

Economic Policy Uncertainty, Political Uncertainty and the Greek Economic Crisis

by

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Based on the revised April 2018 SSRN working paper #3155172
by G. Hardouvelis, G. Karalas, D. Karanastasis, and P. Samartzis



International Conference

The Future of Money

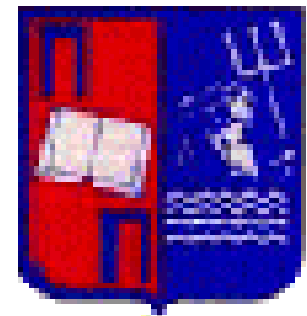
Trends-Alternatives-Potentials

Thursday, May 24, 2018, 08:30- 17:00
The American School of Classical Studies (Gennadius Library)
9 Anapiron Polemou, 106 76 Athens

Organizers

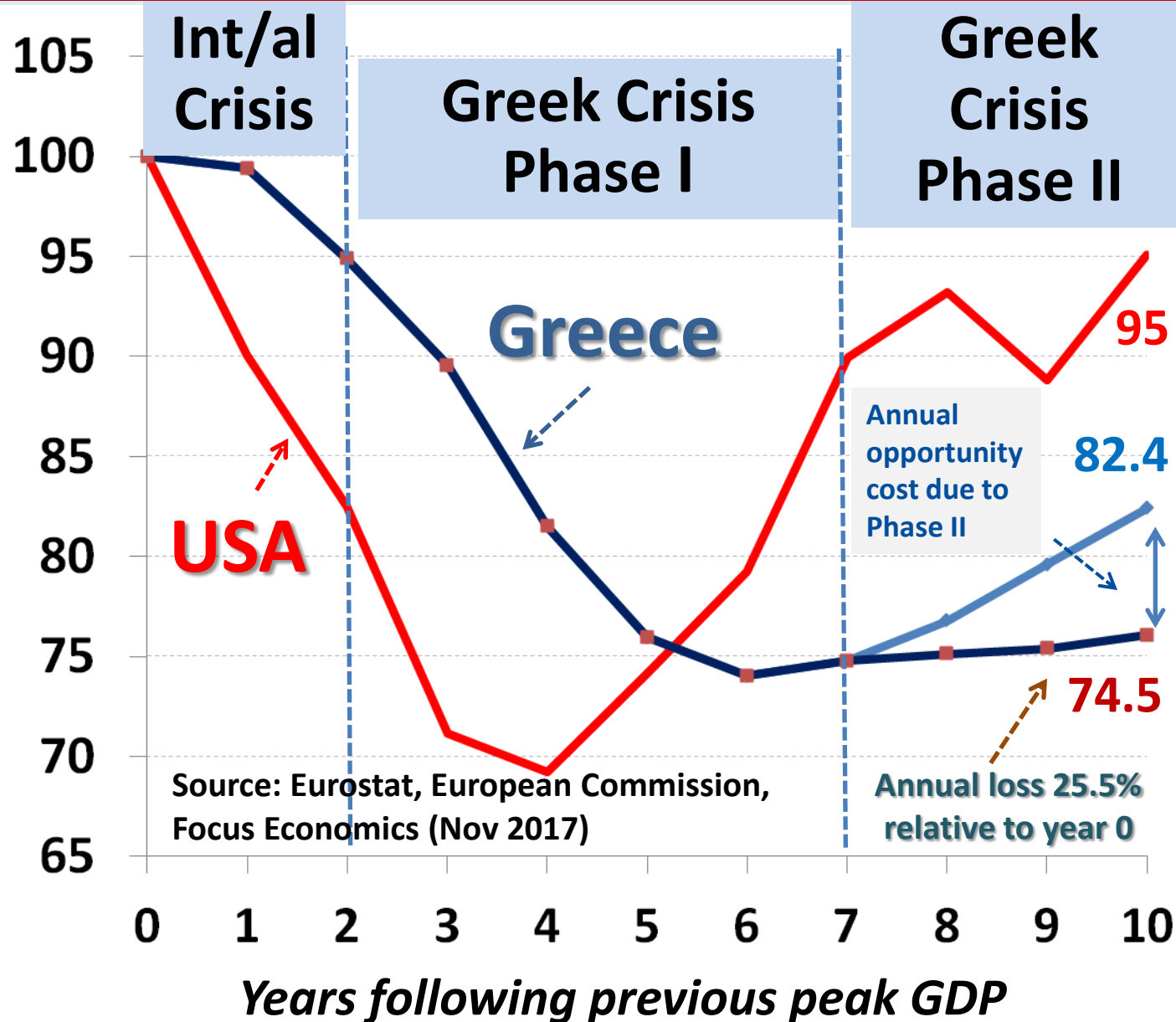
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ROMIKI BIBLIOTHIKI
CONFERENCE

The poster features a silhouette of a person on a globe holding a string that supports three floating coins: a Bitcoin, a Euro, and a Greek Drachme, set against a starry space background.



