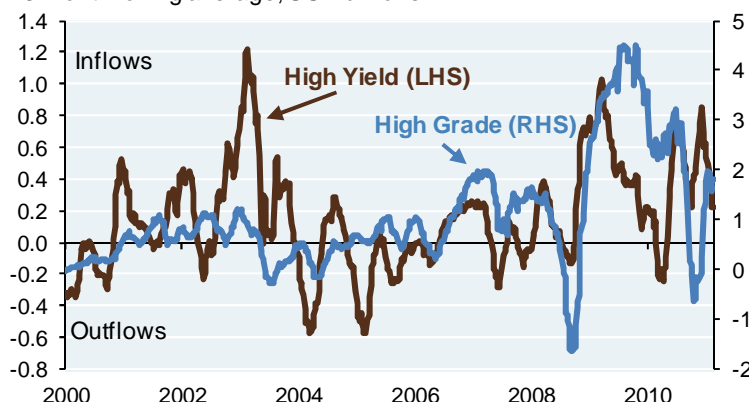


# Feast or Famine: an update on public and private credit markets; Why Greece < > Uruguay; Fannie/Freddie post-script

**Credit markets are schizophrenic things.** Instead of holding to an equilibrium that works for both issuers and investors, credit markets often veer back and forth between investor-friendly (after recessions) and issuer-friendly (after yield-chasing by investors). The Fed played a large role this time, as zero interest rates render cash temporarily useless as a store of value, driving even more flows into credit. After the shock in 2008, there was a surge of inflows into high grade and high yield bond funds. High grade spreads are almost back to where they were in the spring of 2007, while high yield spreads are still modestly wider. Last week saw the most high yield issuance on record, as issuers recognize the opportunity.

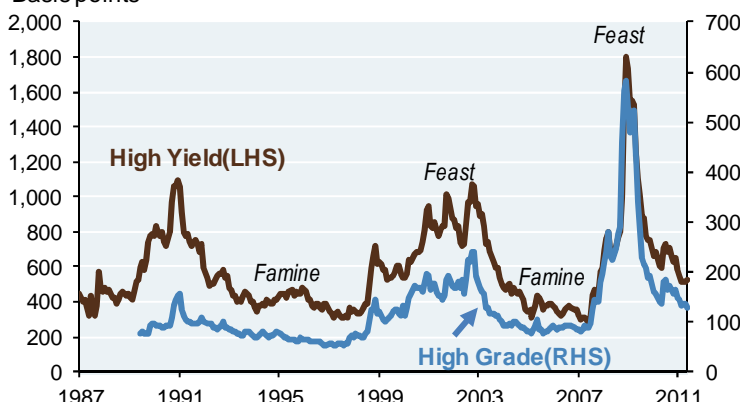
## High grade and high yield mutual fund flows

3 month rolling average, USD billions



## High grade and high yield spreads, 1987-2011

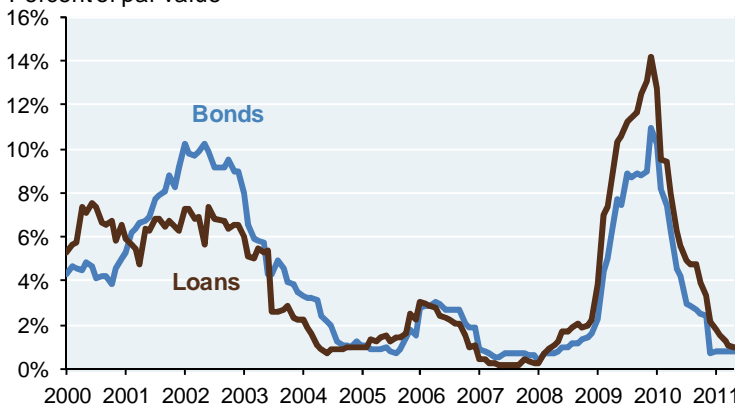
Basis points



**Corporate cash flows and cash balances are at elevated levels, and high yield default rates have plummeted, so we would not characterize credit spreads as being wildly expensive.** But there's a risk that the credit markets are ahead of themselves, particularly with risk-free rates near all-time lows. It's not a credit spread famine yet for investors; more like an overpriced restaurant with mediocre food (people will gradually start eating elsewhere).

