
An Outlook of
Puerto Rican Economy :2007
J & J/PMA Puerto Rico Panel Discussion

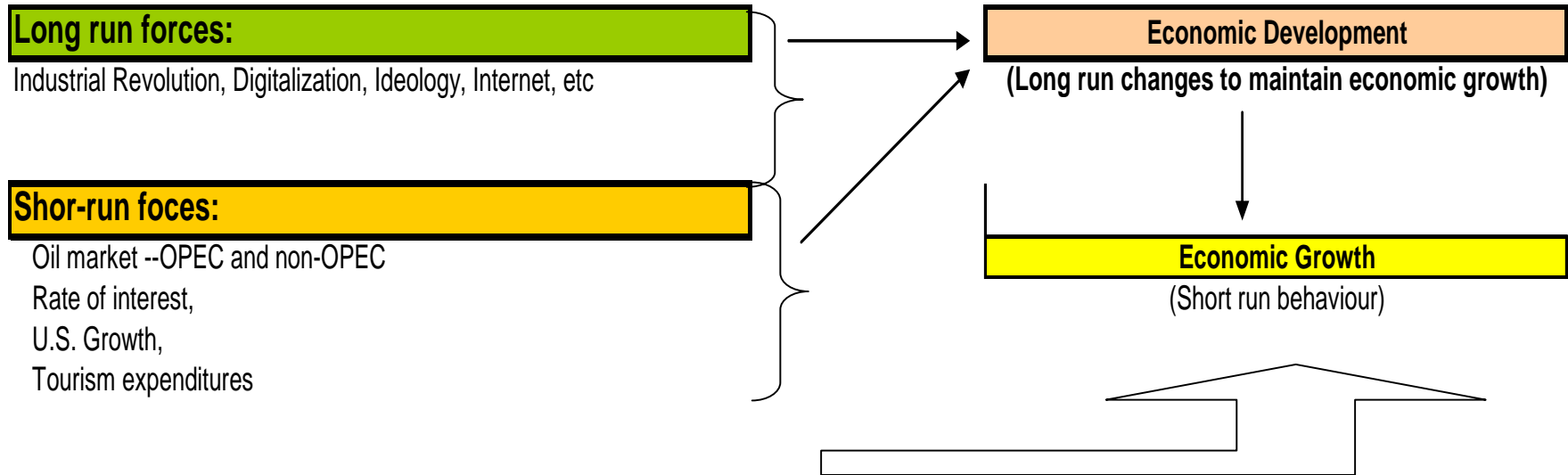


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12, October 2006

Agenda for the meeting

- **Examine the economic forces acting over the Economy of Puerto Rico.**
- **Understand these economic forces: Structural (long-run) versus Short –run variables.**
- **Because, we emphasize short-run, deliver main determinants of the economic growth.**
- **As corolary, is Puerto Rican economy in a recession ? Yes, No, Yes, No. Uhf ?.**
- **If U.S. Economy is not, why Puerto Rico is not growing, Why ?**
- **How about the construction industry ?.**
- **What is the role of pharmaceutical before and after Section 936 ?**
- ***Quo vadis* Puerto Rico's Economy ?**

Economic forces acting over the economy at a given period of time



- Therefore, the economic growth is a result of two simultaneous forces:
 - **Long-run -permanent component: encourages development under a given model and institutions; -> suppose to maintain economic growth path.**
 - **Short-run –transitory component: encourages growth, or reduces it.**

Outlook of Puerto Rican economy

- Let's talk about:

LONG- RUN FORCES

Long –run forces is explained by:

The Competitive Advantage of Puerto Rico.

Our economy has been consolidated as a *state –a-like economy* (“*almost a state economy*”) of the United States since the early 1900’s.

Since the 1920’s, United States understood that economy development of Puerto Rico or any insular area, was feasible mainly by a taxes policy.

Therefore, the economic development efforts lean over the U.S. Multinational Corporations as well as the development policy designed by the U.S. Congress.

