# ECB interventions in distressed sovereign debt markets: The case of Greek bonds Christoph Trebesch and Jeromin Zettelmeyer

Discussion by: Athanasios Orphanides MIT

Macroeconomics After the Great Recession

IMF Seventeenth Jacques Polak Annual Research Conference

Washington DC, November 3–4, 2016



#### Pertinent questions

- ▶ Do central bank purchases of sovereign debt reduce long-term yields?
- ▶ Do the modalities of asset purchases matter?
  - Communication
  - Clarity of objective
  - Transparency
  - Commitment
- Was the ECB's SMP effective?



#### **Findings**

- ▶ ECB SMP purchases of Greek debt had a sizeable temporary effect on yields.
- ► Effect was highly localized, reducing yields of specific securities purchased and only as long as purchases continued.
- ▶ The SMP did not achieve a generalized sustained reduction of yields.
- ► The result is in stark contrast to evidence on QE programs. QE delivers a generalized reduction of yields beyond the securities purchased. (e.g. D'Amico and King, 2013, for Fed's QE program.)



#### Praise and lessons

- ► Amazingly resourceful use of public data sources and careful empirical analysis shed light on an episode where the ECB has not been transparent.
- ▶ An important implicit lesson for designing asset purchase programs: A central bank's clear communication and commitment to reduce yields may be far more important than the quantity of actual purchases made.
- ▶ Results raise questions about the wisdom of ECB's SMP decision, which was already quite controversial when made. (Under its current secrecy norms, the ECB may keep the identity of dissenters under wraps until 2040.)
- ► Failure of the ECB's SMP raises further uncomfortable questions about the overall mismanagement of the euro area crisis.



#### Some questions about the SMP

- What was the ultimate objective?
- ▶ Was it "monetary policy"?
- What determined the size and timing of purchases?
- What determined the member states whose debt was purchased?
- Was there explicit or implicit conditionality involved?



## A snapshot of the SMP (after its termination)



#### **PRESS RELEASE**

#### ${\bf 21}$ February ${\bf 2013}$ - Details on securities holdings acquired under the Securities Markets Programme

The Governing Council of the European Central Bank (ECB) decided today to publish the Eurosystem's holdings of securities acquired under the Securities Markets Programme (SMP). This decision is in line with the envisaged transparency stance for the Outright Monetary Transactions (OMTs) as communicated on 6 September 2012, at which time the SMP was terminated.

To this end the following table shows the breakdown of the Eurosystem's SMP holdings as at 31 December 2012, per country of issuer, indicated at nominal value, book value and average remaining maturity.

	Outstanding amounts			
	Nominal amount (EUR billion)	Book value [1] (EUR billion)	Average remaining maturity (in years	
Ireland	14.2	13.6	4.6	
Greece	33.9	30.8	3.6	
Spain	44.3	43.7	4.1	
Italy	102.8	99.0	4.5	
Portugal	22.8	21.6	3.9	
Total	218.0	208.7	4.3	



 $<sup>^{[1]}</sup>$ The SMP holdings are classified as held-to-maturity and consequently valued at amortised cost.

## SMP: Government bond purchases with conditionality?

"Dear Prime Minister,

The Governing Council of the European Central Bank discussed on 4 August the situation in Italy's government bond markets. The Governing Council considers that pressing action by the Italian authorities is essential to restore the confidence of investors. . . .

In view of the severity of the current financial market situation, we regard as crucial that all actions listed in section 1 and 2 above be taken as soon as possible with decree-laws, followed by Parliamentary ratification by end September 2011. A constitutional reform tightening fiscal rules would also be appropriate. . . .

We trust that the Government will take all the appropriate actions."

(Letter by Mario Draghi and Jean-Claude Trichet sent to Silvio Berlusconi on August 5, 2011, as published by Italian press.)