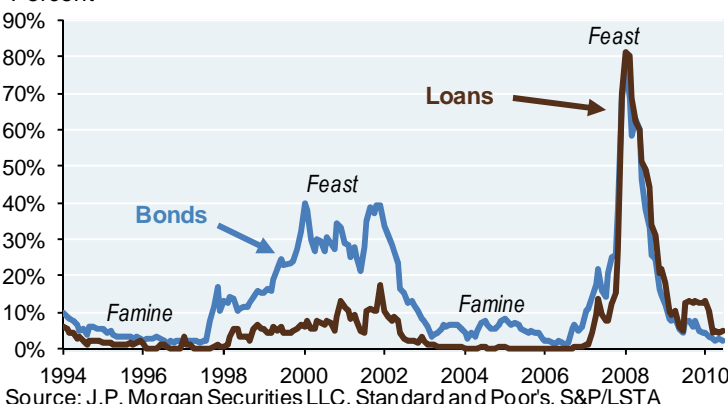
## U.S. High Yield default rates

Percent of par value



## U.S. HY bonds and loans trading <= 80% of face value

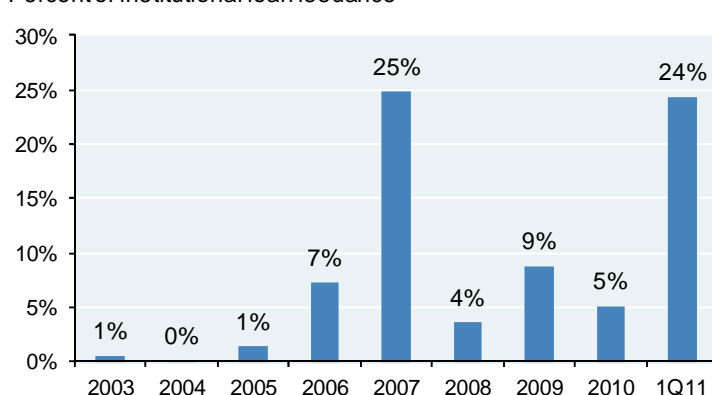
Percent



**As a sign spreads are no longer dislocated, consider the shrinking number of US high yield bond and loans trading below 80 cents on the dollar, and recent increases in covenant-lite loans (see charts).** Using a parallel to residential credit markets, think of covenant-lite as the Alt-A equivalent in the corporate credit markets. We are not expecting a credit market accident (they usually coincide with recessions), but are gradually reducing our overweight exposure to high yield bonds, and hedge fund strategies focused on directional positions in high yield bonds and leveraged loans. We are redirecting some of the proceeds into strategies focused on merger arbitrage and distressed loan sales by over-leveraged European banks.

## Covenant-lite loans: they're baaaaaack

Percent of institutional loan issuance



## Feast or Famine: an update on public and private credit markets; Why Greece < > Uruguay; Fannie/Freddie post-script

**When the recession hit and credit spreads rose, we increased exposure to both public and private credit markets.** Private credit markets are where corporate and commercial property borrowers sometimes go when bond markets and banks tighten credit conditions. For example, in 2007, credit markets lent up to 6x-7x cash flow to corporate borrowers; now they generally only lend up to 4x-5x cash flow. Credit markets used to lend 70%-80% against commercial property; this has now fallen to 50%-60%. For complex credits, smaller issuers, first-time issuers or speed-to-market needs, credit availability is often even more constrained. This latter development is what created an opportunity for providers of second lien and subordinated private credit (sometimes referred to as mezzanine debt), assuming that it's priced right, and that companies and commercial properties are re-appraised before lending.

