ACUSE DE RECIBO
Fecha 24 de oct /2012
Firma
9:25 P.M

POSICIÓN DEL COMITÉ NEGOCIADOR DE LA UTIER DE 24 DE OCTUBRE DE 2012 EN TORNO A LA "REACCIÓN DE LA AEE A LA PRESENTACIÓN DEL DR. JOSÉ ANTONIO HERRERO, ECONOMISTA DE LA UTIER", DE FECHA 23 DE OCTUBRE DE 2012

1. Swaps* - se incluye en forma de réplica información práctica y cuantitativa que ilustra el costo alto de la liquidez de la AEE, la cual la obliga a comprometer su capacidad financiera y crediticia. Además, a generar pérdidas económicas inducidas como consecuencia de una posición especulativa errónea. Véanse las siguientes piezas de información.

   Pieza Núm. 1 – Gráfica: LIBOR 3 meses, 2005-2012 (Fuente: The New York Times, Behind the Libor Scandal, días 8-10 y sigs., julio, 2012, Deal book).

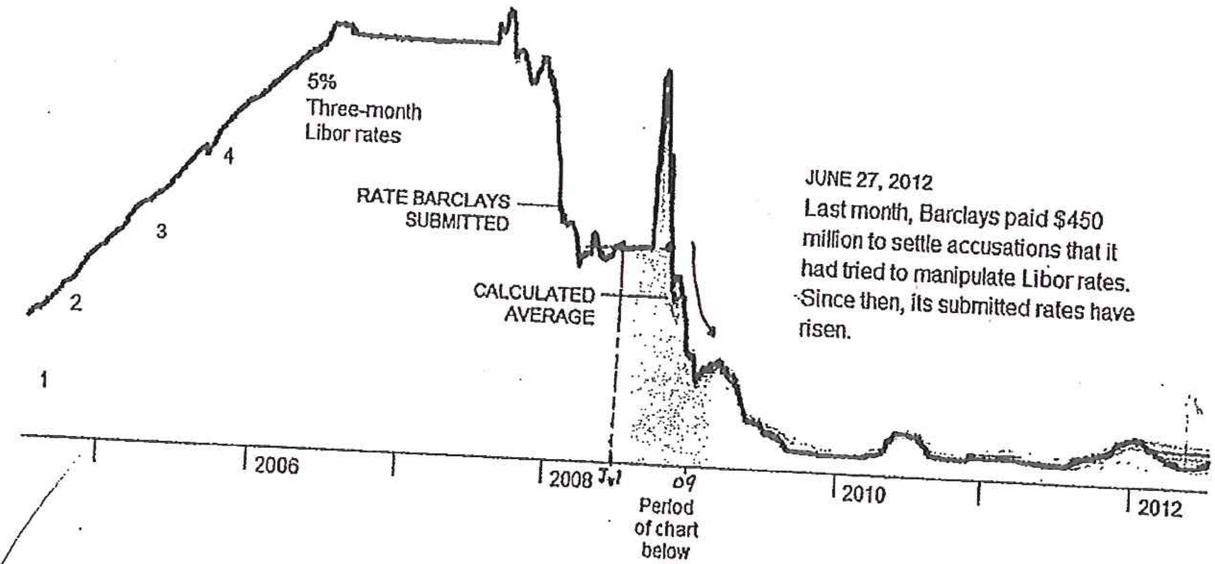
   Núm. 1.1 – Véase además, The Economist, on the Libor Scandal. Columbis Journalism Review 6/7/2012.

   Véase en la gráfica la ganancia extraordinaria que produjo el movimiento especulativo desde julio 2008 a diciembre 2008, para

* En el caso particular del swap (intercambio) de interés, se trata de un "basis swap". Este término no se debe traducir: "swap básico". La definición de basis swap: A swap where cash flows determined by a floating reference rate are exchanged for cash flows determined by another floating reference rate. [Joh C. Hull, Options Futures and other derivatives, Prentice Hall/Pearsen Education Inc., 2012, p. 792).

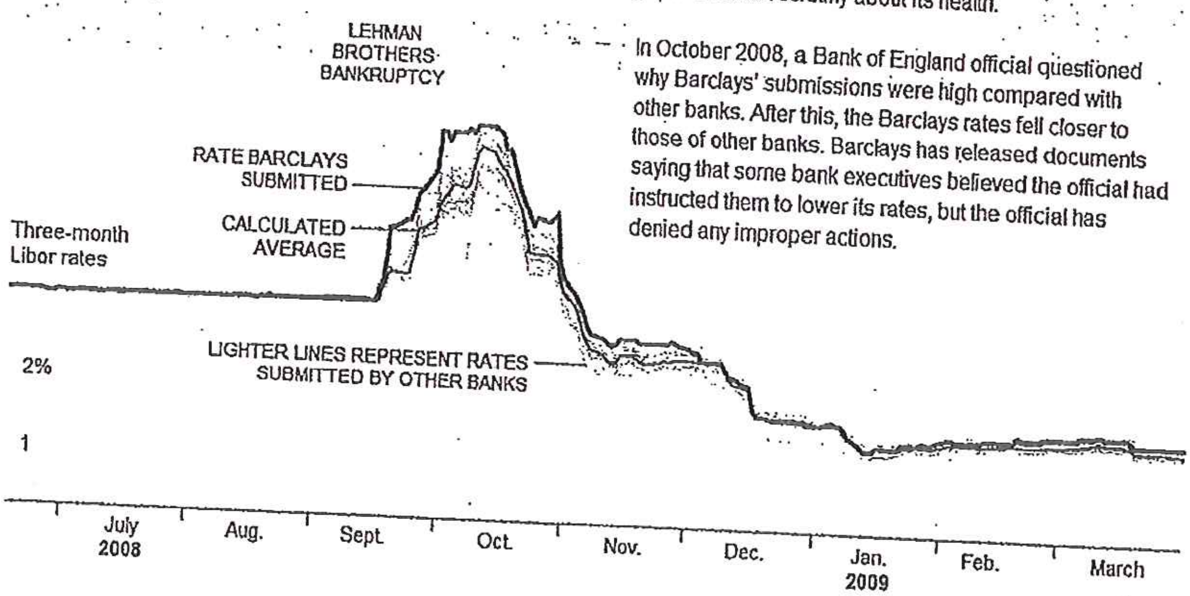
bajar a partir de enero 2009. Aproximadamente 1 por ciento de interés contra ± 5.2 por ciento en agosto, septiembre, octubre 2008. La tabla Libor 3 meses es 0.33 por ciento en 17-24 octubre 2012. (Véase tabla 1.3).