#### The data: Official Gazette of the Hellenic Republic

ΔΛΔ· R44VH\_3MN ΔΛΔ· R44VH-3MN



TMHMA: A'

LENIKO VOLIZZHBIO ZOA KBYZOAZ LENIKH VIEABANZH UHZVABOWAVKIOA

Δθόνα 15 Φεβρουαρίου 2012 Anii Tour 2/13203/0023A

ΑΝΑΡΤΗΤΕΑ ΣΤΟ ΔΙΑΔΙΚΤΥΟ πιανύσιο Αισύνεισ N. 3861/2010)

Δημοσιεύθηκε στο ΦΕΚ 574 Β/2012

ΚΑΙ ΠΡΟΥΠΟΛΟΓΙΣΜΟΥ ΑΙΕΥΘΥΝΣΗ :23η Απμοσίου Χοέους Ταν Αλιση : Πανεπιστημίου 37 Ταν. Κώδικας : 101 65 Αθήνα

ΥΠΟΥΡΓΕΙΟ ΟΙΚΟΝΟΜΙΚΩΝ

ΘΕΜΑ:«Απόφαση ανταλλαγής ομολόγων του Ελληνικού Δημοσίου».

#### АПОФАТН Ο ΥΠΟΥΡΓΟΣ ΟΙΚΟΝΟΜΙΚΟΝ

#### Ένοντας μπόμια:

- 1. Τις διατάξεις του άρθρου 1 του v.2187/94 «Ρύθμιση θεμάτων δημοσίου
- votouc» (ΦΕΚ 16A/8.2.1994). 2. Τις διατάξεις των άρθοων 5 έως και 12 του v.2198/1994 «Αύξηση αποδοχών δημοσίων υπαλλήλων εν νένει, σύναψη δανείων υπό του Ελληνικού Αρμοσίου και δρυμομογία στην Τρόπεζα της Ελλάδος Συστόματος Παρακολούθησης Συγαλλαγών επί τίτλων με λογιστική μορφή (άυλοι τίτλοι)» (ФЕК 43A/22.3.1994).
- Τις διατάξεις των άρθοων 31 και 32 του ν 1914/90 «Εκαμγορνισμός και ανάπτυξη του Δημόσιου τουέα και της Κεφαλαιανοράς φορολογικές ρυθμίσεις και άλλες διατάξεις» (ΦΕΚ 178Α/17.12.1990).
- 4. Τις διατάξεις του άρθρου 11 του v.2459/1997 «Κατάρνηση φορολογικών απαλλαγών και άλλες διατάξεις» (ΦΕΚ 17 Α' /18.2.1997), όπως τροποποιήθηκε με το άρθρο 9 του v. 2579/98 (ΦΕΚ 31 A/1998)
- 5. Tic Airmétric Truy doBoury 90 & 91 Tou v 2362/1995 «Fisoi Anuoriou Λονιστικού, ελέγχου των δαπανών του Κράτους κ.α.δ.» (ΦΕΚ 247 Α/1995) και του άρθοου 64 του παραπάνων νόμου, όπως τροποποιάθηκε και ισχύει με το άρθρο 38 του v. 3871/2010 (ΦΕΚ 141 A/2010).
- Την αριθμ. 2021180/2981/0023/31.3.1997 απόφαση του Υπουργού των Οικονομικών «Περί των δαπανών σύναιμης, έκδοσης και εξυπηρέτησης кАтт. тым бамым тон банодіон (ФЕК 286/B/10.4.1997)»
- 7. Την αριθμ.2/4627/0023/25.01.2001 απόφαση του Υπουργού Οικονομικών «Καθορισμός όρων, τύπου και κειμένου των ομολόνων Ελληνικού Δημοσίου σε Ευρώ στοθερού επιτοχίου (ΦΕΚ 370 Β/2001)»
- 8 Toy gold 2/20187/0023/A/20-4-2004 (dek/ 670/B/10-5-2004) отполого тоц Υπομονού Οικονομικών «Καθορισμός νενικών όρων, τύπου και κειμένου των ομολόνων Ελληνικού Δημοσίου σε Εμοώ, κυμαινόμενου επιτοκίου»
- 9. Τις αποφάσεις έκδοσης του Υπομονού Οικονομικών με αο πουτ. 2/11184/0023A/13-2-2009 2/13482/0023A/27-2-2007 2/20947/0023A/18-3-2/5004/00224/26 1 2000 2/6276/00224/20 1 2010