The table shows our progress so far. Our managers have extended credit with target yield to maturities of 12%-13%, with 9%-11% from cash coupons. The estimated equity cushions beneath these positions range from 33%-50%, with average debt service coverage of 2.1x to 2.7x for the different pools of capital. Some positions are accompanied by warrants which entail potentially higher returns for lenders. All things considered, we see a fair balance between risk and potential return on these investments. To be clear, private credit lending is illiquid, and is best designed for the part of an overall portfolio that sacrifices liquidity in exchange for potential returns in excess of what public credit markets have to offer, and is only suitable for appropriate clients.

### Private credit fund characteristics

Equal-weighted averages

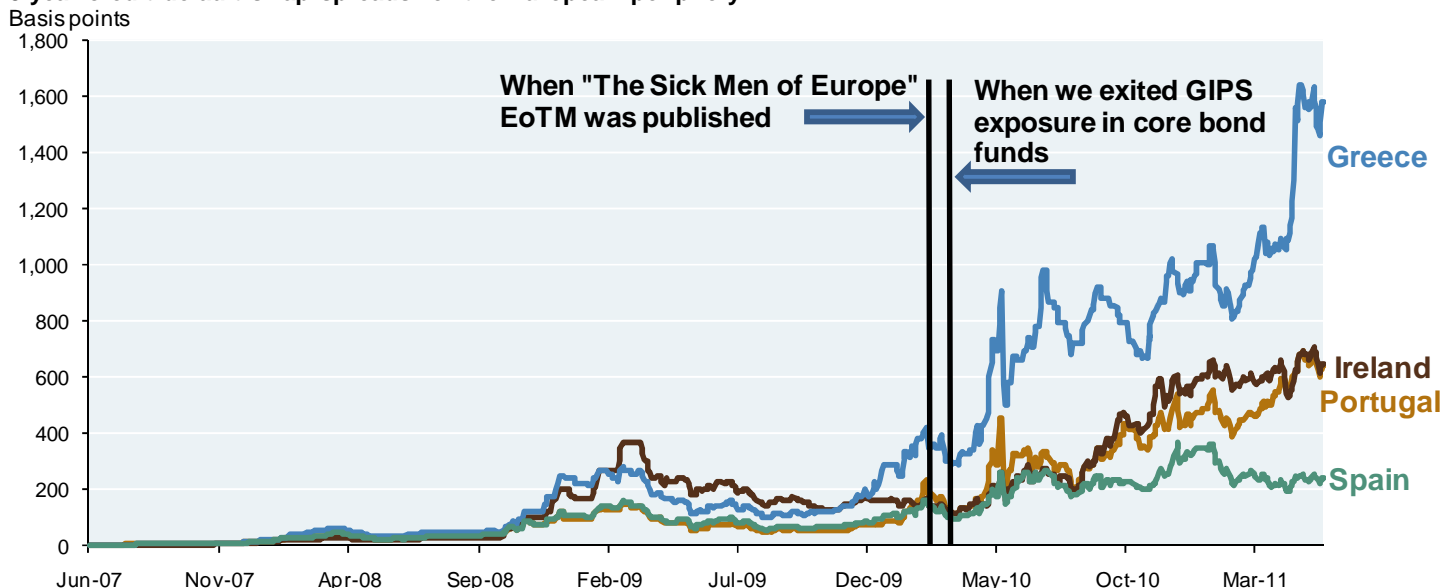
	Fund A	Fund B	Fund C	Fund D
Type of collateral	Corporate	Corporate	Corporate	Comm. R/E
Yield to call	15.7%	17.0%	19.3%	12.3%
Yield to maturity	13.4%	13.2%	16.4%	12.4%
Cash coupon	9.5%	11.1%	10.0%	9.0%
Years to maturity	7.7 yrs	6.9 yrs	5.5 yrs	3.0 yrs
Debt / EBITDA	5.1x	5.1x	4.5x	n/a
Estimated equity cushion	46%	33%	43%	33%
Debt service coverage	2.6x	2.7x	2.4x	1.2x

Source: Individual fund managers, J.P. Morgan Private Bank.

