakao (2014) suggested that there is an interplay between the Japanese stock-trading behaviour and online search intensity for the Japanese stock market. Da et al. (2011) found that Google's ticker search frequency consists of a leading indicator of share trading, whereas Da et al. (2015) suggested that

TABLE 1 Average values for domestic deposits (excluding Monetary Financial Institutions)

Levels (in million euros)			
	One-day deposits	**Time deposits**	**Total deposits**
Firms' deposits	12 094.61	8113.91	20 208.52
Households' deposits	8717.05	66 792.60	75 509.65
Total deposits	20 811.66	74 906.51	191 436.34

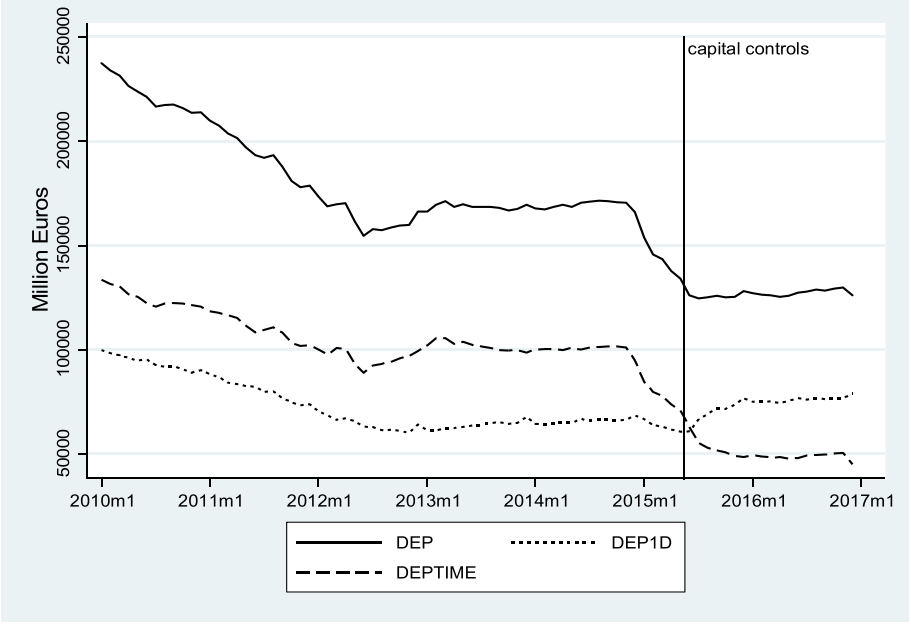

FIGURE 1 Time series paths of (domestic) Total deposits (*DEP*), One-Day deposits (*DEP1D*) and Time deposits (*DEPTIME*) [Colour figure can be viewed at wileyonlinelibrary.com]

crisis-related queries from Google are able to forecast both the mutual funds flows and the short-term volatility of the U.S. market.

Finally, a different goal was set by Siliverstovs and Wochner (2018) who found that Google Trends data are on average very precise approximations to reality as illustrated in a Swiss tourism demand context.

3 | DATA ISSUES AND BACKGROUND ANALYSIS

3.1 | Dependent variables

We obtained monthly data, which are the highest publicly available frequency, on deposits of the domestic private sector (excluding Monetary Financial Institutions). The data are available in the Aggregated Balance Sheet of Monetary Financial Institutions compiled by the Bank of Greece. The sample covers the period from January 2010 to December 2016. In some more detail, apart from *Total deposits* (***DEP***), we also collect data on its two main constituents: (a) *One-Day deposits* (**DEP1D**) and (b) *Time deposits* (**DEPTIME**). Moreover, aiming to shed light on an even more micro-level analysis of the Greek bank deposits' behaviour, we take into consideration the following sub-constituents: (a) *Firms' Total deposits* (***DEP_F***), (b) *Firms' One-Day deposits* (**DEP1D_F**), (c) *Firms' Time deposits* (**DEPTIME_F**), (d) *Households' Total deposits* (***DEP_H***), (e) *Households' One-Day deposits* (**DEP1D_H**) and (f) *Households' Time deposits* (**DEPTIME_H).**

Table 1 summarizes the basic descriptive statistics for Total deposits along with all its constituents. As it becomes apparent, in terms of type of deposit, Time deposits are the dominant deposit type. When we look in terms of depositor, households' deposits account for the lion share.

3.1.1 | Some facts about the behaviour of the Greek bank deposits

In Figure 1, we plot the time series paths of Total deposits, One-Day deposits and Time deposits, whereas in Figure 2, the corresponding time series paths of Total deposits along with firm and household deposits. Total deposits plunged from approximately EUR 237 bn in

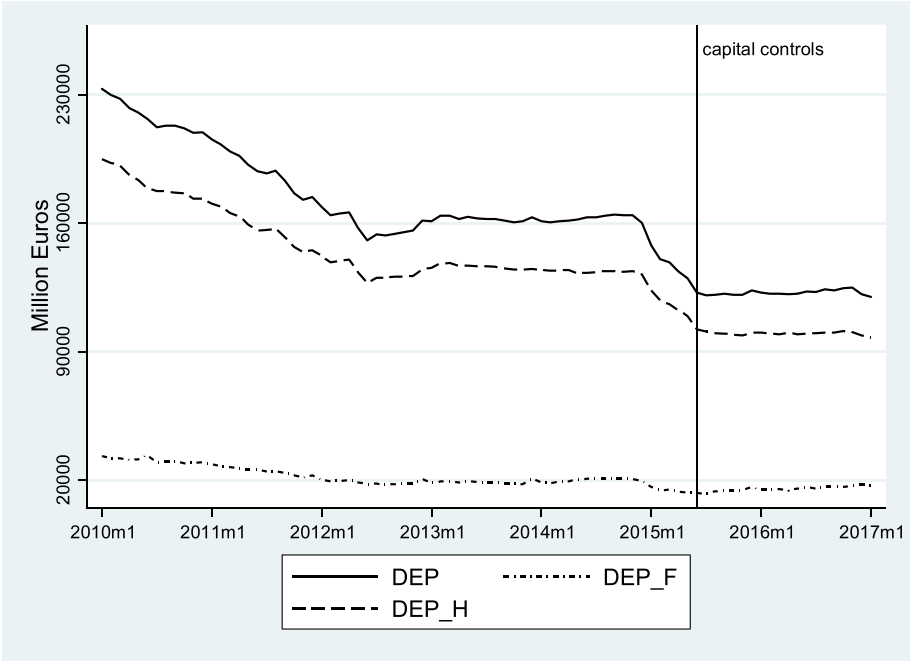

FIGURE 2 Time series paths of (domestic) Total deposits (*DEP*), Firms' Total deposits (DEP_F), and Households' Total deposits (DEP_H) [Colour figure can be viewed at wileyonlinelibrary.com]