Main long run forces

Puerto Rico and United States relationship:

In this type of relationship both share:

- ❑ **Common market-no tariff & no quotas;**
- ❑ **Free flows of capital and technology;**
- ❑ **Common financial system-same U.S. dollar;**
- ❑ **Special Federal Tax Treatment to U.S. firms;**
- ❑ **Common U.S. citizenship—implies free flow of labor; and transfer payments; and**
- ❑ **Political stability.**
- ❑ **Many Federal legislation and agencies apply to Puerto Rico; for instance; Federal Trade Commission; Federal Communication Commission; Federal minimum wages; etc**

Competitive Advantage: Based mainly on Federal Taxes

- **Because “the federal government has used tax policy as a tool to encourage investment and increase employment in the insular areas” a/:**
 - **Puerto Rico has been globally asserted as a tax havens for the U.S. corporations;**
 - **In the 1950’s => Section 931 from the U.S. Treasury (enacted by 1920s), and**
 - **1976 => shifting to Section 936;**
 - **brought full Federal Taxes breaks to US. Corps;**
 - **Many U.S. pharmaceutical firms found special treatment to income derived not only from their active business but alos from intangible assets, royalties and financial investments.**
 - **By the 1980, Puerto Rico was called as “*the International Capitol of U.S. Pharmaceutical Industry*”**
-
- ***a/ GAO Report, May 2006; “Fiscal Relations with the Federal Government and Economic Trends during the Phaseout of the Possessions Tax Credit: GAO-06-541 p. 28.***

The economic development:

Stages tied to taxes breaks and special treatment from the U.S. Congress

- **The development program started at 1948 under the name *Operación Manos a la Obra* =Operation Bootstrap (1948):**
 - **Encourages economic development/ growth:**
 - **By combining Special Federal Taxes Treatment to Puerto Rico with local taxes and incentives:**
 - **Developing labor skills and infrastructure:**
 - **Three stages of development have been stated:**
 - **1948 to mid 1960s --labor intensive and tourist attractiveness; double tax exemptions-Federal & local.**
 - **Mid 1960s to mid 1970s—capital intensive model (petrochemicals); special treatment of U.S. oil imports**
 - **Mid 1970s to mid 1990s —high technology model— pharmaceuticals, electronical, medical devices, computers; and so on. Under Section 936.**

Since the mid 1990's: no more breaks (...say U.S. Taxes breaks)

So, would Puerto Rico, will be capable to grow with no Federal taxes breaks ?. YES.

Some projects:

- Transshipment Port –Las Américas
- \$ 6 billions in infrastructure project underway;
- \$1.7 billions investment for XIX Central American Games hosted by Mayaguez and West Coast;
- PRIDCO is also configurating;

Mid 1990s up to present –Clusters; Health and Medical Devices and Biotechnology industry—