Greek Depression worse than US Great Depression

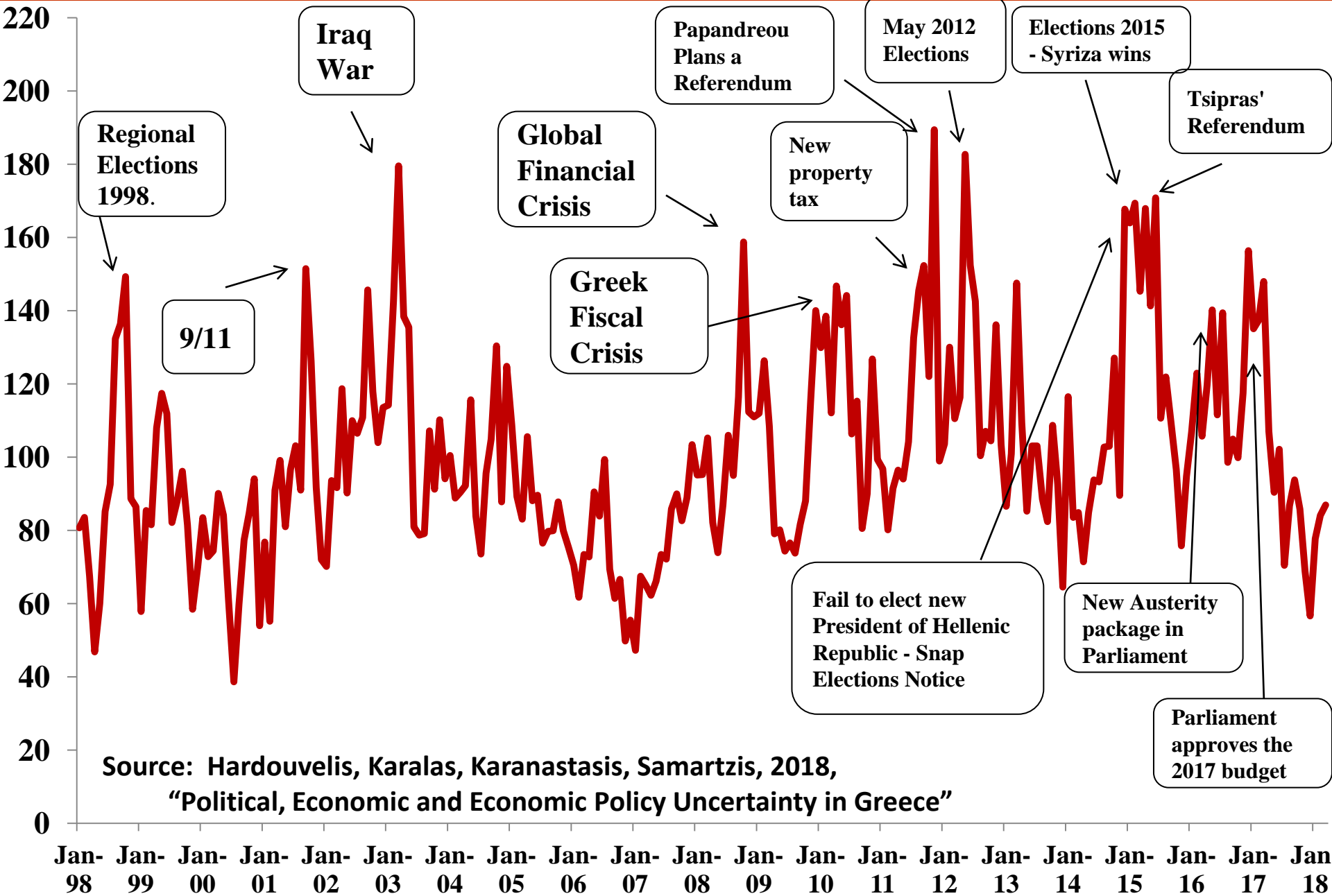
- ❑ Date 0 is **1929** for the US, and **2007** for Greece: Real GDP is set at 100
- ❑ The Greek recovery of year 10, 2017, is a forecast
- ❑ After 10 years, the **US was at 95** in 1939 but **Greece at 74.5** in 2017
- ❑ **Fall 2014: Greece was forecasted to be around 82.4**
- ❑ **At minimum, Phase II costs annually 7.9 ppt or ca. €18bn**



How much has Uncertainty contributed to the Depth and Length of the Greek Depression?