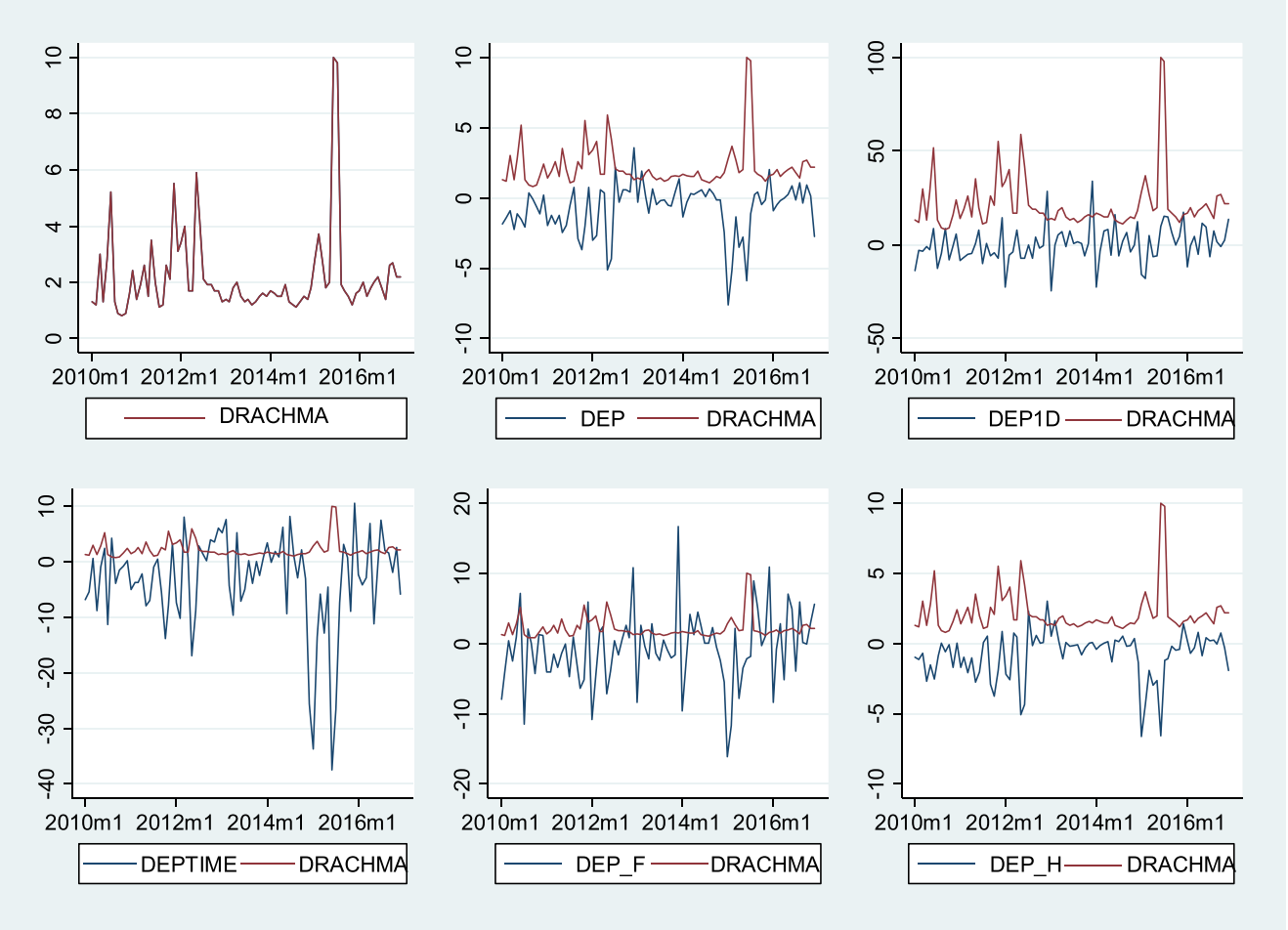

FIGURE 3 Google search intensity for «Drachma» and the percentage changes of Total deposits, One-Day deposits (*DEP1D*), Time deposits (*DEPTIME*), firm deposits (DEP_F) and household deposits (DEP_H) [Colour figure can be viewed at wileyonlinelibrary.com]

January 2010 to just over EUR 126 bn in December 2016, experiencing a staggering 46.85% drop. The path followed by deposits shows four distinct phases. During the first phase, starting from January 2010 until June 2012, deposits followed a steady downward trend. Then, from July 2012 until November 2014 entered a second phase, characterized by relative stability and even showing a slight increasing tendency. In the third phase from December 2014 to July 2015, deposits exhibited a rapid depletion. It is interesting to make a comparison of the first and the third phases, during which deposits consistently fell. In the former phase between January 2010 and June 2012, a two- and a half-year period, deposits fell by approximately EUR 83 bn, whereas in the latter phase that spanned just 8 months, the deposits drop was a stunning EUR 41bn. The fourth stage starting from August 2015 to December 2016 coincides with the imposition of capital controls and as a consequence, deposits have been (artificially) relatively stable.

3.2 | Proxying uncertainty about the future currency

We propose a novel and direct measure of depositors' behaviour/attention[2] employing data from the Google trends Database. As discussed in the introduction, we utilize the Google search intensity for the term «Drachma» as a proxy of uncertainty regarding the future currency (***DRACHMA***). We obtain the Google search intensity for the term «Drachma» from Google Trends database. According to Google Trends, the time trajectory of each search term reflects how many searches have been done for the particular term relative to the total number of searches done on Google.[3]

Figures 3 and 4 depict the time series path of Google search intensity for «Drachma» and the percentage changes of Total deposits along with all its constituents. A strong message delivered from the time series path of «Drachma» search intensity is that the term