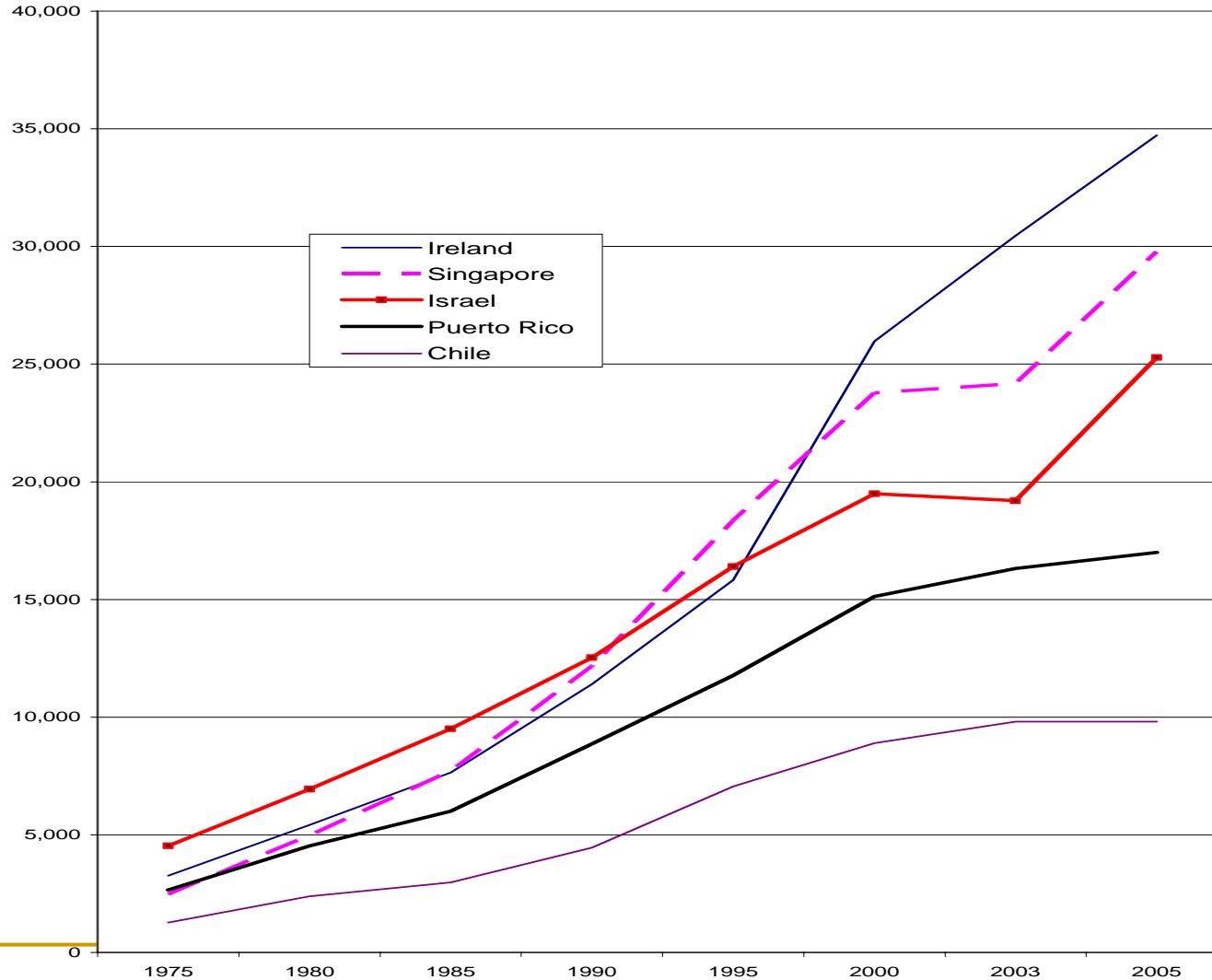
- R & D efforts, Universities are key pieces.

Since the mid 1990's: no more breaks (...say U.S. Taxes breaks)

- Puerto Rico is now also facing new challenges by:
 - Free Trade Agreement of United States to:
 - NAFTA, CAFTA+RD; etc;
 - Economic Union from Europe Countries;
 - Strong U.S. and Europe investment attractiveness from: Ireland; Asia (Singapore, Malaysia, China, etc), and India.
 - In Pharmaceutical Industry: New competitors:
 - Brasil
 - Russia
 - India, and
 - China

Puerto Rico and its peers

Gross National Income World Bank



Outlook of Puerto Rican Economy

- Let us talk about;
 - **SHORT – RUN FORCES**

Short –run behavior is been determined by three main variables,
say : “The good, the Bad and the Ugly”:

- **“The Good”: U.S. Economic Growth** determines
 - Tourist Expenditures;
 - P.R. Exports—manufacturing and services;
 - U.S. Material prices for many local firms
- **“The Bad”: Oil prices (OPEC., and speculators)**
 - Gasoline prices; oil derived fuels, etc
 - Kwh hour by PR Energy Authority: residential, industrial and commercial.
- **“The Ugly” : Interest rate (the Fed Bank)**
 - Construction industry; housing, durables goods, etc