- We know fiscal tightening is mainly responsible for the recession, yet effective tightening ended in 2013
- Some claim the underground economy is also to blame, as activity has shifted there and is not being recorded
- The analysis thus far is incomplete and depends critically on calibration exercises of DSGE models
- We ask: Does uncertainty play a role?
- No one has so far explored the role of uncertainty because no such index exists
- We construct EPU, POLU and sub-indices of EPU related to fiscal policy (EPUF) , monetary policy (EPUM), currency or GREXIT uncertainty (EPUC), pension policy (EPUM) and banking (EPUB)
- The methodology is textual analysis: We search more than half a million articles in 4 Greek newspapers from Jan 1999 to Dec 2017 and record the frequencies of articles containing certain key words

Greek Economic Policy Uncertainty over time



Greek EPU correlations with international EPUs vary across the different crisis periods

Greek EPU	Pre-Crisis	International Crisis	Greek Crisis Phase I	Greek Crisis Phase II
Correlation with:	1/1998 7/2007	8/2007 9/2009	10/2009 11/2014	12/2014 12/2017
Global EPU	66.6%	85.4%	52.7%	0.6%

Source: Hardouvelis, Karalas, Karanastasis, Samartzis, 2018, "Political, Economic and Economic Policy Uncertainty in Greece"

- ❑ Earlier Diagram showed Greek EPU driven by important international events in the pre-crisis sample
- ❑ The common global financial crisis raised further the positive correlation
- ❑ Correlation dropped during Greek Crisis Phase I
- ❑ Correlation collapsed during Greek Crisis Phase II, showing the completely idiosyncratic nature of Greek Crisis Phase II