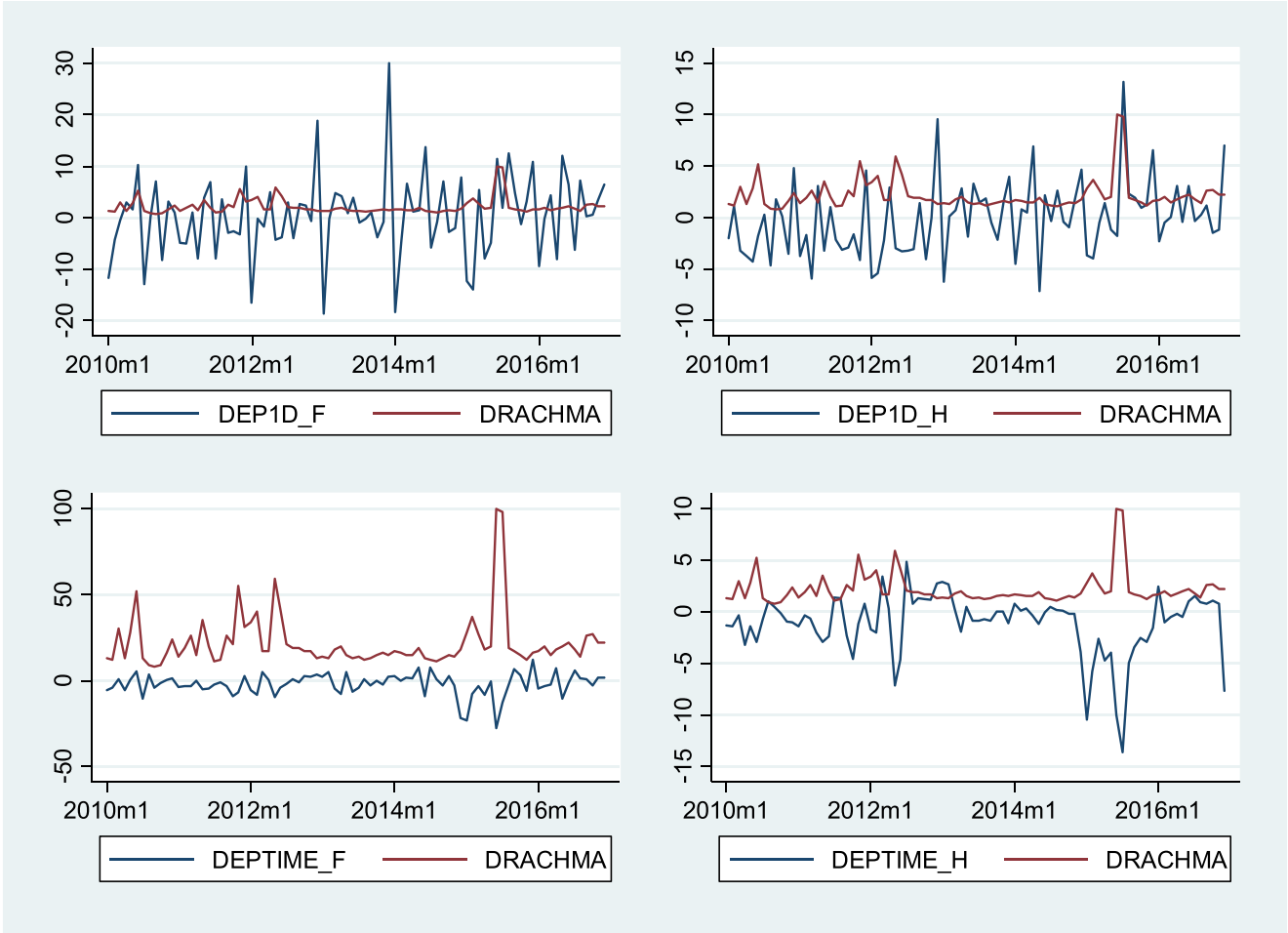

FIGURE 4 Google search intensity for «Drachma» and the percentage changes of One-Day deposits and Time deposits for both firms (_F) and households (_H) [Colour figure can be viewed at wileyonlinelibrary.com]

«Drachma» has been essentially at the centre of interest during the period under scrutiny. Except for the clear flat segment approximately between July 2012 and November 2014, in all other periods search intensity was very high. As expected, the data reveal that search intensity reached its highest levels in June–July 2015, months in which the Greek Referendum[4] was announced and held, which although had a seemingly irrelevant question posed with respect to the currency adoption, anecdotal evidence suggests that in the public discourse, it turned into exactly that. It is also interesting that the peak of July 2015 was followed by a substantial drop in search intensity, which, however, shows a resurgence in 2016. Also, both graphs demonstrate that the movements of deposits are clearly shadowed by «Drachma» Google search intensity. In particular, the periods of negative deposit flows (drop in deposits) coincide with periods of increased Google «Drachma» search intensity. Moreover, the flat segment of deposit flows coincides with the flat segment for «Drachma» Google search intensity.

Figure 3 depicts the time series paths of the percentage change in each type of deposit and the Google search intensity for «Drachma». Starting with Total deposits, it becomes apparent that its percentage change is strongly correlated with the time path of «Drachma» search intensity. In fact, there are certain sub periods where their time trajectories, almost perfectly, mirror each other. This observed correlation is indicative for the higher uncertainty leading to deposit withdrawals, albeit it is tentative and conclusive evidence can be obtained from a formal econometric analysis where other factors have been controlled for. Furthermore, from the time series plots included in Figure 3, we observe that in terms of type of deposit (depositor), the «Drachma» Google search intensity exhibits a higher correlation with One-Day (Household) deposits. In Figure 4, we show in a more disaggregated manner, the same behaviour where type of deposit and type of depositor are jointly depicted.

All in all, the graphs provide a vivid picture. There seems to be a strong, albeit unconditional at this stage, relationship between Total and at least Time deposits and ***DRACHMA***, and a similar pattern with household deposits. These observations provide us with the motivation to formally investigate whether there is indeed a linkage between deposit flows and «Drachma» Google search intensity.

TABLE 2 Control variables

Panel A: Descriptive statistics for macroeconomic factors				
Variables	**Mean**	***SD***	**Minimum**	**Maximum**
Percentage change of total Interest Rate (%ΔR)	−1.319	3.316	−8.633	9.060
Percentage change of households' interest rate (%ΔR_H)	−1.514	5.255	−28.571	11.445
Percentage change of firms' interest rate (%ΔR_F)	−1.011	8.899	−28.571	49.999
Percentage change of Economic Sentiment Indicator (%ΔESI)	0.224	2.809	−10.375	10.889
Percentage change of Economic Policy Uncertainty Index (%ΔEUI)	4.854	35.999	−70.730	173.884
Percentage change of Industrial Production Index (%ΔIP)	−0.045	2.871	−8.265	7.136
Percentage change of Unemployment Rate (%ΔUN)	0.422	1.812	−3.867	5.235
Panel B. milestone events				
Private Sector Involvement (PSI)	Dummy attaining the value 1 on March 2012 and 0 otherwise.			
Cypriot Banking Crisis (CYPRUS)	Dummy attaining the value 1 on, March 2013 and 0 otherwise.			
Elections (ELECTIONS)	Dummy attaining the value 1 on May 2012, June 2012, January 2015, September 2015, and 0 otherwise.			
Referendum (REFER)	Dummy attaining the value 1 on July 2015 and 0 otherwise.			

3.3 | Control variables

We employ two sets of control variables: (a) macroeconomic factors that might be potential drivers of deposits flows and (b) milestone events pertinent to the Greek economy that might have impacted on deposits flows.

The set of macroeconomic factors is populated as follows:

TABLE 3 The effect of «Drachma» Google search intensity on Total deposits flows and its breakdown by type of deposit

	Dependent variable		
Regressors	**%ΔDEP**	**%ΔDEP1D**	**%ΔDEPTIME**
%ΔDEP (t−1)	0.146 (0.148)	-	-
%ΔDEP1D (t−1)	-	−0.316** (0.155)	-
%ΔDEPTIME (t−1)	-	-	0.060 (0.106)
DRACHMA	−0.055*** (0.008)	0.007 (0.080)	−0.280*** (0.099)
%ΔR	−0.008 (0.071)	−0.421 (0.401)	0.225 (0.361)
%ΔESI	0.184*** (0.063)	0.264 (0.458)	0.736*** (0.272)
%ΔEUI	0.001 (0.003)	−0.009 (0.024)	−0.006 (0.022)
%ΔIP	0.036 (0.046)	−0.269 (0.334)	0.490** (0.234)
%ΔUN	−0.069 (0.139)	−1.354 (0.906)	−0.390 (0.561)
UP	−1.214 (1.704)	−7.576* (3.954)	−10.200 (8.741)
DOWN	−0.389 (0.463)	4.698 (3.309)	0.251 (3.369)
PSI	1.756*** (0.443)	−6.690** (3.050)	9.083*** (3.258)
CYPRUS	−0.138 (0.373)	6.720*** (1.547)	−5.092*** (1.448)
ELECTIONS	−2.261*** (0.795)	−1.029 (3.826)	−3.786 (4.152)
REFER	6.614*** (1.160)	13.572 (9.295)	6.062 (8.735)
Constant	0.624* (0.353)	0.482 (2.607)	3.962 (2.394)
Diagnostics			
R^2	0.556	0.220	0.532