Pieza Núm. 1



JUNE 27, 2012
Last month, Barclays paid $450 million to settle accusations that it had tried to manipulate Libor rates. Since then, its submitted rates have risen.

In 2008, Barclays submitted artificially low figures to deflect scrutiny about its health.



In October 2008, a Bank of England official questioned why Barclays' submissions were high compared with other banks. After this, the Barclays rates fell closer to those of other banks. Barclays has released documents saying that some bank executives believed the official had instructed them to lower its rates, but the official has denied any improper actions.

S/F/B?
07 1,23
08 1,03
09 0,40
10 0,27

LIBOR
Jn
5.50
3,00-5,00
1,60
0,70

COLUMBIA JOURNALISM REVIEW
The future of media is here

Pieza 1.1
p 1/2

Economic Crisis, The Audit — July 6, 2012 02:08 PM

The Economist on the Libor scandal

What happened and why it matters

By Ryan Chittum

If you haven't paid much attention yet to the Libor scandal, this *Economist* piece will get you caught up quickly.

Long story short, the British bank Barclays paid nearly half a billion dollars to regulators after it was caught manipulating the London Interbank Offered Rate. Libor is supposed to measure what banks are paying to borrow from each other and underpins hundreds of trillions of dollars of loan rates and derivatives. It's a critical part of the global financial system, and manipulating rates by even one basis point (0.01 percent) can unfairly affect billions of dollars of contracts. Barclays is just the first of the banks on the firing range. Swiss giant UBS has already copped a plea and is ratting out fellow conspirators.

When a center-right publication like *The Economist* talks about the "rotten heart of finance" in one headline, uses the word "banksters" in another, and says the scandal may be "the biggest securities fraud in history," you know it's a very big story.

When it also quotes an unnamed big bank CEO saying that the Libor scandal could be the financial industry's "tobacco moment," referring to how that industry's crimes sparked hundreds of billions of dollars in payouts, it signals that this could be something bigger (emphasis mine):

> The extent of the banks' liability may well depend on whether regulators press them to pay compensation or, conversely, offer banks some protection because of worries that **the sums involved may be so large as to need yet more bail-outs**, according to one senior London lawyer.

This seems like a bit jumpy based on what we know now, but this "one senior London lawyer" isn't alone. Here's an antitrust lawyer quoted in a Bloomberg story:

> "This is potentially the mother lode in terms of potential damages," he said.
>
> While it's not possible to predict a specific loss amount, damages could be in the tens or hundreds of billions of dollars if the lenders are found liable, Shinder said.

By manipulating a rate like Libor, bankers and traders created both winners and losers on every transaction in hundreds of trillions of dollars in loans and derivatives. To see why people are talking about potentially giant losses, you have to look at who got screwed here.

Pieza 1.1
2/2

Say you have an adjustable-rate mortgage that resets every year. If your ARM reset in 2008 when banks were allegedly colluding to cover up their woes by pushing Libor down 30 to 40 bps, you benefited from the illegality by saving 0.3 to 0.4 percent off what you should have paid. But this isn't free money; it's a zero-sum game. The investors who own your loan, which were probably the hedge funds, mutual funds, pension funds, and banks (including some of the same banks who employed the manipulators) who buy or hold securitized mortgages lost that 0.3 to 0.4 percent. They're not going to be happy about that and they're going to want to recover as much of it as they can. The banks will be on the hook, not the borrower who unknowingly benefited from the manipulation.

But even beyond the unknowable potential damages, the Libor story, which the FT's Gillian Tett first started raising questions about five years ago and which *The Wall Street Journal* cracked open in May 2008, matters on a deeper level.

Coming at a time when the global economy is tipping back into recession, a too-big-to-fail bank reveals a multibillion-dollar oopsie, and the eurozone threatens another financial calamity, the Libor scandal adds another couple of big reasons to mistrust the financial system. This alone won't trigger a panic, but it adds to the atmosphere that fosters one.

Beyond the fact that it, yet again, shows how a banking system that depends on our trust abuses it to enrich itself, the enormous potential liability raises questions about whether the losses will affect the health of at least some banks.

Again, that seems unlikely right now, but the uncertainty is huge, as you can see from the fact that places like *The Economist* are quoting experts about possible bailouts. It's not like people trust the banks' books anyway. As Jonathan Weil points out, Barclays "trades for a mere 37 percent of its common shareholder equity, which shows that investors believe most of its 55.6 billion pounds of book value is fictional."

The legal liability will all take years to sort out, and the revelations and settlements with regulators seem just to have begun.

Table 1.2

MORTGAGE

LIBOR, other interest rate indexes

By Bankrate.com

The LIBOR is among the most common of benchmark interest rate indexes used to make adjustments to adjustable rate mortgages. This page also lists some other less-common indexes.

Click on the links below to find a fuller explanation of the term.

LIBOR, other interest rate indexes

Updated 10/17/2012

	This week	Month ago	Year ago
Bond Buyer's 20 bond index	3.68	3.72	4.08
FNMA 30 yr Mtg Com del 60 days	2.77	2.73	3.79
1 Month LIBOR Rate	0.21	0.22	0.25
3 Month LIBOR Rate	0.33	0.36	0.42
6 Month LIBOR Rate	0.59	0.65	0.61
Call Money	2.00	2.00	2.00
1 Year LIBOR Rate	0.90	0.97	0.92

Ratings methodology

Who are they for? These indexes are of interest to investors and borrowers alike, especially those who have mortgages or business loans tied to these indexes.

What's included? The Bond Buyer 20 bond index is a barometer for yields on tax-free bonds issued by state governments and local municipalities. The Fannie Mae 30-year mortgage commitment for delivery within 60 days helps mortgage lenders determine what rates to charge on 30-year fixed rate mortgages that are to be sold to Fannie Mae within the next 60 days. The LIBOR rates, which stand for London Interbank Offered Rate, are benchmark interest rates for many adjustable rate mortgages, business loans, and financial instruments traded on global financial markets.