Econometric model of Puerto Rico forecasts (easily) local growth using the “good” and the “bad”

- See www.josealameda.com/
 - (Please, don't watch closely the photo in there, I have no insurance liability for any physical or mental damages).
 - The “Good”: US Growth:
 - “The Bad”: Oil Price:
 - The “*Ugly*”-well managed by the Fed, although it tends to alter investment and consumption
-

“The Good”: its forecast is not so good – Fed Bank Philadelphia

	<i>Real GDP (%)</i>		<i>Unemployment Rate (%)</i>		<i>Payrolls (000s/month)</i>	
	<i>Previous</i>	<i>New</i>	<i>Previous</i>	<i>New</i>	<i>Previous</i>	<i>New</i>
<i>Quarterly data:</i>						
2006: Q3	3.1	2.7	4.7	4.7	165.5	125.3
Q4	3.0	2.9	4.8	4.8	146.3	127.2
2007: Q1	2.9	2.9	4.8	4.8	149.2	118.5
Q2	3.0	2.7	4.8	4.9	124.5	126.4
Q3	N.A.	3.0	N.A.	4.9	N.A.	136.2
<i>Annual average data:</i>						
2006	3.4	3.4	4.7	4.7	169.5	153.6
2007	3.0	2.8	4.8	4.9	138.4	126.1

Conference Board insights

Press Release / News

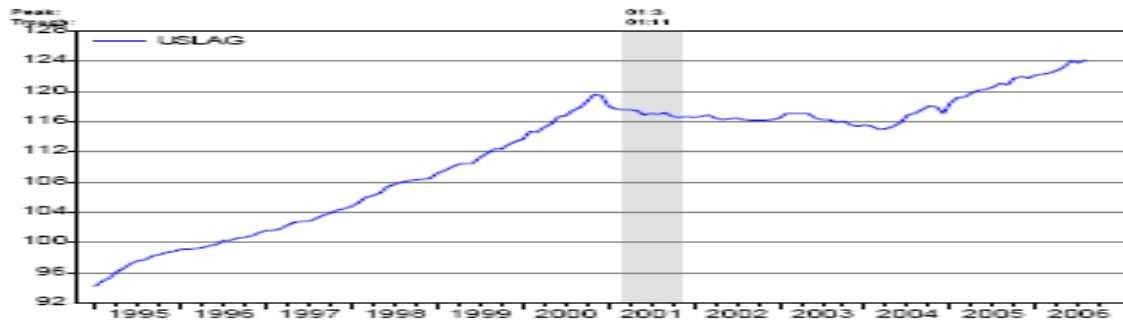
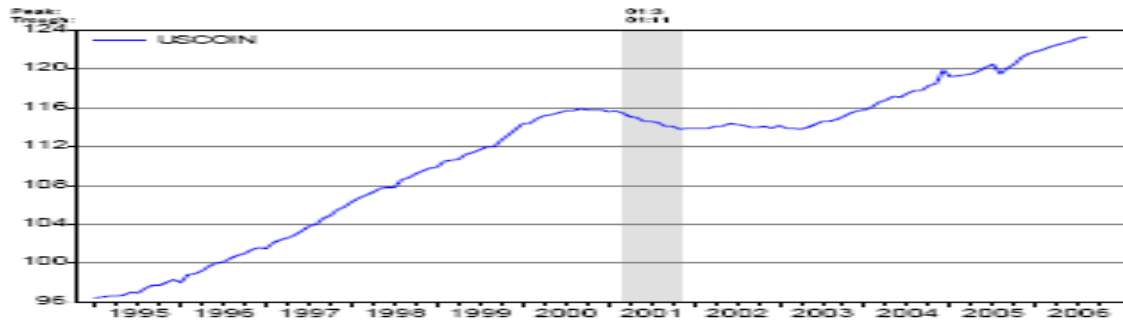
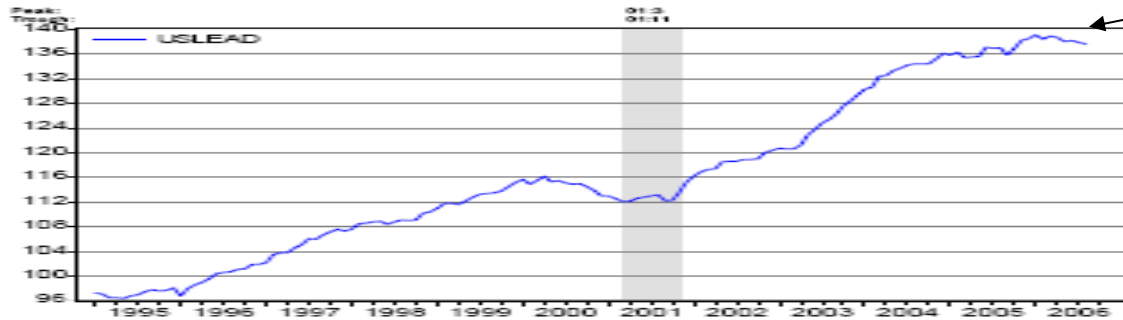
The U.S. Economy Will Grow Slowly and Not Sink Into a Recession, The Conference Board Reports Today