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

- ***R***: is the interest rate that banks set for total deposits on non-financial corporations and households (Data source: *ECB data warehouse*);
- ***R_H***: stands for the interest rate that banks set on households' deposits (Data source: *ECB data warehouse*);
- ***R_F***: denotes the interest rate that banks set on firm deposits (Data source: *ECB data warehouse*);
- ***ESI***: stands for the Economic Sentiment Indicator (Data source: *Eurostat*);
- ***EUI***: stands for the Greek Economic Policy Uncertainty Index (Datasource: http://www.policyuncertainty.com, from the two indices constructed by Fountas et al. (2018) and Hardouvelis et al. (2018) we utilize the first)
- ***UN***: stands for the unemployment rate (Data source: *Eurostat*);
- ***IP***: denotes the industrial production index (Data source: *Eurostat*);
- ***UP***: is a dummy variable attaining the value of one when the Greek state has been upgraded and zero otherwise (Data source: *Moody's*);
- ***DOWN***: is a dummy variable attaining the value of one when the Greek state has been downgraded and zero otherwise (Data source: *Moody's*).
- [Correction added on 13 January 2021 after first online publication: The citation for EUI has been updated in this version.]

We also consider the following milestone events in the analysis:

- ***PSI***: a dummy variable capturing the Private Sector Involvement agreement[5];
- ***CYPRUS***: a dummy variable capturing the Cypriot banking crisis[67];
- ***ELECTIONS***: a dummy variable capturing elections held in the sample;
- ***REFERENDUM***: a dummy variable capturing the referendum.

In Table 2, we provide the descriptive statistics for the above macroeconomic factors and the exact definitions of the milestone events.

4 | ECONOMETRIC METHODOLOGY AND RESULTS

4.1 | Econometric methodology and testable hypotheses

In this section, we investigate whether the «Drachma» Google search intensity affects total deposits and/or its main constituents broken down by type of deposit (One-

Day deposits and total Time deposits) and type of depositor (firms and households).

Therefore, we employ five models, one for each deposit type, whose parameters are estimated with the Ordinary Least Squares (OLS) methodology (Wooldridge, 2016) with robust standard errors, as follows:

$$(\%\Delta DEP)_t = \beta_{0,1} + \lambda_1 \cdot (DRACHMA_t) + \varphi_1 \cdot (\%\Delta DEP_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,1} \cdot \%\Delta MACRO_t) + \sum_{i=1}^{4} (\delta_{i,1} \cdot EVENTS_t) + \varepsilon_{t,1} \quad (1)$$

$$(\%\Delta DEP1D_t) = \beta_{0,2} + \lambda_2 \cdot (DRACHMA_t) + \varphi_2 \cdot (\%\Delta DEP1D_{tt-1}) + \sum_{i=1}^{7} (\gamma_{i,2} \cdot \%\Delta MACRO_t) + \sum_{i=1}^{4} (\delta_{i,2} \cdot EVENTS_t) + \varepsilon_{t,2} \quad (2)$$

$$(\%\Delta DEPTIME_t) = \beta_{0,3} + \lambda_3 \cdot (DRACHMA_t) + \varphi_3 \cdot (\%\Delta DEPTIME_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,3} \cdot \%\Delta MACRO_t) + \sum_{i=1}^{4} (\delta_{i,3} \cdot EVENTS_t) + \varepsilon_{t,3} \quad (3)$$

$$(\%\Delta DEP\_F_t) = \beta_{0,4} + \lambda_4 \cdot (DRACHMA_t) + \varphi_4 \cdot (\%\Delta DEP\_F_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,4} \cdot \%\Delta MACRO_t) + \left(\sum_{i=1}^{4} \delta_{i,4} \cdot EVENTS_t\right) + \varepsilon_{t,4} \quad (4)$$

$$(\%\Delta DEP\_H_t) = \beta_{0,5} + \lambda_5 \cdot (DRACHMA_t) + \varphi_5 \cdot (\%\Delta DEP\_H_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,5} \cdot \%\Delta MACRO_t) + \left(\sum_{i=1}^{4} \delta_{i,5} \cdot EVENTS_t\right) + \varepsilon_{t,5} \quad (5)$$

where *%ΔDEP*, *%ΔDEP1D* and *%ΔDETIME*, %ΔDEP_F and %ΔDEP_F stand for the monthly percentage change of Total deposits, One-Day deposits, Time deposits, Total firms' and households' deposits, respectively. ***DRACHMA*** denotes the monthly Google «Drachma» search intensity. ***MACRO*** denotes the set of macroeconomic factors, expressed in a monthly percentage change, and ***EVENTS*** denotes the milestone events.

According to our first testable hypothesis, if uncertainty about the future currency (proxied by Google «Drachma» search intensity) affects deposits flows, we expect: $\lambda_1, \lambda_2, \lambda_3, \lambda_4, \lambda_5 < 0$.

TABLE 4 The effect of «Drachma» Google search intensity on deposits flows and its breakdown by type of depositor

	Dependent variable	
Regressors	**%ΔDEP_F**	**%ΔDEP_H**
%ΔDEP_F (t−1)	−0.170 (0.178)	-
%ΔDEP_H (t−1)	-	0.144 (0.140)
DRACHMA	−0.0453 (0.036)	−0.061*** (0.007)
%ΔR_F	0.086 (0.074)	-
%ΔR_H	-	0.012 (0.043)
%ΔESI	0.373 (0.250)	0.178*** (0.044)
%ΔEUI	−0.005 (0.013)	0.001 (0.003)
%ΔIP	0.081 (0.178)	0.033 (0.040)
%ΔUN	−0.890** (0.406)	−0.057 (0.106)
UP	−7.314 (5.049)	−1.009 (1.243)
DOWN	1.021 (1.891)	−0.704 (0.471)
PSI	0.763 (1.889)	2.134*** (0.490)
CYPRUS	0.759 (1.012)	−0.009 (0.304)
ELECTIONS	−1.519 (2.565)	−2.084*** (0.606)
REFER	5.828 (5.086)	7.825*** (1.650)
Constant	1.183 (1.079)	0.747*** (0.231)
Diagnostics		
R^2	0.214	0.648

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

TABLE 5 The effect of «Drachma» Google search intensity on deposits flows and its breakdown by type of deposit and depositor