Back to Rate Watch main page

Compare Mortgage Rates »

Click for the best Mortgage rates in your state

FIXED RATES

10 year fixed, 15 year fixed refi, 15 year fixed, 20 year fixed refi, 20 year fixed, 30 year fixed refi, 30 year fixed, 30 year FHA refi, 30 year FHA, See all fixed

ADJUSTABLE RATES (ARMS) AND INTEREST ONLY (IOS)

1 year ARM, 1 year ARM refi, 3/1 ARM (IO), 5/1 ARM (IO) refi, 3/1 ARM, 3/1 ARM refi, 5/1 ARM (IO), 7/1 ARM (IO) refi, 5/1 ARM, 5/1 ARM refi, 7/1 ARM (IO), 30 year fixed (IO) refi, 7/1 ARM, 7/1 ARM refi, 30 year fixed (IO), See all ARMs, 10/1 ARM, 10/1 ARM refi, 3/1 ARM (IO) refi, See all IOs

Compare Mortgage Rates

30 yr fixed average **3.49%**

Zip code: Zip Code

Product: 30 yr fixed

About our rates Search

30 year fixed mortgage

Phoenix-Mesa, AZ

Rates based on:
$165,000 loan, 20% down, All points

Mortgage Overnight Averages

About this index

Product	Rate	+/-	Last week
30 yr fixed mtg	3.46%	▲	3.43%
15 yr fixed mtg	2.84%	▲	2.83%
5/1 ARM	2.99%	–	2.99%
30 yr fixed mtg refi	3.44%	▲	3.41%

View rates in your area: Search

Tabla 1.3

SIFMA Municipal Swap Index Yield

Add to Portfolio

Security Type: Rate

MUNIPSA:IND 0.20000

Share

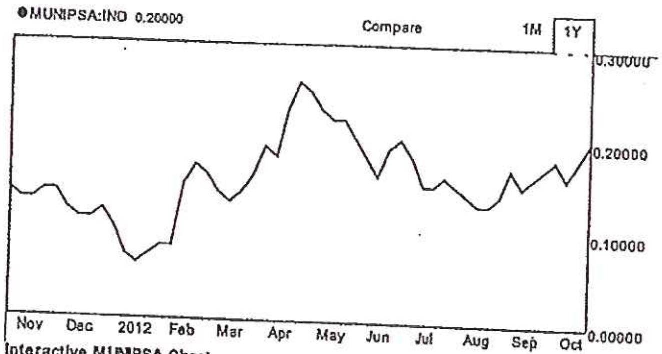
As of 10/17/2012.

More on MUNIPSA
Snapshot
Chart

Snapshot for SIFMA Municipal Swap Index Yield (MUNIPSA)

Open: - High: - Low:

Rate Chart for MUNIPSA



Interactive MUNIPSA Chart

Rate Profile Information for MUNIPSA

This index information is under embargo by its source until Monday morning for the previous Wednesday's value. Quoted on an actual/actual basis. This index is a weekly high grade market index comprised of 7-day tax exempt variable rate demand notes produced by Municipal Market Data Group. Actual issues are selected from Municipal Market Data's database of more than 10,000 active issues based on several specific criteria. For more information on the criteria, you can contact MMD directly at (617) 856-2940.

Para más detalles véase Nota 1. La Nota 1 corresponde a las páginas 54-58 del: Ernst £ Young, <u>Financial Statements, Required Supplementary Information</u>, Years ended 30/6/2010 y 30/6/2011, San Juan, 23/12/2011.

Nota 1
1/5

11. Long-Term Debt (continued)

Interest-Rate Swap Agreements (continued)

The following tables include fiscal year 2011 and 2010 summary information for the Authority's effective hedges related to the outstanding swap agreements.

Instrument Type	Changes in Fair Value: Classification	Changes in Fair Value: Amount	Fair Value at June 30, 2011: Classification	Fair Value at June 30, 2011: Amount	Notional
Interest Rate Swap	Deferred Outflows	$ 11,811	Fair value of derivative instruments	$ (52,286)	$ 411,825
Basis Swap	Deferred Outflows	28,985	Fair value of derivative instruments	(16,856)	1,375,000
	Total	$ 40,796		$ (69,142)	$ 1,786,825

Instrement Type	Changes in Fair Value: Classification	Changes in Fair Value: Amount	Fair Value at June 30, 2010: Classification	Fair Value at June 30, 2010: Amount	Notional
Interest Rate Swap	Deferred Outflows	$ (21,556)	Fair value of derivative instruments	$ (64,097)	$ 411,825
Basis Swap	Deferred Outflows	$ 15,506	Fair value of derivative instruments	(45,841)	1,375,000
	Total	$ (6,050)		$ (109,938)	$ 1,786,825

115,958

The terms, fair values and credit ratings of the outstanding interest-rate swaps as of June 30, 2011, were as follows (in thousands) (excludes basis swap):

Associated Power Revenue Bonds	Notional Amount	Effective Date	Maturity Date	Fixed Rate	Fair Value 2011	Fair Value 2010
LIBOR Bonds, Series UU	$ 169,532	3-May-07	1-Jul-29	4.080%	$ (23,814)	$ (29,278)
LIBOR Bonds, Series UU	14,570	3-May-07	1-Jul-25	4.232%	(1,962)	(2,294)
LIBOR Bonds, Series UU	72,800	3-May-07	1-Jul-31	4.286%	(10,703)	(13,311)
LIBOR Bonds, Series UU	83,343	3-May-07	1-Jul-29	4.080%	(11,857)	(14,463)
Muni-BMS Bonds, Series UU	25,525	3-May-07	1-Jul-17	4.014%	(1,407)	(1,619)
Muni-BMS Bonds, Series UU	17,000	3-May-07	1-Jul-18	4.054%	(945)	(1,121)
Muni-BMS Bonds, Series UU	29,055	3-May-07	1-Jul-20	4.124%	(1,597)	(2,010)
Total	$ 411,825				$ (52,285)	$ (64,096)

29,055 x 0.04124 = 1.198

The notional amounts of the swaps match the principal amounts of the associated Power Revenue Bonds.

During fiscal years 2010-2011 and 2009-2010, the payments of fixed rate interest from the Authority exceeded the amount received as variable interest rate, from swap counter parties by $13.0 million and $23.4 million, respectively.