ΒΙΝ υφιστάμενον ομολάγον προς ανταλλαγή	Ημνία έκδοσης	Ημ/νία λήξης	Τουρμερίδιο	Ονομ. αξία ομολόχου προς ανταλλαγή (€)
GR0110021236	17/2/2009	20/3/2012	4,30%	4.273.195.000,00
GR0114020457	2/3/2007	20/8/2012	4,10%	2.517.423.000,00
GR0114021463	26/3/2008	20/8/2013	4,00%	1.902.000.000,00
GR0114022479	28/1/2009	20/8/2014	5,50%	3.565.820.000,00
GR0114023485	2/2/2010	20/8/2015	6,10%	3.020.300.000,00
GR0118012609	7/4/2010	20/4/2017	5,90%	1.185.800.000,00
GR0124018525	17/1/2002	18/5/2012	5,25%	2.073.950.000,00
GR0124021552	17/1/2003	20/5/2013	4,60%	3.288.645.000,00
GR0124022568	3/7/2003	3/7/2013	3,90%	84.300.000,00
GR0124024580	13/1/2004	20/5/2014	4,50%	2.868.250.000,00
GR0124025595	1/7/2004	1/7/2014	4,50%	30.000.000,00
GR0124026601	22/2/2005	20/7/2015	3,70%	2.095.880.000,00
GR0124028623	18/1/2006	20/7/2016	3,60%	1.446.070.000,00
GR0124029639	17/1/2007	20/7/2017	4,30%	2.412.206.000,00
GR0124030645	13/5/2008	20/7/2018	4,60%	1.255.900.000,00
GR0124031650	11/3/2009	19/7/2019	6,00%	3.317.950.000,00
GR0124032666	11/3/2010	19/6/2020	6,25%	1.132.350.000,00
GR0128001584	20/5/1998	20/5/2013	7,50%	779.550.000,00
GR0128002590	11/1/1999	11/1/2014	6,50%	1.424.750.000,00
GR0133001140	22/10/1999	22/10/2019	6,50%	1.450.650.000,00
GR0133002155	24/4/2002	22/10/2022	5,90%	539,300,000,00
GR0133003161	30/5/2007	20/3/2024	4,70%	1.090.870.000,00
GR0133004177	10/11/2009	20/3/2026	5,30%	696,706,000,00
GR0138001673	7/3/2005	20/9/2037	4,50%	16.800.000.00
GR0512001356	11/2/2009	20/2/2013	6M Euribor + 2,00%	121.278.000.00
GR0514017145	21/5/2009	21/5/2014	6M Euribor + 1,30%	40.000.000,00
GR0528002315	4/4/2005	4/4/2017	6M Euribor + 0,09%	48.000.000,00
IT0006527532	11/3/1999	11/3/2019	5,00%	17.117.000,00
XS0097596463	21/5/1999	21/5/2014	10YEAR EUSA10*0,85 (floor 4,00%)	1.000.000.00
XS0260024277	5/7/2006	5/7/2018	6M Euribor + 0.09%	14.000.000.00
XS0357333029	11/4/2008	11/4/2016	6M Euribor + 0.075%	22,800,000,00
Σένολο				42,732,860,000,00

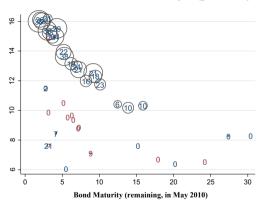
3. Για του ποσυματοποίηση της ανααλλουής ενδίδουσαι νέα ομόλουα γυνοίς δυνατότητα αποκοπής τοκουεριδίων και ξεγωριστής τους διαπραγυάτευσης, με τους παρακάτω όρους:

Α) Ομόλονα με ημερομηνία έκδοσης 15.02.2012, ημερομηνία λήξης 20.03.2012, έναρξη 1% τοκοφόρου περιόδου 20.03.2011, ημερομηνία πληρωμής πρώτου τοκομεριδίου 20.03.2012 και ISIN GR0106004808 KOTÓ TO JOSTÓ IGNÍCIUS OL ÓDOL (PROTECTOL ISIN GROT110021236 (ATRAGOSTO Υπομονού Οικονομικών με σο, πουτ 2/11184/0023Δ/13-2-2009\ Β) Ομόλονα με ημερομηνία έκδοσης 15.02.2012, ημερομηνία λήξης 20.08.2012, έναρξη 1% τοκοφόρου περιόδου 20.08.2011, ημερομηνία πληοωμής ποώτου τοκομεριδίου 20.08.2012 και ISIN GR0106006829. Κατά τα λοιπά ισχύουν οι όροι έκδοσης του ISIN GR0114020457 (Απόφαση Υπουργού Οικονομικών με αρ. πρωτ. 2/13482/0023Α/27-2-2007). Γ) Ομόλονα με ημερομηνία έκδοσης 15.02.2012, ημερομηνία λήξης 20.08.2013, έναρξη 1% τοκοφόρου περιόδου 20.08.2011, ημερομηνία πληρωμής πρώτου τοκομεριδίου 20.08.2012 και ISIN GR0108007460.

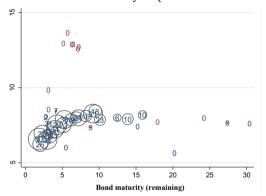


# The immediate impact of purchases on bond yields

Panel A: Yield curve on May 7 (pre-SMP)



Panel B: Yield curve on May 17 (1 week after SMP start)

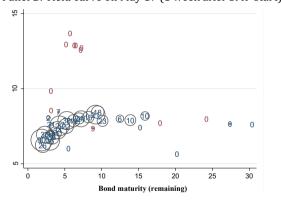


Reproduced from Figure 4. Dramatic drop in yields.

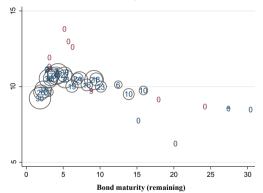


### The impact of purchases on bond yields: After most purchases

Panel B: Yield curve on May 17 (1 week after SMP start)



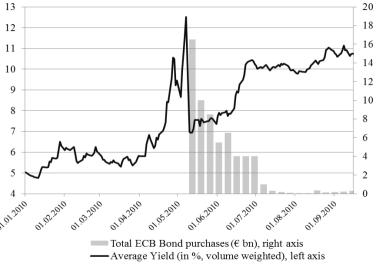
Panel C: Yield curve on July 5 (8 weeks after SMP start)



Reproduced from Figure 4. A notable partial reversal by week 8 of program.



# Ultimately the program "failed" when purchases stopped





#### The broader context: The SMP and the Troika program

- ▶ The SMP was just one component of larger scheme for Greek crisis.
- ► The ECB's "independent" SMP decision complemented negotiations taking place over many months between certain governments of the euro area and certain IMF officials.
- ► The SMP was, in effect, an integral part of the Troika program designed to deal with the Greek issue.
- ▶ Should the design, implementation and failure of the SMP be examined in isolation of the rest of the scheme?