	Dependent variable			
Regressors	**%ΔDEP1D_F**	**%ΔDEPTIME_F**	**%ΔDEP1D_H**	**%ΔDEPTIME_H**
%ΔDEP1D_F (t−1)	−0.389*** (0.077)	-	-	-
%ΔDEPTIME_F (t−1)	-	−0.105 (0.086)	-	-
%ΔDEP1D_H (t−1)	-	-	−0.279*** (0.070)	-
%ΔDEPTIME_H (t−1)	-	-	-	0.237*** (0.058)
DRACHMA	−0.013 (0.054)	−0.163*** (0.040)	−0.078*** (0.025)	−0.070*** (0.013)
%ΔR_F	0.032 (0.074)	0.160*** (0.057)	-	-
%ΔR_H	-	-	0.033 (0.059)	0.075** (0.033)
%ΔESI	0.312 (0.225)	0.576*** (0.173)	0.134 (0.102)	0.176*** (0.054)
%ΔEUI	−0.009 (0.017)	−0.002 (0.012)	−0.004 (0.008)	0.002 (0.004)
%ΔIP	−0.122 (0.210)	0.269* (0.158)	−0.081 (0.097)	0.039 (0.050)
%ΔUN	−0.753** (0.355)	−0.849*** (0.261)	−0.614*** (0.166)	−0.088 (0.087)
UP	−2.674 (3.052)	−1.174 (2.258)	−0.073 (1.386)	−0.558 (0.732)
DOWN	4.045 (3.262)	−0.460 (2.394)	−1.987 (1.439)	−0.769 (0.763)
PSI	−5.608 (7.143)	4.879 (5.270)	−1.400 (3.255)	4.676*** (1.719)
CYPRUS	4.941 (6.583)	−3.125 (4.863)	0.783 (2.988)	−0.434 (1.590)
ELECTIONS	−1.865 (3.170)	−3.788 (2.332)	0.535 (1.435)	−3.360*** (0.767)
REFER	6.596 (9.263)	7.420 (6.998)	22.306*** (4.338)	−1.037 (2.347)
Constant	1.369 (1.269)	2.625*** (0.927)	2.349*** (0.598)	1.163*** (0.311)
Diagnostics				
R^2	0.167	0.340	0.341	0.623
Hypothesis testing				
Joint zero effect of «Drachma» search intensity on the time and One-Day deposits	53.40***			
Symmetry of absolute effects of «Drachma» search intensity across the time and One-Day deposits (firms)	6.45***			

(Continues)

TABLE 5 (Continued)

Regressors	Dependent variable			
	%ΔDEP1D_F	%ΔDEPTIME_F	%ΔDEP1D_H	%ΔDEPTIME_H
Symmetry of absolute effects of «Drachma» search intensity across the time and One-Day deposits (households)	33.27***			
Symmetry of absolute effects of «Drachma» search intensity across firms and households (One-Day deposits)	1.69			
Symmetry of absolute effects of «Drachma» search intensity across firms and households (time deposits)	25.81***			

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

Then, we perform a disaggregated analysis by investigating whether the «Drachma» Google search intensity affects firms' Time and firms' One-Day deposits and households' Time and households' One-Day deposits, respectively. We estimate the following models as a system of four equations with the methodology of Seemingly Unrelated Regression (SURE), firstly proposed by Zellner (1962), a set up that allows us to test cross-equation restrictions:

$$(\%\Delta DEP1D\_F_t) = \beta_{0,6} + \lambda_6 \cdot (DRACHMA_t) + \varphi_6 \cdot (\%\Delta DEP1D\_F_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,6} \cdot \%\Delta MACRO_t) + \left(\sum_{i=1}^{4} \delta_{i,6} \cdot EVENTS_t\right) + \varepsilon_{t,6} \quad (6)$$

$$(\%\Delta DEP1D\_H_t) = \beta_{0,7} + \lambda_7 \cdot (DRACHMA_t) + \varphi_7 \cdot (\%\Delta DEP1D\_H_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,7} \cdot \%\Delta MACRO_t) + \left(\sum_{i=1}^{4} \delta_{i,7} \cdot EVENTS_t\right) + \varepsilon_{t,7} \quad (7)$$

$$(\%\Delta DEPTIME\_F_t) = \beta_{0,8} + \lambda_8 \cdot (DRACHMA_t) + \varphi_8 \cdot (\%\Delta DEPTIME\_F_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,8} \cdot \%\Delta MACRO_t) + \left(\sum_{i=1}^{4} \delta_{i,8} \cdot EVENTS_t\right) + \varepsilon_{t,8} \quad (8)$$

TABLE 6 The effect of ESI and EUI on «Drachma» Google search intensity

Regressors	Dependent variable
	DRACHMA
ESI	−0.515***
	(0.173)
EUI	0.110***
	(0.037)
Constant	50.903***
	(15.277)
Diagnostics	
R^2	0.234

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

$$(\%\Delta DEPTIME\_H_t) = \beta_{0,9} + \lambda_9 \cdot (DRACHMA_t) + \varphi_9 \cdot (\%\Delta DEPTIME\_H_{t-1}) + \sum_{i=1}^{7} (\gamma_{i,9} \cdot \%\Delta MACRO_t) + \left(\sum_{i=1}^{4} \delta_{i,9} \cdot EVENTS_t\right) + \varepsilon_{t,9} \quad (9)$$

where *%ΔDEP1D_F* and *%ΔDEP1D_H* stand for the monthly percentage change of One-Day deposits for firms and households, whereas *%ΔDEPTIME_F* and *ΔDEPTIME_H* denote Time deposits for firms and households, respectively. ***DRACHMA*** denotes the monthly

Google «Drachma» search intensity. MACRO denotes the set of macroeconomic factors, expressed in a monthly percentage change, and EVENTS denote the milestone events.

According to our first testable hypothesis, if uncertainty about the future currency (proxied by Google «Drachma» search intensity) affects deposits flows, we expect: $\lambda_6, \lambda_7, \lambda_8, \lambda_9 < 0$.

According to our second testable hypothesis, we expect: $|\lambda_6| < |\lambda_8|$ and $|\lambda_7| < |\lambda_9|$, whereas according to our third testable hypothesis, we expect: $|\lambda_6| < |\lambda_7|$ and $|\lambda_8| < |\lambda_9|$.

TABLE 7 The effect of abnormal «Drachma» Google search intensity on total deposits flows and its breakdown by type of deposit

Dependent variable			
Regressors	**%ΔDEP**	**%ΔDEP1D**	**%ΔDEPTIME**
%ΔDEP (t−1)	0.130 (0.135)	-	-
%ΔDEP1D (t−1)	-	−0.326** (0.152)	-
%ΔDEPTIME (t−1)	-	-	0.054 (0.105)
DRACHMA_ABN	−4.131*** (1.108)	−3.100 (7.099)	−16.371* (9.379)
%ΔR	−0.010 (0.072)	−0.381 (0.408)	0.169 (0.354)
%ΔESI	0.171*** (0.062)	0.224 (0.460)	0.721** (0.273)
%ΔEUI	0.001 (0.003)	−0.006 (0.024)	−0.009 (0.022)
%ΔIP	0.038 (0.047)	−0.254 (0.330)	0.480* (0.243)
%ΔUN	−0.068 (0.136)	−1.372 (0.906)	−0.375 (0.548)
UP	−0.895 (1.531)	−7.636* (3.936)	−8.567 (7.815)
DOWN	−0.335 (0.525)	4.682 (3.490)	0.585 (3.365)
PSI	1.439*** (0.495)	−7.104** (3.263)	8.054** (3.386)
CYPRUS	0.007 (0.361)	6.572*** (1.498)	−4.323*** (1.438)
ELECTIONS	−2.404*** (0.774)	−0.187 (3.777)	−5.426 (3.928)
REFER	4.784*** (1.155)	15.887* (8.144)	−5.671 (6.824)
Constant	4.336*** (1.312)	4.316 (8.504)	17.372 (10.737)
Diagnostics			
R^2	0.556	0.223	0.473