08 4.8
09 16.6
10 23.4
11 13.0

Nota 1
3/5

11. Long-Term Debt (continued)

Interest-Rate Swap Agreements (continued)

Using rates as of June 30, 2011, debt service requirements of the variable-rate debt and net swap payments, assuming current interest rates remain the same for their term. These debt service requirements are included in the scheduled maturities of long-term debt disclosed further on this note. As rates vary, variable-rate bond interest payments and net swap payments will vary.

Fiscal Year Ending June 30	Principal	Interest	Interest-Rate Swap, Net	Total
			(In thousands)	
2012	$ –	$ 4,008	$ 12,958	$ 16,966
2013	–	4,008	12,958	16,966
2014	–	4,008	12,958	16,966
2015	–	4,008	12,958	16,966
2016	–	4,008	12,958	16,966
2017-2032	411,825	38,245	155,428	605,498
Total	$ 411,825	$ 58,285	$ 220,218	$ 690,328

As of June 30, 2011 and 2010, the swaps had a negative fair value of approximately $52.3 million and $64.1 million, respectively. The negative fair value of the swaps may be countered by reduction in future net interest payments required on the variable-rate Power Revenue Bonds, creating higher synthetic rates.

As of June 30, 2011 and 2010, the Authority was not exposed to credit risk because the swaps had a negative fair value in the amount of the swaps' fair value. However, should interest rates change and the fair value of the swap become positive, the Authority would be exposed to credit risk in the amount of the derivative's fair value. The swaps counterparties were rated Aa1 and Aa3 as issued by Moody's Investor Services (Moody's), AA- and A+ by Standard & Poors (S&P), and AA- and A+ by Fitch Ratings.

The derivative contract uses the International Swaps and Derivatives Association, Inc. master agreement, which includes standard termination events, such as failure to pay bankruptcy. The Authority or the counterparties may terminate the swaps if the other party fails to perform under the terms of the contracts. Also, the swaps may be terminated by the Authority if the counterparties' credit quality rating falls below Baa1 as issued by Moody's or BBB+ as determined by S&P. If at the time of termination the swap has a negative fair value, the Authority would be liable to the counterparty for a payment equal to the swap's fair value.

Note 1
3/5

II-32

11. Long-Term Debt (continued) Basis Risk Future - spot

Basis Swap Agreement 44-45

In March 2008 (with effective date of July 1, 2008), the Authority entered into a basis swap agreement in the notional amount of $1,375 million with an amortization schedule matching certain maturities of the Authority's outstanding power revenue and revenue refunding bonds issued in various years from 2027 to 2037 (the 2008 basis swap). Under the terms of a master swap agreement, the Authority receives from its counterparty (Goldman Sachs Capital Markets, L.P., an affiliate of Goldman, Sachs & Co.) quarterly, commencing on October 1, 2008, a floating amount applied to said notional amount at a rate equal to 62% of the taxable London Inter-Bank Offering Rate (LIBOR) index reset each week plus 29 basis points (hundredths of a percent) and a fixed rate payment of 0.4669% per annum (the "basis annuity"), quarterly for the term of swap in return for quarterly payments by the Authority, commencing also on October 1, 2008, on such notional amount at a rate based on the Securities Industry and Financial Markets Association (SIFMA) municipal swap index. p.67

The basis swap hedges the portion of the fair value of the underlying liabilities attributable to the relative value/basis risk between tax-exempt and taxable rates. Because of the tax-exemption, tax-exempt bonds trade at yields lower than taxable yields. The percent at which tax-exempt yields trade relative to taxable yields (UST or LIBOR) is referred to as MMD ratios or muni bond ratios.

In order to assess effectiveness of the basis swap as a hedge, the Authority ran a regression of SIFMA ratios (as an independent variable) and MMD ratios (as dependent variable), adjusting to the specific circumstances. The result showed a high correlation. The method used can be qualified as Other Quantitative Method.
So, what?

Because the MMD ratios and SIFMA ratios reflected respectively the change in the relative value of the tax-exempt rates to taxables in the bond market and the SIFMA swap market, the Authority concluded that the regression showed that the SIFMA swap could effectively hedge the bond's value attributable to basis risk between tax-exempt and taxables and, therefore, the basis swap was considered an effective hedge instrument under GASB 53. ?

1112-1313725

Nota 1
4/5

11. Long-Term Debt (continued)

Basis Swap Agreement (continued)

By using ~~derivative financial~~ instruments to hedge the exposure to changes in interest rates, the Authority exposes itself to credit risk, market-access risk and basis risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contract. When the fair value of a derivative contract is positive, the counterparty owes the Authority, which creates a credit risk for the Authority. When the fair value of the derivative contract is negative, the Authority owes the counterparty and, therefore, does not pose credit risk to the Authority. The Authority minimizes the credit risk in derivative instruments by entering into transactions with high-quality counterparties whose credit rating is acceptable under the investment policies of the Authority and of Government Development Bank for Puerto Rico (GDB), its fiscal agent.

Market risk is the adverse effect on the value of a financial instrument that results from a change in interest rates. The market risk associated with an interest rate swap contract is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken. The Authority assesses market risk by continually identifying and monitoring changes in interest rate exposures that may adversely affect expected interest rate swap contract cash flows and evaluating other hedging opportunities. The Authority and GDB maintain risk management control systems to monitor interest rate cash flow risk attributable to both the Authority's outstanding or forecasted debt obligations as well as the Authority's offsetting hedge positions.

Basis risk arises when different indices are used in connection with a derivative instrument such as an interest rate swap contract. The 2009 basis swap exposes the Authority to basis risk should the relationship between LIBOR and the SIFMA municipal swap index converge. If a change occurs that results in the relationship moving to convergence, the expected financial benefits may not be realized. The Authority assesses basis risk by following the aforementioned market risks control system.

Ver incongruencia p. 56 ¶ 3 y 4

Nota. 1
5/5

11. Long-Term Debt (continued)

Basis Swap Agreement (continued) 67-69 o.s.

During the fiscal years 2010-2011 and 2009-2010, the Authority received from its counterparty $9.6 million and $9.5 million, respectively. The following table shows the cash flow benefit of the basis annuity in exchange for the Authority taking tax and other basis risks tied to the change in the relationship between LIBOR and the SIFMA municipal swap index.