3-year cumulative effect of 22% uncertainty shock

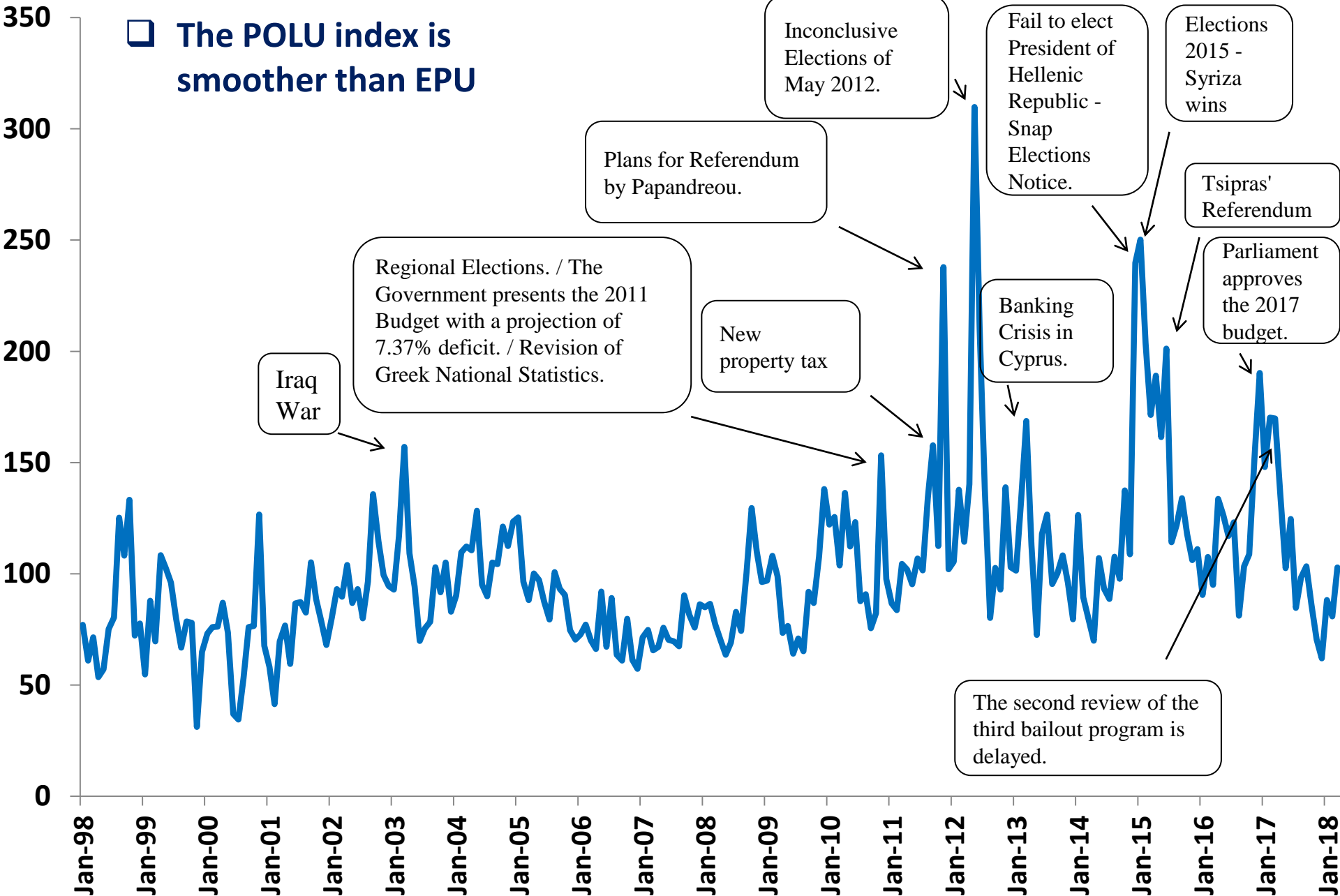
- ❑ Average EPU increased 22% from the pre-crisis to the crisis period
- ❑ EPU shocks can explain both direction & magnitude of economic fluctuations
- ❑ EPU more successful than POLU in separate VARs
- ❑ Monthly models provide better statistical fits than quarterly models

-
- VARs estimated from Jan 1998 to Dec 2017
 - Statistically significant coefficients in **bold**
 - The actual changes of Industrial Production, Employment, Economic Sentiment, Athens Stock Exchange index and 10-yr yield are the % changes of their average values from the period 1/1998-7/2007 to the period 8/2007-12/2017

	EPU	POLU	Actual Change
Industrial Production	-18.2%	-8.4%	-24.0%
Employment	-11.4%	-7.8%	-13.4%
10-yr bond yield (bps)	1197	881	586
Athens Stock Exchange	-76.0%	-32.6%	-83.4%
Economic Sentiment	-21.3%	-9.4%	-30.4%
Household Deposits	-41.5%	-33.6%	-30.4%
G.D.P.	-6.2%	-1.5%	-25.5%
Investment	-22.2%	-12.3%	-70.3%

- The actual changes of Household Deposits, GDP and Investment are the % changes of their values from July 2007 to December 2017.