Oct. 10, 2006

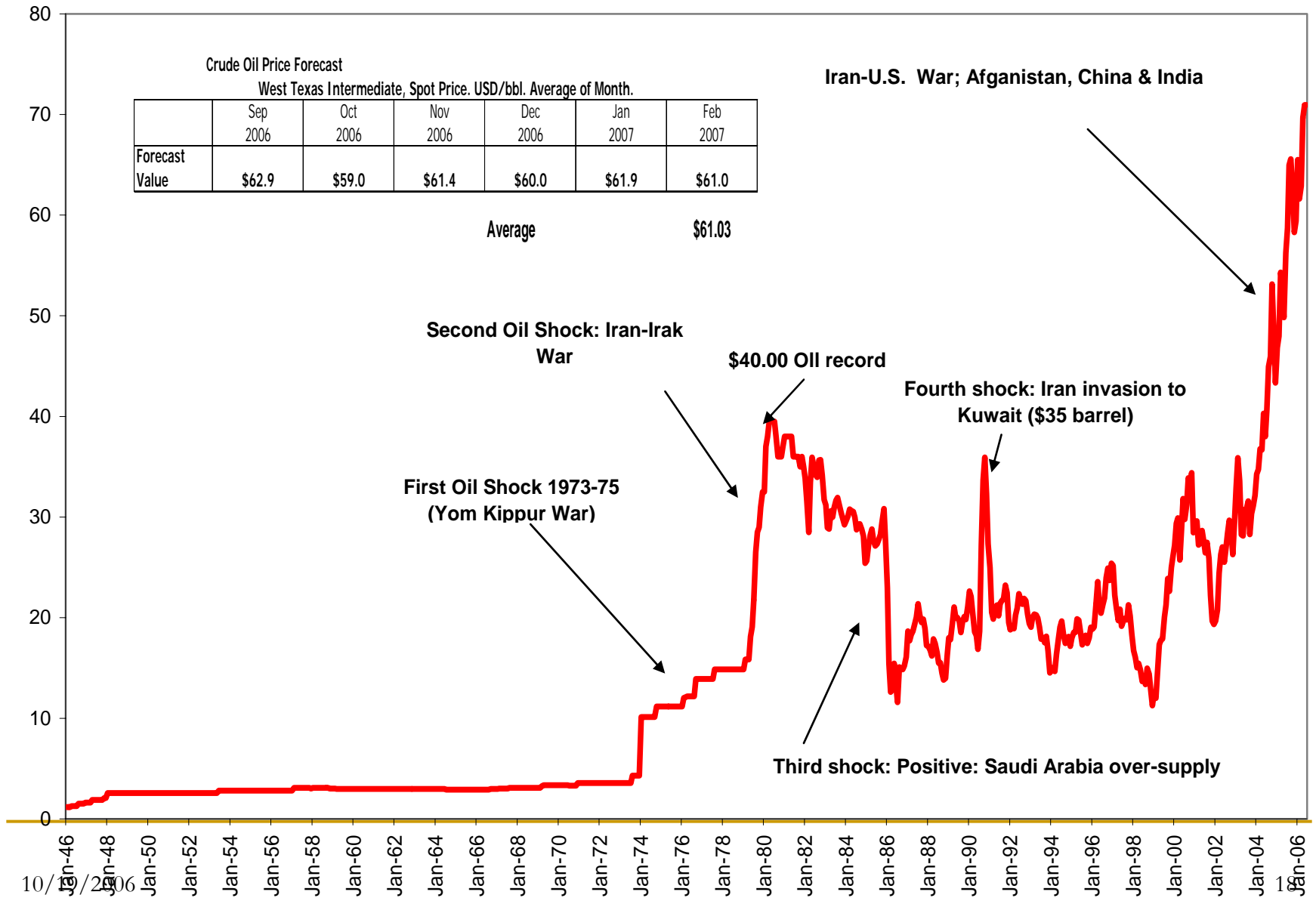
Varied economic indicators produced by The Conference Board are now pointing to slow growth ahead in the U.S., but not a recession, according to an analysis released today by The Conference Board, the global research and business membership organization.

