

On-line Appendix and Files to accompany

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“Forecasting the Recovery from the Great Recession: Is This Time Different?”

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This appendix describes the construction of the data in Figure 1 and provides the detailed news events underlying Table 1. Data underlying the figures and tables are available on-line.

The solid line in Figure 1 is real US GDP (chained) revised as of December 19, 2012. The dashed lines are the mean levels of the US Survey of Professional Forecasters (based on data downloaded from the Federal Reserve Bank of Philadelphia as of December 19, 2012). This appendix describes the procedure for adjusting and interpolating these quarterly forecasts. The SPF tabulates the mean forecast for the current quarter and the next four quarters. As of 2009:2, it also tabulates the mean forecast for the current and next three calendar years. For the one-, two-, three-, and four-quarter ahead forecasts, the levels plotted in Figure 1 reflect the growth rate of the mean forecast precisely from the levels as tabulated by the SPF. For the fifth- through eight-period ahead forecasts, we need to interpolate quarterly growth rates from the annual forecasts. To do so, we interpolate quarterly growth rates that exactly fit the tabulated annual forecasts. For forecasts beginning in all quarters, we assume a constant quarterly growth rate for the fifth through eighth quarters ahead. To reconcile this growth rate with the subsequent annual levels, we require several more quarters. For forecasts in the first and second quarter, we allow for a different quarterly growth rate beginning in the ninth quarter. For forecasts in the third quarter, we keep the ninth quarter forecast at the same growth rate as the previous four quarters. For forecasts in the fourth quarter, there is no need to interpolate beyond the eighth quarter because the eight quarters forecast coincide with exactly two calendar years.

The foregoing describes how we convert the SPF forecasts into one- to eight-quarter ahead growth rates. To get the levels shown in Figure 1, we construct a *nowcast error* defined as the difference of the growth rate “forecast” for current quarter and the growth rate reported in the preliminary release of the GDP data for that quarter (generally released at the end of the first month of the next quarter). (These data are also supplied by the Philadelphia Fed.) We start the plotted forecast path at a level adjusted up or down relative to the actual GDP by the amount of

this nowcast error. Figure 1 then plots the implied levels based on this starting point and the growth forecasts as described in the previous forecast. Note that the difference between this starting point and the revised data necessarily reflects both information about the current quarter not available when the forecast was made and the effects of revisions in the GDP data.

Files attached:

DominguezShapiro\_Figure1-SPFdata.xlsx

DominguezShapiro\_Figure2-SPFdata.xlsx

DominguezShapiro\_Table2.xlsx

DominguezShapiro\_Appendix-Table.xlsx

**Appendix Table**  
Major US and EU Policy and Market News: 2007-2012

Date	Event	Sources	US Policy News	US Mkt News	Euro Policy News	Euro Mkt News
August 6, 2007	American Home Mortgage Investment Corp files for Chapter 11 bankruptcy protection	WSJ, FT		1		
August 9, 2007	BNP Paribas, France's largest bank, freezes three of their funds indicating they have no way to value the CDOs in those portfolios	WSJ, FT				1
December 12, 2007	US Term Auction Facility is announced, first swap lines with ECB and SNB established	FRB	1			
February 13, 2008	US Economic Stimulus Act of 2008 signed into law	US Treasury	1			
February 17, 2008	UK nationalizes Northern Rock	FT, WSJ			1	
March 11, 2008	Fed announces Term Securities Lending Facility (TSLF)	FRB	1			
March 14, 2008	JP Morgan acquires Bear Stearns	WSJ, FT		1		
September 7, 2008	Fannie Mae and Freddie Mac placed in Federal conservatorship	WSJ, FT	1			
September 15, 2008	Lehman Brothers files for bankruptcy	WSJ, FT		1		
September 16, 2008	Fed authorizes loan to AIG	FRB	1			
September 17, 2008	SEC announces temporary emergency ban on short selling in the stocks of all companies in the financial sector	WSJ, FT	1			
September 21, 2008	Goldman Sachs and JP Morgan Chase change their status to banking holding companies	WSJ, FT		1		
September 30, 2008	Ireland promises to underwrite its banking system	WSJ, FT			1	
October 3, 2008	US Emergency Economic Stabilization Act of 2008 establishes the \$700b Troubled Asset Relief Program (TARP)	US Treasury	1			
October 7, 2008	Iceland's 3 biggest banks collapse	WSJ, FT				1
October 8, 2008	8 Central Banks (including Fed, BoE and ECB) cut their interest rates by .5% in a coordinated attempt to ease the pressure on borrowers	FRB, WSJ, FT	1		1	
October 13, 2008	UK bails out Royal Bank of Scotland, Lloyds TSB and HBOS	WSJ, FT			1	
January 19, 2009	UK announces comprehensive bank rescue plan	WSJ, FT			1	
February 17, 2009	American Recovery and Reinvestment Act of 2009 signed into law	US Treasury	1			
March 2, 2009	Fed and Treasury announce joint restructuring plan for AIG	FRB, US Treasury	1			