	2010-2011	2009-2010	2008-20
	(In thousands)		
Basis annuity received	$ 6,420	$ 6,420	
LIBOR index amounts received	6,685	6,919	
SIFMA index amounts paid	(3,499)	(3,832)	
Net amount received	$ 9,606	$ 9,507	7.9

As of June 30, 2011 and 2010, the 2009 basis swap had a negative fair value to the Authority of approximately $16.9 million and $45.8 million, respectively. The negative fair value of the basis swap may be viewed as a reduction in future benefits to be received from the counterparty.

According to the Credit Support Annex of the Master Swap Agreement, if the fair value of the 2009 basis swap is negative and exceeds the threshold amount, the Authority shall post eligible collateral on the next business day upon notification from its counterparty. During fiscal year 2009-2010 the threshold amount for the Authority was $50 million. The Authority and GDB entered into an agreement for a $150 million revolving line of credit to meet collateral posting requirements from the 2009 basis swap. As of June 30, 2011 and 2010, there was no balance outstanding on the line of credit.

As of June 30, 2011 and 2010, negative fair values of the derivative instruments are $69.1 million and $109.9 respectively.

El Statement of Cash Flows (Véease Nota p.1) muestra las facultades de la cuenta Cash Flows from Investing Activities. Nótese que esta cuenta refleja un cash flow neto de +178.9 millones que surgen de una deuda de $172.1 millones. Aquí se ve a la AEE consiguiendo dinero bancario ($172.1 millones) para poseer una cantidad de $178.9 millones de cash flow positivo. Nótese además, que la AEE registró pérdidas en dinero por total de $97.1 millones en 2010 y $228.2 millones en 2011.

La exposición de AEE en el párrafo 1 (swaps) adolece de precisión y veracidad:

a. La AEE ha recibido $33. Millones. No se identifican las contrapartidas de pagos y los pasivos adquiridos: $109.9 millones (Véase último párrafo de la página 68 del Official Statement de 12/4/2012).

2. Productividad

a. La AEE no está en condiciones... A esta expresión la acompañan dos preguntas implícitas: ¿De qué condiciones se trata? Nótese que la AEE es una empresa PÚBLICA; NO PRIVADA. Como empresa pública la AEE no tiene una Cuenta de Capital. Su capital productivo lo produce el

TRABAJO. La AEE emite deuda no emite acciones; con los recursos financieros que recibe a cambio de deuda (Bonos) adquiere bienes de capital para generar, transmitir y distribución de energía eléctrica. Vende el producto y capitaliza la forma de depreciación. Con la capitalización paga las deudas... y así, se expande y se moderniza. En las empresas públicas la medida de la productividad del trabajo es, aún más importante que en las empresas privadas. En estas últimas la negligencia consume la riqueza del propietario. En las empresas públicas, la negligencia corroe el fruto del trabajo. (Véase Nota L).

Nota 2 p.1

Puerto Rico Electric Power Authority
(A Component Unit of the Commonwealth of Puerto Rico)

Statements of Cash Flows
(In thousands)

	Year Ended June 30 2011	2010 *(As restated)*
Cash flows from operating activities		
Cash received from customers	$ 4,203,889	$ 4,210,885
Cash paid to suppliers and employees	(3,675,557)	(3,554,091)
Net cash flows provided by operating activities	528,332	656,794
Cash flows from noncapital financing activities		
Proceeds from notes payable	172,062	38,364
Principal paid on notes payable	(36,119)	(337,985)
Interest paid on notes payable	(28,286)	(16,937)
Principal paid on fuel line of credit	(125,000)	(275,000)
Proceeds from fuel line of credit	125,000	–
Interest paid on fuel line of credit	(3,100)	(11,992)
Net cash flows provided by (used in) noncapital financing activities	104,557	(603,550)
Cash flows from capital and related financing activities		
Construction expenditures	(423,872)	(395,444)
Proceeds received from contributed capital	6,064	14,408
Allowance for funds used during construction	16,471	8,428
Power revenue bonds:		
Proceeds from issuance of bonds, net of original discount	361,620	1,547,073
Principal paid on revenue bonds maturities		(173,062)
Interest paid on revenue bonds	(209,287)	(353,501)
Proceeds from issuance of refunding bonds, net of original discount	222,883	939,646
Defeased bonds, net of original discount or premium	(200,173)	(924,361)
Proceeds from bond anticipation notes	50,750	186,610
Payment of bond anticipation notes	(50,000)	(747,675)
Interest paid on notes payable	(201)	(24,547)
Net cash flows (used in) provided by capital and related financing activities	(225,745)	77,575
Cash flows from investing activities		
Purchases of investment securities	(3,280,411)	(2,231,395)
Proceeds from sale and maturities of investment securities	[illegible]	2,137,457
Interest on investments	4,860	11,795
Transfer from general fund to restricted funds	(15,000)	(15,000)
Net cash flows used in investing activities	(228,235)	(97,143)
Net increase in cash and cash equivalents	178,909	33,676
Cash and cash equivalents at beginning of year	431,644	397,968
Cash and cash equivalents at end of year	$ 610,553	$ 431,644

(Continued)

THE LABOR MARKET AS A SOCIAL INSTITUTION

ROBERT M. SOLOW

Nolo L
p.1

1 Circumstantial Evidence

I want to sidle up to my subject indirectly by first saying something about the relationship of academic scholarship to common sense. On the whole, scholars enjoy confuting common sense. They like to show that what "everyone thinks" is all wrong. We all take obvious pleasure in creating a sensation by nonplussing the conventional wisdom. It feeds our sense of doing something of value. You can see this happening in subjects as diverse as history and astronomy. There is particular pleasure in demonstrating that Thomas Jefferson was not a virtuous man, or that there are objects, like black holes, with amazing properties. So also in economics.

Maybe even more so in economics. There is more folk wisdom going around about economics than there is about biology or chemistry and so naturally there are more opportunities to put down common sense. Often, maybe even usually, the confrontation with common sense is successful. Take for example the "paradox of thrift," the Keynesian demonstration that, when aggregate output is limited by effective demand, an attempt to create an autonomous increase in saving may, if successful, diminish the total of saving. I realize that there are many economists today who think that Keynes's argument was all wrong and common sense was right; I do not presume to settle that issue, only to point out that for a quarter-century the refutation of common sense stood. (You can recall other examples; think about tariffs.)