Conference Board Indexes

U.S. Composite Indexes (1996=100)



Oil Prices shocks- “The Ugly”



The forecasted growth

Son of the.... “Good” and the “Bad”

Real Growth of United States (GDP)(%)											
	-3.5	-2.5	-2.0	-1.5	-1.0	0.0	1.0	1.5	2.0	2.5	3.0
Oil Price	Real Growth for Puerto Rico (GNP) (en %)										
\$50	(2.56)	(1.97)	(1.67)	(1.38)	(1.08)	(0.49)	0.10	0.40	0.69	0.99	1.29
\$54	(2.73)	(2.14)	(1.84)	(1.54)	(1.25)	(0.66)	(0.06)	0.23	0.53	0.83	1.12
\$58	(2.89)	(2.30)	(2.00)	(1.71)	(1.41)	(0.82)	(0.23)	0.07	0.36	0.66	0.96
\$60	(2.98)	(2.38)	(2.09)	(1.79)	(1.50)	(0.90)	(0.31)	(0.01)	0.28	0.58	0.87
\$64	(3.14)	(2.55)	(2.25)	(1.96)	(1.66)	(1.07)	(0.48)	(0.18)	0.12	0.41	0.71
\$68	(3.31)	(2.71)	(2.42)	(2.12)	(1.83)	(1.23)	(0.64)	(0.35)	(0.05)	0.25	0.54
\$70	(3.39)	(2.80)	(2.50)	(2.20)	(1.91)	(1.32)	(0.72)	(0.43)	(0.13)	0.16	0.46
\$74	(3.55)	(2.96)	(2.67)	(2.37)	(2.07)	(1.48)	(0.89)	(0.59)	(0.30)	(0.00)	0.30

{ US Growth = 3.0%
 Oil Price = \$60.00 }

PR Growth
 0.87%

Short run Challenges

- Now, let's see the some new challenges

Short-run challenges

Short run challenges: legacy of long run woes and new troubles

■ **First: Growing pains:**

- The Economy of Puerto Rico is growing at a very low rate. Less than 2% since the early 2000.