Date	Event	Sources	US Policy News	US Mkt News	Euro Policy News	Euro Mkt News
April 2, 2009	G20 agree on a global stimulus package worth \$5 trillion	WSJ, FT	1		1	
June 1, 2009	General Motors declares bankruptcy	WSJ, FT		1		
November 5, 2009	Greece reveals that its budget deficit is 12.7% of GDP (twice what it had previously reported)	WSJ, FT				1
May 2, 2010	Greece receives bailout worth 110b euros (Eurozone provides 80b and IMF 30b) over 3 years.	WSJ, FT, EU			1	
May 3, 2010	ECB announces that it will accept Greek sovereign debt as collateral no matter the country's rating	ECB			1	
May 9, 2010	Eurozone creates the European Financial Stability Facility (EFSF) and European Financial Stabilization Mechanism (EFSM), IMF pledges 250b euros; ECB announces Securities Market Program (to ensure depth and liquidity for EZ sovereign debt markets)	EU, ECB			1	
April 16, 2010	SEC charges Goldman Sachs with fraud in structuring and marketing of CDOs tied to subprime mortgages	WSJ, FT		1		
June 29, 2010	Dodd-Frank Wall Street Reform and Consumer Protection Act Passed	WSJ, FT	1			
July 23, 2010	Results announced for European bank stress tests: 7 of 91 European banks fail tests (and 17 banks barely pass)	WSJ, FT				1
November 28, 2010	Ireland receives Eurozone bailout worth 85 billion euros	EU			1	
January 14, 2011	Fitch cuts Greek debt rating to junk	WSJ, FT				1
March 25, 2011	Eurozone creates a permanent European Stability Mechanism intended to serve as a lender of last resort for ailing euro-zone countries	EU			1	
May 5, 2011	Portugal receives Eurozone bailout worth 78b euros (conditional on a series of austerity measures)	EU			1	
July 5, 2011	Moody's cuts Portugal's debt rating to junk	WSJ, FT				1
July 9-22, 2011	Daily news on contentious debt talks between White House and Congressional leaders	WSJ, FT		1		
July 12, 2011	Moody's cuts Ireland's debt rating to junk	WSJ, FT				1
July 21, 2011	Greece receives second Eurozone bailout; existing Greek loans are restructured with more generous terms ("selective default").	EU			1	
July 31, 2011	US congress increases debt ceiling (Budget Control Act of 2011, includes trigger for automatic spending cuts in 2013)	WSJ, FT		1		
August 5, 2011	S&P downgrades US sovereign debt	WSJ, FT		1		

Date	Event	Sources	US Policy News	US Mkt News	Euro Policy News	Euro Mkt News
August 7, 2011	ECB says it will buy Italian and Spanish government bonds to bring down their borrowing costs	ECB			1	
September 21, 2011	Fed announces "Operation Twist" (designed to lower yields on long-term bonds)	FRB	1			
October 10, 2011	Dexia SA. Belgium's biggest lender is nationalized	WSJ, FT				1
October 13, 2011	Enlargement of the EFSF is approved by all the Eurozone nations	EU			1	
October 27, 2011	Eurozone agrees to new plan to resolve the European Sovereign Debt Crisis: holders of Greek debt asked to cut the value of their holdings by 50%, tier 1 capital of European Banks to be increased to 9%, EFSF to leverage capacity up to 1 trillion euros	EU			1	
November 12, 2011	Italian Prime Minister Silvio Berlusconi resigns	WSJ, FT				1
November 21, 2011	US super-committee fails to reach agreement setting off automatic spending cuts in 2013	WSJ, FT	1			
December 9, 2011	Eurozone governments agree to greater centralization of their budgets and automatic punishment for those who break the budget accord	EU			1	
December 21, 2011	ECB extends 489b euros in loans to more than 500 European banks, 3-year loans are offered at a fixed 1% interest rate	ECB			1	
January 30, 2012	New Eurozone fiscal compact proposal to grant power to the European Court of Justice to impose sanctions on EU member nations that do not comply with the Maastricht Treaty economic targets	EU			1	
February 9, 2012	Settlement announcement between US Mortgage lenders and US officials over improper foreclosure paperwork	WSJ, FT		1		
February 21, 2012	Greek debt deal: creditors agree to loss of 53.5% of the face value of debt	WSJ, FT				1
February 27, 2012	S&P downgrades Greece to Selective Default	WSJ, FT				1
February 28, 2012	ECB announces that Greek sovereign debt can no longer be used as collateral	ECB			1	
February 29, 2012	ECB provides a second long-term loan refinancing operation which injects 530b euros into the banking system	ECB			1	
March 2, 2012	25 EU countries sign new pact on fiscal discipline (UK and Czech Republic opt out)	EU			1	

Date	Event	Sources	US Policy News	US Mkt News	Euro Policy News	Euro Mkt News
March 9, 2012	Greek government exercises "collective action clauses" to force the remaining bondholders to accept debt swap deal (new bonds have longer term, lower interest rate and less than half the previous face value)	WSJ, FT				1
May 28, 2012	Spain nationalizes Bankia (third largest bank)	WSJ, FT				1
June 9, 2012	Spain seeks a bailout of up to 100b euros in aid for its banking sector	WSJ, FT			1	
June 22, 2012	ECB states that it will now accept some mortgage-backed securities, car loans, and loans to smaller firms in exchange for loans it gives to Eurozone banks.	ECB			1	
June 26, 2012	Cyprus announces it needs a bailout	EU			1	
June 27, 2012	Barclays bank admits to misconduct and is fined by US and UK for manipulating LIBOR rates	WSJ, FT		1		
July 26, 2012	Draghi announces ECB will "do whatever it takes" to defend the euro	ECB			1	
September 12, 2012	Germany's Constitutional Court refuses to block ratification of the ESM; European Commission unveils plans for a unified bank supervisory system for the Eurozone to be headed by the ECB	EU			1	
September 27, 2012	ESM ratified by Germany	EU			1	
December 31, 2012	US Fiscal Cliff negotiations continue past deadline	WSJ, FT	1			

*Sources:* Financial Times (FT), Wall Street Journal (WSJ), Federal Reserve websites (FRB), US Treasury, ECB, European Commission (EU).

*Notes:* FT and WSJ articles found using ProQuest online searchable archive. The last four columns of the table show the coding of the news events reported in Table 1.