A

Common Sense NO

There is an important difference, however, between natural science and social science when it comes to the status of common sense. It does not matter what the person in the street believes about the nature of condensed matter or the movements of heavenly bodies. The same experiments on superconductivity will be performed and the same astronomical measurements will be made, and they will come out the same way, no matter what "people" think. (Leave aside the question whether public funds will be made available for unpopular research. Peer review was invented for that contingency.) In economics, however, the common-sense beliefs of businessmen, bankers, workers, managers, consumers, and speculators affect how they interpret what they see and therefore affect what they do. Common-sense beliefs about the economy are therefore an important influence on the behavior of the economy. They may even be decisive for what is actually true about it (as with the effects of a monetary injection). For the same reason, one might be inclined to take common-sense beliefs about the economy more seriously than common-sense beliefs about superconducting materials. When "people" think this or that about the economy, they are in

Animal Spirits

 Note p. 3

part thinking about themselves. Even if they are not always right about themselves (let alone about the economic system), they could be said to have a certain privileged position.

These abstract remarks have some particular relevance because my general subject in these lectures is the right way to think about the labor market, or at least about two or three aspects of the labor market. One important tradition within economics, perhaps the dominant tradition right now, especially in macroeconomics, holds that in nearly all respects the labor market is just like other markets. It should be analyzed in much the same way that one would analyze the market for any perishable commodity, using the conventional apparatus of supply and demand. Common sense, on the other hand, seems to take it for granted that there is something special about labor as a commodity, and therefore about the labor market too. (It is not hard to see why one might think that. It is worth pointing out that specialists in labor economics and industrial relations tend to side with common sense in this instance.)

Common sense Yes

B

Simon Coase Marx Leazar Gibbs

In the rest of this lecture I want to make the case that the labor market really is different. In particular, I claim that it cannot be understood without taking account of the fact that participants, on both sides, have well-developed notions of what is fair and what is not. In trying to convince you I will make use of all the rhetorical tricks. I will appeal to authority, I will appeal to common sense, I will produce a few relevant facts, especially ones that I hope you have not heard about before.

If there are any civilians here they will wonder why I spend so much time and effort, and exhibit so much defensiveness, in asserting the obvious. I have already explained why. Among economists, it is not obvious at all that labor as a commodity is sufficiently different from artichokes and rental apartments to require a different mode of analysis. In fact many economists will regard this idea as simply bizarre. I have some faint hope that Berkeley economists may have been softened up by exposure to the work of Professor George Akerlof and Professor Janet Yellen, whose ideas are a lot like mine (though I will on purpose emphasize somewhat different ways of examining the question).

In the second lecture I will focus on what has always seemed to me to be one of the main puzzles about the labor market and one of the main reasons for doubting the validity of the standard view. That is: when there is a non-trivial amount of unemployment, why is there not active competition for the limited number of jobs, and why does that competition not force wages down quite promptly? That is what we expect from artichokes and rental apartments, and it is roughly what we get. You will see at once how a notion of fairness and a related standard of acceptable behavior might provide a solution to the puzzle. But that loose implication will hardly do by itself. For one thing, it is too easy, too close to the surface, to be academically respectable. So I will try to provide a model, a sort of semi-formalization, of the way in which such a standard might arise and be maintained through thick and thin (at least if it is not too thin).

Finally, in the third lecture, I will try to relate all this to some more immediate and practical pieces of modern macroeconomics. First of all, I will try to undermine the notion of a stable "natural rate of unemployment." I put it tentatively like that because I am not at all sure what the right theory is for that situation. But I am fairly confident that the "natural rate" theory has been given more widespread acceptance than it has earned. So I will use the notions discussed in the first two lectures, plus some empirical work by myself and others, to infiltrate some skepticism about the theory and its policy implications. Then I will say a little about the policy notions that might follow from the view of unemployment proposed here.

Note L p.5

The most elementary reason for thinking that the concept of fairness, and beliefs about what is fair and what is not, play an important part in labor-market behavior is that we talk about them all the time. That is the appeal to common sense. The fact is so obvious that I will not trouble you with examples, except to bet that if you conjure up in your mind a picture of a picket line, the largest word on the placards is likely to be "UNFAIR." Let me quote from an essay called "A Fair Rate of Wages" by no less a person than Alfred Marshall. He says ". . . the phrase is constantly used in the market place; it is frequent in the mouths both of employers and the employed; and almost every

Note 2 p.6

phrase in common use has a real meaning, though it may be difficult to get at." (Full documentation is provided in the Bibliographical Notes to each lecture. This reference is to page 212.) I am going to return to Marshall's essay later. It was called to my attention by Professor R.C.O. Matthews, which seems appropriate because he is the current tenant of the professorship at Cambridge once held by Marshall.

A few days after writing these lines I walked past a group of picketing painters. The word "UNFAIR" was not to be seen. I was disappointed. When I looked again at the signs, I saw that they said that the X Construction Company "does not observe COMMUNITY STANDARDS in wages and working conditions." It made my day. From the point of view of these lectures, there is no better definition of "unfair."

Of course it is conceivable that a phrase or concept that is in everyone's mouth, or even in everyone's brain, should have nothing to do with the reality of outcomes. They may be words, just words, as Kenneth Burke once said of the novel. That seems especially implausible in a context like the labor market where negotiation and bargaining play a fairly conspicuous role. But it is hard to give a conclusive proof of the opposite. Even if the employers and the employed who talk about fairness are not just cynical phonies, their decisions may be entirely controlled by an invisible force, whether they know it or not. All one can do is to offer circumstantial evidence, which is what I try in this

b. La expresión "compensar ... a base de productividad... no existe ningún tipo de sistema...".

La relación o contrato o convenio de trabajo tiene dos componentes: la relación formal (las normas de trabajo dominada por el patrono) y el esfuerzo del trabajador, dominado por el trabajador.

El esfuerzo del trabajador es sensitivo a incentivos, por tanto, existe un conjunto de incentivos que conducen a un mayor esfuerzo. Los incentivos pueden alinearse al potencial de producción del trabajador individual o al grupo de trabajadores que produzcan una unidad de algo.

3. La diversificación del combustible

Esta es una problemática que descansa sobre bases de poco contenido real, fantasía y politiquería. Véase el siguiente escenario. (Nota 3).