## Where is the bottom for European peripheral sovereign bonds?

One of the few places in the world where credit spreads are not approaching pre-crisis levels: the European periphery. We have covered this topic extensively in prior notes, most recently in the *"Snakes and Ladders"* Eye on the Market from two weeks ago. As far as I am concerned, we have the luxury of time: as shown in the chart, we took a close look at the European Monetary Union in February 2010, and then one month later, instructed our managers to sell Greece, Ireland, Portugal and Spain out of core bond funds. We are in no rush to repurchase them, despite how cheap they have become. The latest market chatter involves the idea of a voluntary debt rescheduling by Greece, as Uruguay did in 2003. However, as discussed on the following page, Greece 2011 and Uruguay 2003 are two very different places. Last week, Lorenzo Smaghi of the ECB's Executive Board referred to a voluntary debt rescheduling involving no principal writedowns as "devastating for overall financial stability". That strikes us as very odd; since all this could do is *help* Greece. We are going to take Smaghi at his word however, and hold off on making a re-entry into these markets for now, as his comments suggest a very large problem without an apparent solution.

### 5-year credit default swap spreads for the European periphery



Source: Bloomberg.

# Feast or Famine: an update on public and private credit markets; Why Greece <> Uruguay; Fannie/Freddie post-script

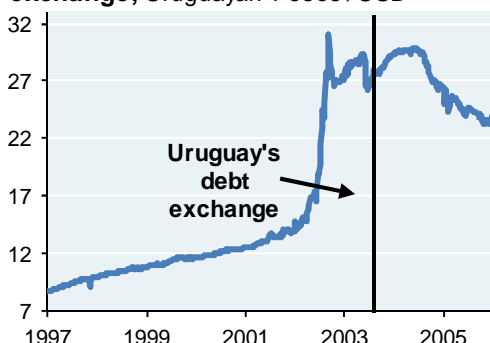
## Sovereign math department: Greece <> Uruguay

Some commentators suggest that Greece will follow Uruguay's path, and voluntarily restructure its debt by extending the maturity of its bonds with no principal haircut. While European policymakers might go down this road, it will likely in the end be a futile exercise. Why? Greece 2011 is in an entirely different zip code of badness than Uruguay.

**Background.** In 2003, Uruguay executed a debt restructuring with its bondholder creditors<sup>1</sup>. But as shown in the first chart, Uruguay **devalued beforehand by 50%**. Recall that our 3-D bubble chart from May 2010 showed that over the last 40 years, countries in Greece's situation experienced 30%-40% currency devaluations before recovering. The 2002 devaluation of the Uruguayan Peso allowed for a recovery in its trade balance/current account (2<sup>nd</sup> chart), and a resumption of growth (3<sup>rd</sup> chart). What about Greece? Greece seems determined to stay within the European Monetary Union, and regain competitiveness through structural reforms and declines in domestic wages and prices, without devaluation. Furthermore, Greece has a debt to GDP ratio of 150%+; a current account deficit that is still 8% of GDP; and a fiscal deficit that is also 8% of GDP. **All three figures for Greece are massively worse than Uruguay's, as shown below.** Comparing them is like drawing parallels between Grover Cleveland and Grover the Muppet simply because they have the same first name.

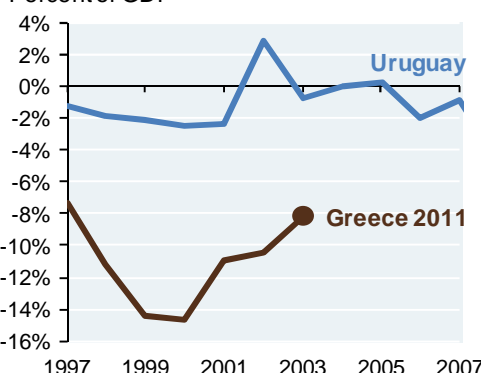
No wonder Uruguayan bondholders participated in the 2003 exchange: Uruguay was experiencing a true liquidity problem, and had a viable plan to remedy its imbalances. Greece isn't and doesn't, and is arguably being used by the EU and IMF as a bulwark against a problem in Spain. If 5-year Greek debt at 60 cents on the dollar turns out to be the investment of a lifetime, it will more likely result from a decision by European countries to pay off private sector creditors and then restructure their own Greek exposures (e.g., the old Paris Club), rather than the consequence of Greece solving its own problems.