■ **Second: A recession:**

- In the 2005-06, Puerto Rico is facing a wear situation (but it is real)....Puerto Rico is in recession although no signs seen to United States economy; (of course, last week, Leading Indicator Index of Conference Board tells us

■ **Third Government mess: *Triple-trouble*:**

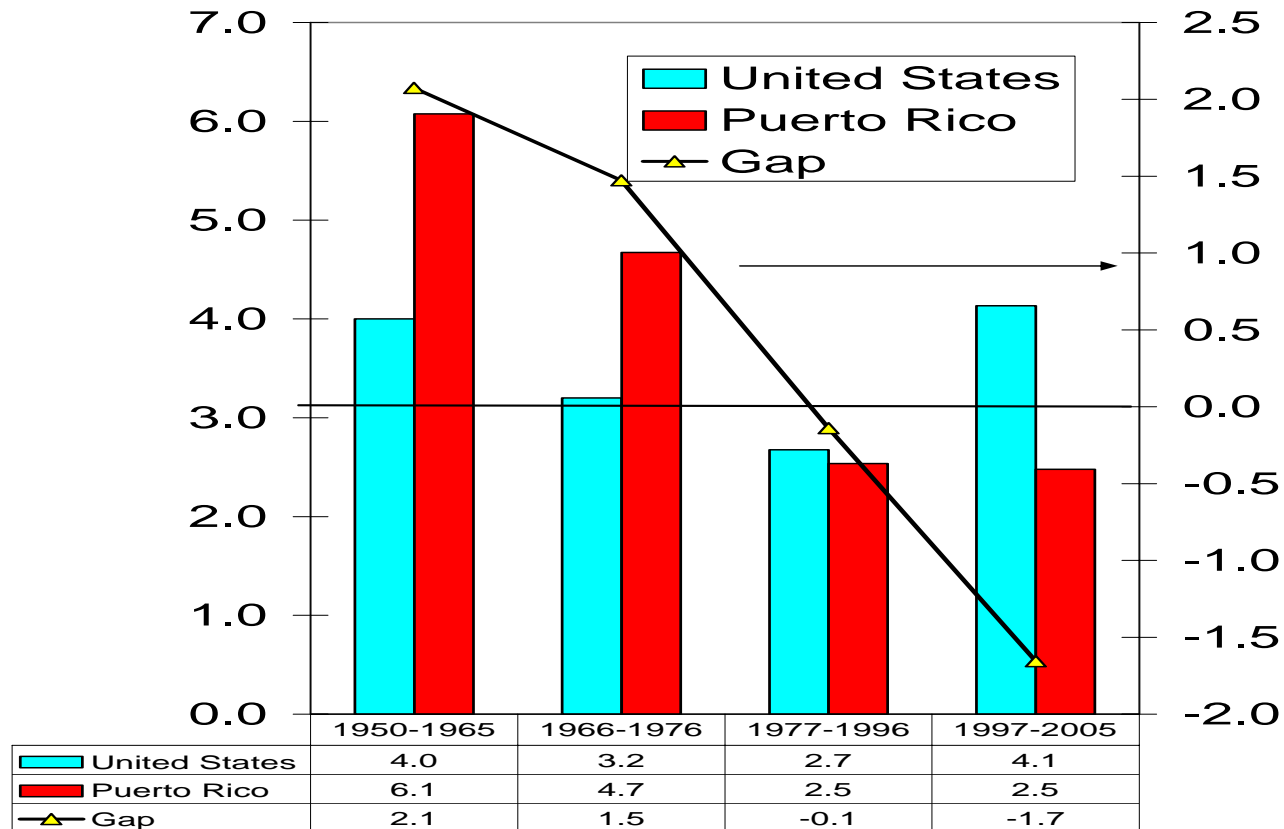
- Public Debt (Constitutional and *Extra-constitutional*) → Budget Deficit → Tax Reform
- Government size. How large is large ?