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

TABLE 8 The effect of abnormal «Drachma» Google search intensity on deposits flows for firms-households and its breakdown by type of deposit

	Dependent variable	
Regressors	**%ΔDEP_F**	**%ΔDEP_H**
%ΔDEP_F (t−1)	−0.176 (0.170)	-
%ΔDEP_H (t−1)	-	0.141 (0.128)
DRACHMA_ABN	−4.810 (3.639)	−4.436*** (1.119)
%ΔR_F	0.105 (0.080)	-
%ΔR_H	-	0.027 (0.046)
%ΔESI	0.349 (0. 253)	0.167*** (0.043)
%ΔEUI	−0.005 (0.013)	0.001 (0.003)
%ΔIP	0.084 (0.179)	0.034 (0.041)
%ΔUN	−0.896** (0.402)	−0.047 (0.104)
UP	−7.045 (4.957)	−0.643 (1.050)
DOWN	0.876 (2.057)	−0.723 (0.501)
PSI	−0.401 (2.045)	1.874*** (0.512)
CYPRUS	0.941 (1.024)	0.143 (0.288)
ELECTIONS	−1.287 (2.541)	−2.247*** (0.598)
REFER	5.864 (4.971)	6.250*** (1.750)
Constant	5.924 (4.227)	4.751*** (1.269)
Diagnostics		
R^2	0.223	0.635

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

TABLE 9 The effect of abnormal «Drachma» Google search intensity on deposits flows and its breakdown by type of deposit and depositor

	Dependent variable			
Regressors	**%ΔDEP1D_F**	**%ΔDEPTIME_F**	**%ΔDEP1D_H**	**%ΔDEPTIME_H**
%ΔDEP1D_F (t−1)	−0.386*** (0.080)	-	-	-
%ΔDEPTIME_F (t−1)	-	−0.112 (0.089)	-	-
%ΔDEP1D_H (t−1)	-	-	−0.250*** (0.070)	-
%ΔDEPTIME_H (t−1)	-	-	-	0.232*** (0.060)
DRACHMA_ABN	−3.485 (4.004)	−10.180*** (3.085)	−6.038*** (1.647)	−4.777*** (0.997)
%ΔR_F	0.066 (0.078)	0.169*** (0.062)	-	-
%ΔR_H	-	-	0.087 (0.062)	0.090** (0.039)
%ΔESI	0.181 (0.234)	0.583*** (0.188)	0.013 (0.099)	0.187*** (0.059)
%ΔEUI	−0.005 (0.017)	−0.004 (0.013)	−0.002 (0.007)	0.001 (0.004)
%ΔIP	−0.093 (0.208)	0.282* (0.164)	−0.069 (0.089)	0.045 (0.052)
%ΔUN	−0.865** (0.357)	−0.847*** (0.274)	−0.690*** (0.159)	−0.089 (0.093)
UP	−2.477 (3.022)	−0.726 (2.336)	0.250 (1.269)	−0.328 (0.755)
DOWN	4.053 (3.233)	−0.543 (2.474)	−1.947 (1.321)	−0.822 (0.787)
PSI	−5.594 (7.073)	4.215 (5.457)	−1.363 (2.984)	4.379** (1.774)
CYPRUS	5.344 (6.510)	−2.736 (5.028)	1.188 (2.732)	−0.322 (1.637)
ELECTIONS	−1.116 (3.123)	−4.353* (2.402)	0.666 (1.308)	−3.588*** (0.787)
REFER	7.414 (8.634)	1.671 (6.805)	20.512*** (3.856)	−2.779 (2.356)
Constant	5.061 (4.749)	11.294*** (3.655)	7.829*** (1.970)	5.391*** (1.182)
Diagnostics				
R^2	0.150	0.317	0.373	0.616
Hypothesis testing				
Joint zero effect of «Drachma» search intensity on the time and One-Day deposits	46.29***			
Symmetry of absolute effects of «Drachma» search intensity across the time and One-Day deposits (firms)	7.05			

TABLE 9 (Continued)

Regressors	Dependent variable			
	%ΔDEP1D_F	%ΔDEPTIME_F	%ΔDEP1D_H	%ΔDEPTIME_H
Symmetry of absolute effects of «Drachma» search intensity across the time and One-Day deposits (households)	37.54***			
Symmetry of absolute effects of «Drachma» search intensity across firms and households (One-Day deposits)	3.64*			
Symmetry of absolute effects of «Drachma» search intensity across firms and households (time deposits)	17.75***			

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level respectively, (b) numbers in parentheses denote robust standard errors.

However, before we proceed to the examination of these hypotheses, we examine first the following testable implications: (a) having the same type of deposit then whether ***DRACHMA*** exerts a symmetric impact on each type of depositor, that is, $\lambda_6 = \lambda_7$, $\lambda_8 = \lambda_9$ and (b) keeping the same type of depositor then whether ***DRACHMA*** exerts a symmetric impact on each type of deposit, namely $\lambda_6 = \lambda_8$ and $\lambda_7 = \lambda_9$.

4.2 | Empirical findings

In Table 3, we report the first baseline estimation results with the Total deposits, Time deposits and One-Day deposits. Starting with Total deposits, we find that «Drachma» search intensity exerts a negative impact, significant at all conventional levels, on Greek bank deposit flows. Looking into the constituents, we see that it is only Time deposits that are negatively affected by «Drachma» search intensity. As far as the control variables are concerned, from the set of macroeconomic factors, deposits are found to depend positively on the change in economic sentiment. This finding is present only in Time deposits. This suggests that, ceteris paribus, expectations for improved economic conditions tend to increase deposits by inducing positive flows. At the monthly frequency, no other macro factor is significant for Time and One-Day deposit flows. In contrast, deposits flows seem to react significantly to several milestone events. For instance, PSI has caused significantly positive flows (both for Time and Total deposits), implying that the debt haircut has been perceived as a positive development. Elections are found as having a significantly negative effect on deposit flows for Total deposits. The Cypriot banking crisis has produced opposite effects on Time deposits and One-Day deposits, by decreasing the former and increasing the latter.

Thus, the main findings from the above analysis are that the ***DRACHMA*** has produced negative flows in domestic Total deposits, which basically reflects the outflows in Time deposits. Hence, the hypothesis that higher uncertainty about the future currency is mapped onto higher deposit outflows is supported by the data.

In Table 4, we report the estimation results for the effect of «Drachma» Google search intensity on both firm and household deposit flows where we find that ***DRACHMA*** exerts a statistically significant and negative impact only on households' deposit flows. Therefore, we find additional empirical evidence supporting our first testable hypothesis that higher Google search intensity for «Drachma» leads to deposit outflows.