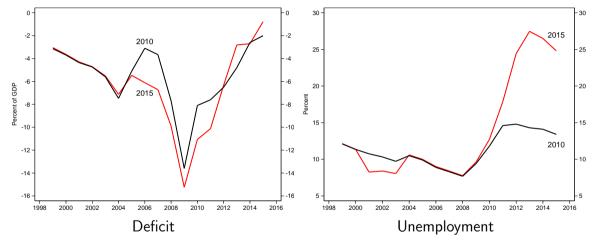


## Timeline of the May 2010 Troika program for Greece

- ► May 8, 2010
  - Summit of the Heads of State or Government of the euro area: Finalized procedures to implement EU/IMF program for Greece.
- ► May 9, 2010
  - IMF: Approval of the Greek program
  - ► EU: Ecofin/Eurogroup announce establishement of EFSF.
  - ► ECB: SMP

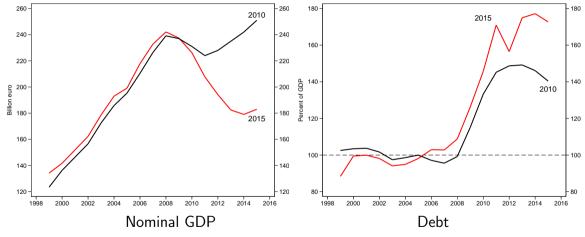


### The Original Sin of the euro crisis: 2010 program vs outcomes



2010 series reflects estimates in program approved by IMF on 9 May 2010. 2015 series from April 2015 WEO.

#### The Original Sin of the euro crisis: 2010 program vs outcomes



2015 series for debt ratio includes effect of 2012 haircut



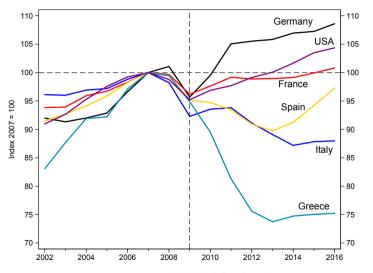
#### What was the Troika program about?

"It was about protecting German banks, but especially the French banks, from debt write offs"

(Karl Otto Pohl, Former Bundesbank President, Spiegel, May 18, 2010.)



#### Summary evaluation of Troika: Winners and losers





Real GDP per person, index, 2007=100. IMF WEO, October 2016.

#### Bibliography

Bluestein, P. (2016). Laid Low: Inside the Crisis That Overwhelmed Europe and the IMF. Waterloo: Centre for International Governance Innovation.

D'Amico, S. and T. King (2013). Flow and Stock Effects of Large-Scale Treasury Purchases: Evidence on the Importance of Local Supply. Journal of Financial Economics, 108(2), pp. 425-448. http://www.sciencedirect.com/science/article/pii/S0304405X12002425

Kincaid, R. (2016). The IMF's Role in the Euro Area Crisis: What Are the Lessons from the IMFs Participation in the Troika? BP/16-02/06. Washington: International Monetary Fund. http://www.ieo-imf.org/ieo/files/completedevaluations/EAC\_BP\_16-02\_06\_\_The\_IMF\_s\_Role\_in\_the\_Troika.PDF

de Las Casas, M. (2016). The IMF Executive Board and the Euro Area Crisis—Accountability, Legitimacy, and Governance. BP/16-02/02. Washington: International Monetary Fund.

 $\label{lem:http://www.ieo-imf.org/ieo/files/completed evaluations/EAC_BP_16-02_02\_The_IMF_Executive\_Board\_and\_the\_Euro\_Area\_Crisis\_-\_Accountability\_Legitimacy\_and\_Governance.PDF$ 

Orphanides, A. (2015). The euro area crisis five years after the original sin. Credit and Capital Markets 4/2015, pp. 535-565. https://ssrn.com/abstract=2676103

Wyplosz, C. and S. Sgherri (2016). The IMF's Role in Greece in the Context of the 2010 Stand-By Arrangement. BP/16-02/11. Washington: International Monetary Fund. http://www.ieo-imf.org/ieo/files/completedevaluations/EAC\_BP\_16-02\_11\_The\_IMFs\_Role\_in\_Greece\_in\_the\_Context\_of\_the\_2010\_SBA.PDF

Zettelmeyer, J., C Trebesch and G. M. Gulati (2013). The Greek Debt Restructuring: An Autopsy. Economic Policy, 28(75), pp. 513-563. https://ssrn.com/abstract=2294273