**Uruguay had a large currency depreciation ahead of its debt exchange, Uruguayan Pesos/USD**



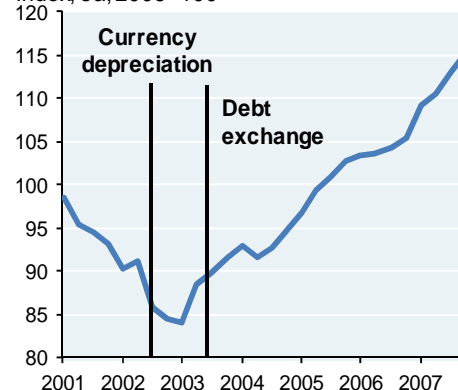
Source: Bloomberg.

**Current account balance**  
Percent of GDP



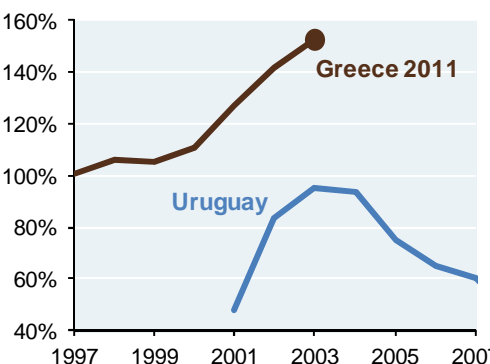
Source: International Monetary Fund.

**Uruguay real GDP**  
Index, sa, 2005=100



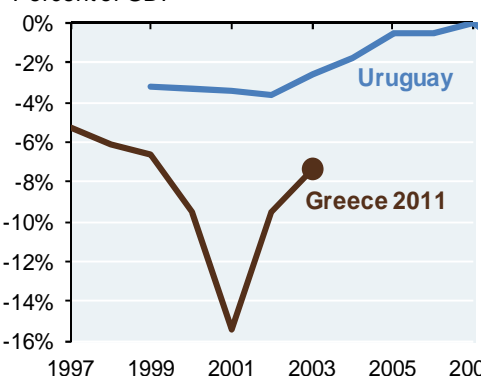
Source: Banco Central del Uruguay.

**Net sovereign debt/GDP**  
Percent

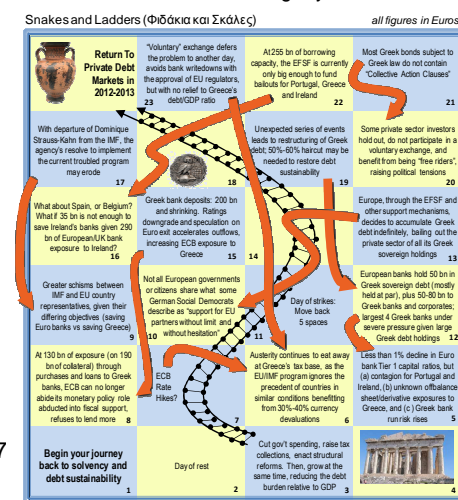


Source: International Monetary Fund.

**Fiscal deficit**  
Percent of GDP



Source: International Monetary Fund.



**Snakes and Ladders from May 3 EoTM**

Michael Cembalest  
Chief Investment Officer

[See next page for Appendix on Fannie Mae and Freddie Mac]

<sup>1</sup> Thanks to Bernard Connolly of Connolly Global Macro Advisors for reminding me of the dynamics around the Uruguay debt exchange.