Now we turn our attention into the testing of the other hypotheses that involve the estimation of a SURE model. We focus on the estimation results presented in Table 5 considering a more detailed breakdown of deposit flows. According to our findings, ***DRACHMA*** has a negative and a statistically significant impact on ***DEPTIME_F***, ***DEP1D_H*** and ***DEPTIME_H***. Moreover, the hypothesis of joint zero effect of «Drachma» search intensity on the Time and the One-Day deposits was emphatically rejected, implying that ***DRACHMA*** has a joint statistically significant impact on all types of deposits. Furthermore, we find that the three out of the four of the other testable hypotheses regarding the symmetry of absolute effects of «Drachma» search intensity across different types of deposits and depositors are rejected. We find evidence that ***DRACHMA*** has an

TABLE 10 The effect of «Drachma» sentiment on total deposits flows and its breakdown by type of deposit

	Dependent variable		
Regressors	**%ΔDEP**	**%ΔDEP1D**	**%ΔDEPTIME**
%ΔDEP (t−1)	0.269*	-	-
	(0.157)		
%ΔDEP1D (t−1)	-	−0.315**	-
		(0.155)	
%ΔDEPTIME (t−1)	-	-	0.097
			(0.131)
DRACHMA_SENTIMENT	−0.019	0.088	−0.240
	(0.032)	(0.230)	(0.165)
%ΔR	−0.034	−0.453	0.077
	(0.064)	(0.384)	(0.307)
%ΔESI	0.194**	0.316	0.725**
	(0.074)	(0.483)	(0.275)
%ΔEUI	−0.002	−0.012	−0.011
	(0.004)	(0.024)	(0.019)
%ΔIP	0.025	−0.266	0.436*
	(0.050)	(0.341)	(0.234)
%ΔUN	−0.066	−1.329	−0.423
	(0.124)	(0.910)	(0.509)
UP	−0.963	−7.082*	−9.828
	(1.481)	(4.225)	(7.277)
DOWN	−0.277	4.789	0.523
	(0.427)	(3.293)	(1.836)
PSI	2.202***	−7.262**	11.705***
	(0.484)	(3.370)	(1.876)
CYPRUS	−0.168	6.656***	−4.092**
	(0.415)	(1.538)	(1.635)
ELECTIONS	−2.760**	−2.392	−4.419
	(1.044)	(5.123)	(4.648)
REFER	3.271***	13.007*	−11.106**
	(1.206)	(6.866)	(5.213)
Constant	−0.050	−1.292	3.219
	(0.610)	(4.982)	(3.354)
Diagnostics			
R^2	0.445	0.223	0.409

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

asymmetric impact on (a) firms' Time deposits *versus* firms' One-Day deposits, (b) households' time deposits *versus* households' One-Day deposits, and on (c) Time deposits of firms' *versus* time deposits of households (Table 5).

4.3 | Sensitivity analysis

In order to check the robustness of our empirical findings, we conduct sensitivity analysis based on two variants of the previous analysis:

- The Google search intensity for a search term is often defined by the literature as Search Volume Index (SVI). Following the methodology of Da et al. (2011), we calculate the Abnormal Search Volume Index (ASVI) of Google search term «Drachma» as follows:

$$DRACHMA\_ABN_t \equiv ASVI_t = \ln(SVI_t) - \ln[Med(SVI_{t-1}, \cdots, SVI_{t-8}) \quad (10)$$

Thus, we replace ***DRACHMA*** by ***DRACHMA_ABN*** (that is abnormal ***DRACHMA***) and then we use it as an

alternative proxy capturing the uncertainty about the future currency.

- The Google statistics provide information about the society attention to specific 'keywords' that could be the outcome of uncertainty. Obviously, Google searches intensity information is agnostic as to whether these searches have a positive or negative emotional content.

In order to mitigate these concerns, we proceed to the following empirical tactic: we estimate a regression model which has as dependent variable ***DRACHMA*** and as explanatory variables ***ESI*** and ***EUI***, as follows:

$$DRACHMA_t = a + \delta_1 ESI_t + \delta_2 EUI_t + u_t \qquad (11)$$

Then, we obtain the fitted values from this regression (***DRACHMA_SENTIMENT***) which are now our secondary proxy of uncertainty about the future currency.

Table 6 reports the estimation results obtained from Equation (11). We find that both parameters of interest carry the proper sign, with ***ESI*** having negative and ***EUI*** having positive impact on ***DRACHMA***, respectively. Moreover, both estimated coefficients were found to be statistically significant at the 1% level.

Table 7 reports the impact of ***DRACHMA_ABN*** on Total deposit flows, whereas Table 8 depicts the results of ***DRACHMA_ABN*** on firm and household deposit flows. Finally, Table 9 shows the impact of ***DRACHMA_ABN*** on Time and One-Day deposits for firms and households, respectively. A test for symmetry of absolute effects is rejected, implying that ***DRACHMA_ABN*** has a joint statistically significant impact on all types of deposits. Once again, we find that households' deposits are more sensitive than firms' deposits. Therefore, we observe that the replacement of the uncertainty about the future currency proxy does not affect our previous findings, which therefore are robust.

The results when ***DRACHMA_SENTIMENT*** is included as the key independent variable are reported in Tables 10, 11 and 12, with the Table 10 reporting the impact of ***DRACHMA_SENTIMENT*** on deposit flows, Table 11 the impact of ***DRACHMA_SENTIMENT*** on households' and firms' deposits and Table 12 the impact of ***DRACHMA_SENTIMENT*** on Time and One-Day deposits for both firms and households. The empirical findings are quite revealing, suggesting that ***DRACHMA_SENTIMENT*** exerts a significant impact on bank deposit flows. A test for symmetry of absolute effects is rejected, implying that ***DRACHMA_SENTIMENT*** has a joint statistically significant impact on all types of deposits. Finally, we also document that ***DRACHMA_SENTIMENT*** has an asymmetric impact across different types of bank deposits and depositors.

The results from the previously mentioned sensitivity analysis suggest that our baseline findings are not sensitive to the alteration of the main explanatory variable and therefore are robust.

TABLE 11 The effect of «Drachma» sentiment on deposits flows for firms-households and its breakdown by type of depositor

	Dependent variable	
Regressors	**%ΔDEP_F**	**%ΔDEP_H**
%ΔDEP_F (t−1)	−0.157 (0.184)	-
%ΔDEP_H (t−1)	-	0.312** (0.151)
DRACHMA_SENTIMENT	−0.025 (0.109)	−0.016 (0.029)
%ΔR_F	0.072 (0.069)	-
%ΔR_H	-	0.012 (0.043)
%ΔESI	0.380 (0.256)	0.200*** (0.058)
%ΔEUI	−0.007 (0.014)	−0.002 (0.004)
%ΔIP	0.075 (0.178)	0.018 (0.045)
%ΔUN	−0.902 (0.407)	−0.097 (0.104)
UP	−7.162 (4.810)	−0.797 (1.088)
DOWN	1.144 (1.747)	−0.631 (0.634)
PSI	1.086 (1.922)	2.626*** (0.724)
CYPRUS	0.834 (1.034)	−0.076 (0.316)
ELECTIONS	−1.914 (3.018)	−2.592*** (0.963)
REFER	2.310 (4.515)	4.488** (2.025)
Constant	0.811 (2.173)	−0.004 (0.576)
Diagnostics		
R^2	0.205	0.483

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

TABLE 12 The effect of «Drachma» sentiment on deposits flows and its breakdown by type of deposit and depositor