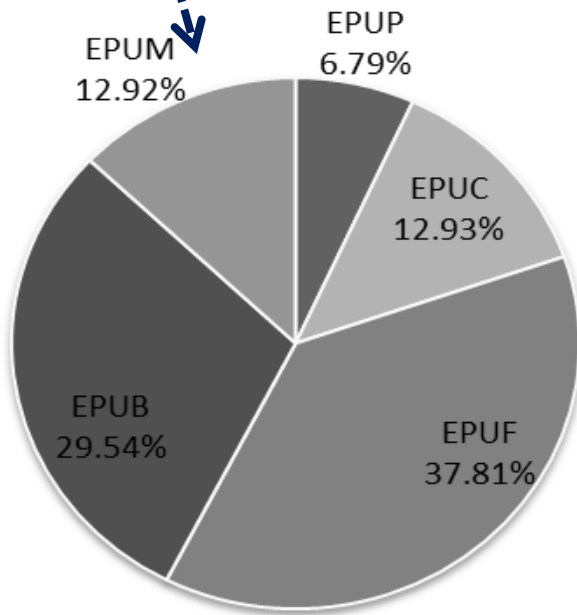
Greek Political Uncertainty over time



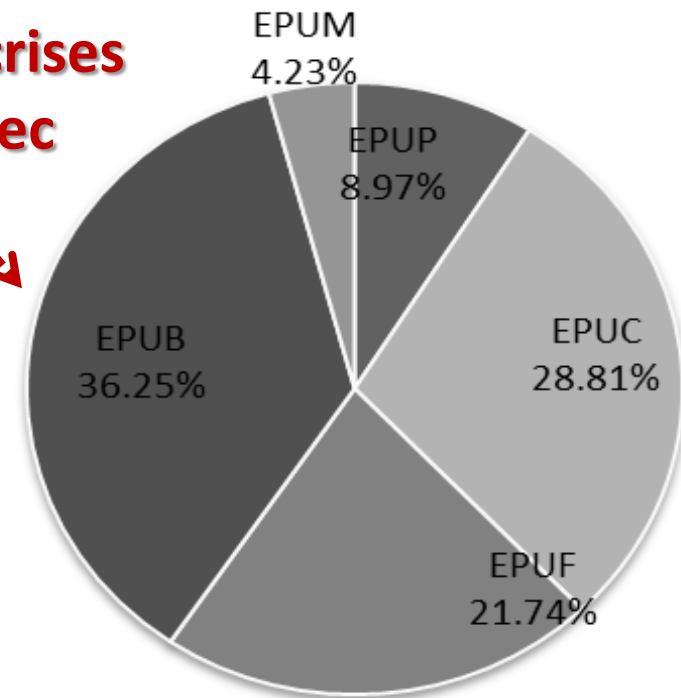
Sources of Greek Economic Policy Uncertainty

- ❑ Relative contribution of Monetary Policy Uncertainty EPUM is minimal and **declines**
- ❑ Relative contribution of Currency (or GREXIT) uncertainty EPUC rises during the crisis
- ❑ Relative contribution of Banking Uncertainty EPUB rises during the crisis
- ❑ Relative contribution of Fiscal uncertainty EPUF declines during the crisis

Before the crisis
Jan 1998 – July 2007



During the
consecutive crises
Aug 2007 – Dec
2017



EPU
Composition

Source: Hardouvelis, Karalas, Karanastasis, Samartzis, 2018, "Political, Economic and Economic Policy Uncertainty in Greece"

Which Variable can explain both the Depth and Length of the Greek 10-year Depression?

- ❑ The change in EPU is consistent with the DEPTH: The large drop in output, employment, stock market, economic sentiment, household deposits, and with the increase in bond yields
- ❑ But can EPU explain the on-going stagnation? the lack of recovery? The LENGTH of the depression?
- ❑ VAR analysis plus Variance decomposition analysis show the three EPU sub-indices related to the Debt crisis (EPUD), the Banking crisis (EPUB) and GREXIT or currency uncertainty (EPUC):
 - Explain both the change in magnitudes from the pre-crisis period to the crisis period and a large fraction of the variability in GDP and Investment during the crisis period
 - The bond yield is another such important variable
- ❑ POLU explains the variability in Household Deposits, whereas interest rates do not
- ❑ POLU seems to dominate the remaining uncertainty variables in explaining the behavior of bond spreads but fails to explain the rest

- **Did policy uncertainty deepen the crisis or did the crisis simply raise uncertainty?**

Thank you for your attention!

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APPENDIX: Global vs. Greek EPU

- ❑ Most local economic variables are driven by domestic EPU shocks and much less by Global EPU shocks
- ❑ The Table records the % contribution to the 3-year ahead VAR forecast variability of each economic variable (in first column) originating from either a Greek EPU shock or a global EPU shock
- ❑ Greek EPU is affected by global EPU but not vice versa

VAR Variance Decomposition

3-year Ahead VAR Forecast Variability of:	Contribution of:	
	Greek EPU shock	Global EPU shock
Ind. Production	17.3%	0.4%
Employment	20.1%	0.0%
Bond yield	13.9%	0.1%
ASE	7.0%	9.9%
Econ. Sentiment	22.7%	2.7%
H/ld Deposits	25.3%	1.2%
G.D.P.	2.8%	4.5%
Investment	13.5%	0.8%
Panel B		
Greek EPU index	53.4%	27.0%
Global EPU index	6.7%	69.3%

Source: G. Hardouvelis, G. Karalas, D. Karanastasis, P. Samartzis, 2018, "Political, Economic and Economic Policy Uncertainty in Greece"

APPENDIX: Monetary Policy Uncertainty carries small weight