Nota 3
p.1

Transportation of Natural Gas to Puerto Rico and Projected Savings from Natural Gas Diversification Strategy. During the past decade, liquefied natural gas ("LNG") has been imported to Puerto Rico for use in the EcoEléctrica cogeneration facility, which has an LNG terminal. On March 28, 2012, the Authority entered into a two-year purchase agreement for natural gas in order to provide natural gas to the Authority's Costa Sur power plant, where the Authority has already completed the conversion of the main generating units to dual fuel, and is able to receive natural gas through an existing pipeline from the EcoEléctrica LNG terminal. The LNG that is imported through the EcoEléctrica LNG terminal is currently from non-U.S. sources as the United States does not currently produce LNG in the contiguous 48 states that can be delivered outside the mainland and lacks the infrastructure and facilities required for such production. The Authority's contracted natural gas prices for the Costa Sur plant are based on a discount to the prices of fuel oil, as is typical in international markets.

In recent years, technological advances have allowed energy companies to tap into large previously untouched reserves of natural gas that could allow the U.S. to become a major producer of LNG in the future, but this would require the development of the appropriate infrastructure. While natural gas inside the U.S. mainland is generally transported via pipeline, deliveries to markets that are not accessible via pipelines would require the construction of LNG production facilities to convert the gas into liquid form and transport it via specialized tankers to foreign or domestic overseas destinations. Several companies are planning or evaluating the construction of such liquefaction plants and related facilities in the United States. Whether the infrastructure for the production of a significant amount of LNG from the U.S. mainland will be developed ultimately will depend on market conditions in the coming years and the energy policy of the United States government.

Natural gas, unlike oil, does not trade on a unified world market. Currently, there is a significant differential in the price of natural gas in international markets versus U.S. based prices, with U.S.-based prices being significantly lower. In the future, if the Authority were able to purchase LNG from the U.S. mainland, it would have to transport it in compliance with the Jones Act. The Jones Act generally requires that the transportation of merchandise between two U.S. points (including Puerto Rico) be carried in vessels that are documented in the United States, built in the United States, and owned and operated by U.S. eligible citizens. The Jones Act contains a limited exemption (adopted in 1996) for vessels that transport LNG to Puerto Rico if the vessel (1) is a foreign built vessel that was built before October 19, 1996, or (2) was documented under U.S. flag before that date, even if the vessel was thereafter redocumented under foreign flag before being redocumented under U.S. flag. In either case, the vessels still have to be U.S. owned and U.S. manned. Although there are currently no Jones Act compliant LNG vessels (either directly or within the limited exemption) operating in U.S. coastwise trade, there are some vessels currently in operation (thirteen (13) vessels that were built in U.S. yards and up to twenty-four (24) vessels that were built in non-U.S. shipyards between January 1, 1990 and October 16, 1996) that could potentially meet the previously mentioned limited exemption and be used to transport LNG from one or more future U.S. LNG production facilities to Puerto Rico. Even if such vessels were available, however, the provisions of the Jones Act would have the effect of increasing the cost of transporting LNG from the United States to Puerto Rico, as such vessels would have a higher cost profile than a foreign-flag LNG vessel. In addition, in November 2011, the U.S. Congress passed a law creating another limited exemption from the Jones Act. The law allows three specific LNG vessels (i.e., LNG Gemini, LNG Leo, and LNG Virgo) to transport natural gas between U.S. ports. This exemption may not be useful for LNG transport to Puerto Rico, since the vessels are quite old and are planned to be used as part of a project to transport ethane from Pennsylvania to the Gulf Coast. As a result, these vessels may not be available to transport natural gas between U.S. ports and Puerto Rico.

* ?, ¿a qué costo?

Nota 3
p. 2

At the request of the Government of Puerto Rico, the U.S. Government Accountability Office is currently performing a comprehensive study on the Jones Act. After this study is concluded, the Government of Puerto Rico will analyze its findings and, as part of its efforts to reduce the cost of electricity in Puerto Rico, possibly seek from the U.S. Congress a broadening of the current Jones Act exemptions to include newer and more efficient LNG vessels in order to facilitate the transportation of LNG from the U.S. There is no assurance that the current exemptions will be broadened or, if they are broadened, that the Authority would be able to contract for the purchase and transportation of LNG from the U.S. mainland at lower prices than what it would be able to obtain in international markets.

The Authority estimates that the use of natural gas instead of fuel oil in the Authority's facilities that would be supplied through the Vía Verde and Aguirre projects could result in annual fuel cost savings to the Authority of between $500 million and $1.0 billion by fiscal year 2016, depending on market prices of fuel oil and natural gas and on the Authority's execution of the plant conversions to dual fuel units that can burn oil and natural gas. To the extent that LNG is produced in the U.S. mainland and becomes available for delivery to foreign or domestic overseas markets, the price differential with international markets persists, and the Authority is able to secure transportation of such LNG in compliance with the Jones Act, as it may be amended from time to time, the Authority believes its savings from the use of natural gas could be in the upper part of the above-mentioned range. Conversely, to the extent the Authority has to continue purchasing natural gas in international markets, it believes its projected savings may be in the lower portion of this range, unless global prices come down as a result of increased production and exports of U.S. natural gas.

4. Reacción AEE a presentación José Herrero sobre Salarios, contiene cinco elementos. Sobre los cinco elementos:

   a. Hurto de Energía – Programa de reducción - Se pretende instalar o remplazar los contadores por otros con tecnología que no es compatible a la actual instalada. En la actualidad se han desmantelado las Secciones de Investigación de Uso Indebido de la Autoridad. Por otro lado, se contrató una compañía privada para realizar los trabajos de la Unidad Apropiada UTIER. Adicional, se utilizan las mismas técnicas para la detención de hurto que no ha rendido frutos en el pasado.

   b. Sistema de Información y Soluciones Tecnológicas - Este elemento también consiste en la instalación de contadores y adiestramientos adicionales los cuales son incompatibles con la tecnología que actualmente se utiliza en la Autoridad. Cabe señalar que esto representa un costo adicional al ya incurrido por la Autoridad para la lectura remota. Sobre lo que se persigue con la implementación de este sistema es el mismo resultado puede ser obtenido con la tecnología que actualmente tiene la AEE.

   c. Ley 235 de 2011 – UIE del Departamento de Justicia - Sobre el asignar las investigaciones a la Unidad de Investigaciones

Especiales podemos decir que esto es como poner el cabro a velar las lechugas. El Departamento de Justicia no cuenta con la experiencia y los conocimientos para atender estos asuntos.

d. Ley 237 de 2011 – Aumento en Penalidades Relacionadas al Uso Indebido - La imposición de penalidades mayores en los casos de uso indebido sólo tiene como resultado el persuadir o tratar de persuadir a las personas para que no incurran en hurto de energía.

e. Aumento en la facturación y Cobro utilizada para mitigar déficit operacional y reducir costo de energía – De los Official Statements o de algún otro documento no se desprende que se hayan presupuestado o proyectado ingresos por este concepto.