## Feast or Famine: an update on public and private credit markets; Why Greece < > Uruguay; Fannie/Freddie post-script

### Post-script on our discussion of Fannie Mae and Freddie Mac (the GSEs), and maybe the biggest estimation miss ever

We've had some interesting external debates in the wake of the *Retractions* piece from May 3, which walked through the history of affordable housing targets, government legislation and private sector/public sector housing losses. While research from the American Enterprise Institute is informative (particularly from Fannie Mae's former EVP and Chief Credit Officer), similar conclusions can be drawn directly from Fannie Mae's own documents, such as its Q1 2011 Credit Supplement:

- As per Fannie Mae's own report, 70%-80% of its losses emanated from "Special Product Features". The bulk of the "Special Product" losses relate to low FICO loans, loans with origination LTVs above 90%, and Alt A loans (the latter being the worst category of all in terms of Fannie Mae losses). These are very "goals-rich" lending categories.
- **Wait....how are Alt A loans goals-rich?** The non-GSE Jumbo Alt A market generally entailed very high loan balances, and had little to do with affordable housing. But the average GSE Alt A loan balance was around \$150,000, and its FICO score of 717 was *below* the average GSE FICO Score of 736, both indicative of affordable housing goals. An even clearer sign that GSE Alt A loans related to affordable housing: a Fannie Mae table from 2008 showing that from 1999 to 2008, 40%-50% of their Alt A originations met their "Low and Moderate Income" lending targets, and that 18%-19% met "Special Affordable" targets. A third way that we know that GSE Alt A loans related to affordable housing: Fannie Mae said so in their 2006 Annual Report, warning investors that underwriting criteria were relaxed specifically to obtain goals-qualifying mortgages that serve HUD goals and sub-goals, and that this could increase credit losses.

**Let's take a step back for a moment from all the data.** Fannie Mae and Freddie Mac balance sheets were set up to absorb annual delinquency rates of around 2% on their guaranteed and owned portfolios (alternatively described as a 1% loss rate, assuming 50% salvage values on default)<sup>2</sup>. If they stuck to traditionally conforming loans, there's a chance they could have avoided conservatorship, since their prime loan delinquency rates are 2.0%-2.5%. But once they got involved in riskier loans, they were engaging in activity that involves higher losses; to avoid this outcome, one must contravene the laws of underwriting and risk that go back hundreds of years. What drove Fannie Mae to go down this road? A combination of profit motive *and* HUD's affordable housing goals; that part is unmistakable. The October 2000 HUD quote we published last time is a chilling anticipation of how HUD policies would drive both GSEs and the private sector into much riskier lending.

In 2002, Nobel Laureate Joseph Stiglitz and future OMB Director Peter Orszag sided with the Department of Housing and Urban Development and the majority in Congress who supported the GSEs, and their 0.45% capital standards on guarantees:

"The probability of a shock as severe as embodied in the risk-based capital standard is substantially **less than one in 500,000 – and may be smaller than one in three million**. Given the low probability of the stress test shock occurring, and assuming that Fannie Mae and Freddie Mac hold sufficient capital to withstand that shock, the exposure of the government to the risk that the GSEs will become insolvent appears quite low..."<sup>3</sup>

**Stiglitz and Orszag wrote that the expected cost to the government of guaranteeing \$1 trillion of mortgages was \$2 million. This may be the largest cost mis-estimation ever as it relates to unfunded guarantees; the Federal Housing Finance Agency estimates that GSEs will cost taxpayers \$250-\$300 billion.** The Stiglitz paper, full of complex equations and formulas, was written *after* HUD has raised GSE affordable lending targets to 50% of all of their loans, so there was plenty of evidence that the GSE mandate was rapidly changing. I guess the private sector wasn't the only place where notions of leverage and risk were completely botched.

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<sup>2</sup> The GSEs were capitalized based on loss experiences on 30-year fixed-rate single-family mortgages originated in 1983 and 1984 in Arkansas, Louisiana, Mississippi, and Oklahoma, given the defaults that resulted from a collapse in oil prices in early 1986.

<sup>3</sup> "Implications of the New Fannie Mae and Freddie Mac Risk-based Capital Standard", Stiglitz, Orszag and Orszag, March 2002.