	Dependent variable			
Regressors	**%ΔDEP1D_F**	**%ΔDEPTIME_F**	**%ΔDEP1D_H**	**%ΔDEPTIME_H**
%ΔDEP1D_F (t−1)	−0.389*** (0.077)	-	-	-
%ΔDEPTIME_F (t−1)	-	−0.068 (0.088)	-	-
%ΔDEP1D_H (t−1)	-	-	−0.241*** (0.072)	-
%ΔDEPTIME_H	-	-	-	0.250*** (0.066)
DRACHMA_SENTIMENT	−0.040 (0.081)	−0.160** (0.067)	−0.077** (0.038)	−0.065*** (0.023)
%ΔR_F	0.043 (0.072)	0.107* (0.057)	-	-
%ΔR_H	-	-	−0.007 (0.061)	0.039 (0.035)
%ΔESI	0.182 (0.235)	0.584*** (0.189)	0.014 (0.100)	0.188*** (0.060)
%ΔEUI	−0.006 (0.018)	−0.005 (0.014)	−0.003 (0.008)	0.002 (0.005)
%ΔIP	−0.142 (0.211)	0.230 (0.173)	−0.121 (0.100)	0.015 (0.057)
%ΔUN	−0.728** (0.360)	−0.691** (0.288)	−0.520*** (0.174)	−0.015 (0.099)
UP	−2.951 (3.072)	−1.835 (2.491)	−0.254 (1.437)	−0.833 (0.824)
DOWN	3.471 (3.275)	−0.629 (2.607)	−2.085 (1.487)	−0.862 (0.854)
PSI	−4.534 (7.157)	7.377 (5.752)	−0.280 (3.361)	5.420*** (1.927)
CYPRUS	5.152 (6.609)	−2.381 (5.339)	1.198 (3.088)	0.076 (1.791)
ELECTIONS	−1.376 (3.267)	−3.187 (2.600)	0.565 (1.523)	−3.143*** (0.876)
REFER	3.913 (7.941)	−8.565 (6.652)	15.526*** (3.931)	−7.761*** (2.316)
Constant	1.953 (1.624)	2.523* (1.323)	2.185*** (0.765)	0.999** (0.448)
Diagnostics				
R^2	0.149	0.198	0.289	0.518
Hypothesis testing				
Joint zero effect of «Drachma» search intensity on the time and One-Day deposits	13.92***			
Symmetry of absolute effects of «Drachma» search intensity across the time and One-Day deposits (firms)	3.37*			

TABLE 12 (Continued)

Regressors	Dependent variable			
	%ΔDEP1D_F	%ΔDEPTIME_F	%ΔDEP1D_H	%ΔDEPTIME_H
Symmetry of absolute effects of «Drachma» search intensity across the time and One-Day deposits (households)	10.71***			
Symmetry of absolute effects of «Drachma» search intensity across firms and households (One-Day deposits)	1.25			
Symmetry of absolute effects of «Drachma» search intensity across firms and households (time deposits)	7.94***			

Note: (a) *, **, *** denote statistical significance at the 10, 5 and 1% level, respectively, (b) numbers in parentheses denote robust standard errors.

5 | CONCLUSIONS AND POLICY IMPLICATIONS

We conducted a Nowcasting exercise for the domestic private sector deposits (total as well as its constituents) in the Greek banking system. After controlling for a wide set of potential macroeconomic drivers and several milestone events, we investigate (a) whether uncertainty about the future currency exerts a negative impact on deposits flows and (b) whether it has an asymmetric impact across different types of bank deposits and depositors. The Nowcasting nature of the analysis stems from the use of Google search intensity data for the term «Drachma», which was obtained from Google Trends.

Our empirical findings document that in periods of increased «Drachma» search intensity, there are significant outflows in Total deposits, which can be traced back to outflows of Time deposits, finding which is consistent with our prior that higher uncertainty about the future currency causes a 'flight-to-safety' response from depositors. Regarding the two major types of depositors, households' deposits are significantly affected in a negative manner by the term «Drachma». As far as firms' deposits are concerned although they drop during the sample period, this drop is unrelated to «Drachma» search intensity. In addition, we find evidence that households' deposits are more sensitive than firms' deposits when we have an increased Google search intensity for the term «Drachma».

Provided that information-gathering activities accurately anticipate future intentions and decisions, online search behaviour may serve as a leading indicator of various economic phenomena (Siliverstovs and Wochner, 2018). In our case, where we find that higher uncertainty about the future currency gives rise to deposit withdrawals across banks, suggests that policy decision-makers and/or depository institutions may find useful to track online search behaviour to the extent that it anticipates depositors' actions. Thus, tracking search data offers a new tool to the standard toolkit of indicators that involved agents traditionally deploy in order to predict future trends.

ACKNOWLEDGEMENTS

We would like to thank the Editor and the two anonymous reviewers for their constructive comments that contributed to the improvement of this paper. We would also like to thank Manthos Delis for his insightful comments.

The views and opinions expressed herein are those of the authors and they do not represent those of their respective institutions.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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ENDNOTES

[1] https://www.moodys.com/research/Moodys-Euro-area-exit-risk-is-very-low-Greece-aside-PR_362993.

[2] A Google search is a revealed attention measure (Da et al., 2011). If someone searches for the term Drachma in Google, he/she is

undeniably paying attention to this term. Hence, Google searches constitute a direct and explicit measure of agents' behavior/attention.

[3] https://storage.googleapis.com/gweb-news-initiative-training.appspot.com/upload/GO802_NewsInitiativeLessons_Fundamentals-L04-GoogleTrends_1saYVCP.pdf

[4] A referendum regarding the acceptance or not of the bailout conditions proposed by the European Commission, the International Monetary Fund and the European Central Bank took place on July 05, 2015. The referendum was announced by Prime Minister Alexis Tsipras on June 27, 2015 (http://primeminister.gr/english/2015/06/27/prime-minister-alexis-tsipras-address-concerning-the-referendum-to-be-held-on-the-5th-of-july).

[5] The PSI was a restructuring scheme of Greek debt held by private investors in March 2012. About 97% of privately held Greek bonds (about €197 billion) took a 53.5% face value cut. (https://www.esm.europa.eu/content/what-was-private-sector-involvement-psi-greece).

[6] In June 2012, Cyprus requested assistance from the euro area and the IMF. A European Stability Mechanism assistance programme of EUR 9 bn was agreed in March 2013. In return, Cyprus agreed to close the country's second-largest bank, the Cyprus Popular Bank and imposed a one-time bank deposit levy on all uninsured deposits. In addition, a deposit levy of approximately 48% of uninsured deposits was also imposed in the Bank of Cyprus (https://www.esm.europa.eu/assistance/cyprus#programme_timeline_for_cyprus).

[7] We control for the Cypriot banking crisis for two reasons: first, because the ties between the Cypriot and the Greek economies are strong, and second because it was an unprecedented bail-in event.

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How to cite this article: Anastasiou D, Drakos K. Nowcasting the Greek (semi-) deposit run: Hidden uncertainty about the future currency in a Google search. *Int J Fin Econ*. 2021;26:1133–1150. https://doi.org/10.1002/ijfe.1841