SOLUCIONES VIABLES

Solución 1–Reestructurar la Cuenta de Inversiones Financieras.

En los años recientes la Autoridad de Energía Eléctrica de Puerto Rico ha experimentado alegadas pérdidas significativas en la operación de la cobertura de riesgo de mercado y de riesgo de bases. Se estima por la Autoridad y se observa por ésta bajo la misma premisa, que sus pérdidas irán creciendo con el pasar del tiempo, especialmente en el caso de los SWAP´s de bases diferentes en los cuales el valor nominal es de $1,175 millones. La Autoridad ha recurrido anualmente a líneas de crédito entre $100 a $150 millones. Otro de los efectos colaterales, tales como la exposición creciente al riesgo y posibles reclasificaciones de la calidad de riesgo de los activos financieros, agravarán el problema. La situación financiera de la Autoridad que ha llevado a tales consecuencias está vinculada a insuficiencias, en extremo negligentes, en el manejo de su cuenta de inversiones financieras. Se trata de una situación auto infligida que no puede ser utilizada como justificación a la negativa de la Autoridad de hacer una oferta en la mesa de negociación dirigida a atender nuestras demandas de mejoras salariales para un convenio de tres años. Los trabajadores no tienen por qué cargar sobre sus hombros la debacle administrativa y financiera provocada por los administradores de esta empresa. Una eficiencia mayor por parte de la Autoridad atendería en forma adecuada las demandas de salud y seguridad para nuestra matrícula y las justas demandas salariales que hemos hecho, que en todo caso, apenas atienden el efecto inflacionario habido en los pasados años de vigencia del presente convenio.

Solución 2 – Reactivación de plantas hidroeléctricas.

En términos nominales, la Autoridad tiene una capacidad generatriz de 100 megavatios en distintos estados de capacidad productiva. Se ha establecido un programa de recuperación de la capacidad productiva de 20 megavatios en el primer año, 30 megavatios en el año dos, 10 megavatios en el año tres y 40 megavatios que tomarán al menos 3 años o más en lograrse. Con la capacidad recuperada para el primer año, la Autoridad podría generar 140 millones de Kw-hr. que valorados al precio de mercado significan, 30.2 millones de dólares. Si se utilizara solamente el .6623 o el 66.23% de la capacidad rehabilitada en el primer año, se generarían $20 millones en ese primer año. Debe señalarse que la rehabilitación total del sistema hidroeléctrico generaría aproximadamente 700 millones de kw-hr., que valorados a precios del mercado equivalen, a $151.2 millones. Esto representa que la ocupación de .1323 o 13.23% de la capacidad hidroeléctrica sería capaz de mantener un aumento permanente del 6% anual en los trabajadores de la UTIER.

Solución 3 – Pérdida tecnológica y pérdida de mercado

En lo que corresponde a este renglón, es necesario asumir varias premisas importantes: a) La proporción de energía producida y no facturada por la Autoridad de Energía Eléctrica en el año 2011 con respecto a la energía generada y comprada, asciende 0.1473. La energía perdida en la producción asciende a 0.0433, para un total de 0.1906. b) La energía generada y comprada por la Autoridad de Energía Eléctrica representó en ese mismo año la suma de 23,579 millones de kilovatio-hora. Si se compara con la energía neta generada y comprada, la cual asciende a 22.559 millones de kilovatio-hora, tenemos una diferencia de 1020 millones de Kilovatio-hora; c) La energía vendida por la Autoridad de Energía Eléctrica en el mismo periodo fue de 19,235 millones de Kilovatio-hora, lo cual establecería una pérdida en Kilovatio-hora de 3,324 millones de Kilovatio-hora. El precio promedio de venta de kilovatio-hora ha sido de $0.216 dólares (o 21.6 centavos) por kilovatio-hora.

El resultado de lo anterior refleja claramente que la pérdida técnica que tuvo la Autoridad en el pasado año fue la siguiente: 1,020 millones de Kw-hr. x 0.216, lo que tomando el valor promedio del costo del kilovatio-hora, representa una pérdida de $220 millones. Si a lo anterior se suma la perdida de mercado, que se representa bajo las mismas constantes de valor de kilovatio-hora, de 3,324 millones de Kw-hr. x $0.216, se añade una pérdida de $718 millones, para un total de $938 millones.

Las ventas totales de la Autoridad en ese mismo año ascendieron a $4,154.4 millones. El coeficiente de perdidas con relación a las ventas fue de .2258 o 22.58%.

Sólo la pérdida de 93 millones de Kw-hr. equivalen a $20 millones, lo que significa que recuperando esa pérdida anual, pueden atenderse nuestras demandas económicas de aumentos salariales anuales en la presente negociación.

Una consideración final:

La enumeración hecha previamente no agota las alternativas. Si quisiéramos analizar la pérdida que tiene la Autoridad por hurto de energía eléctrica, solo sería necesario transformar los valores de la pérdida de mercado a una distribución probabilística del evento de capturar a las personas y corporaciones que hoy día llevan a cabo este tipo de actividad en perjuicio de nuestro pueblo.

Las medidas antes enumeradas generan fondos suficientes, no solo para atender nuestras aspiraciones de demandas salariales y atender nuestras propuestas en las áreas de seguridad y salud, sino que permiten, además, en una sana administración de los recursos de la Autoridad, atender la demanda de reducción en la factura de la luz para nuestro pueblo, con un mejor y más eficiente servicio a la ciudadanía.

Reiteramos que continuamos en la espera de la contra propuesta de la Autoridad de Energía Eléctrica de Puerto Rico a las demandas formuladas por la UTIER en las áreas de seguridad y salud; así como también, aquella formulada por la UTIER relacionadas con el sistema KRONOS/ORACLE.