■ **Four: Political parties controversy.** Please, no comments

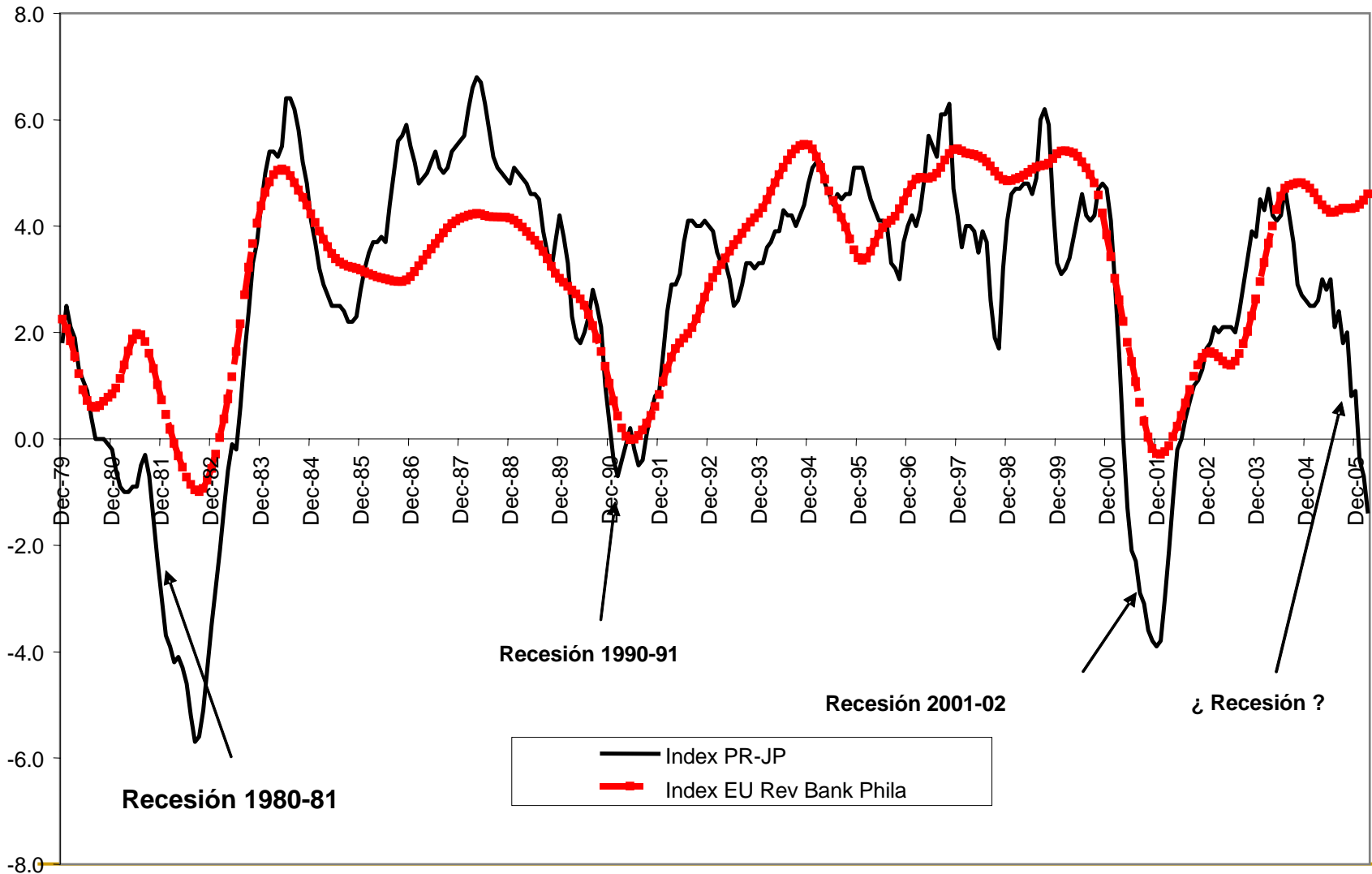
■ **Five: The construction industry is been stagnated, in spite pharmaceutical is investing to fast.**

Puerto Rico is growing slowly; not to say stagnated

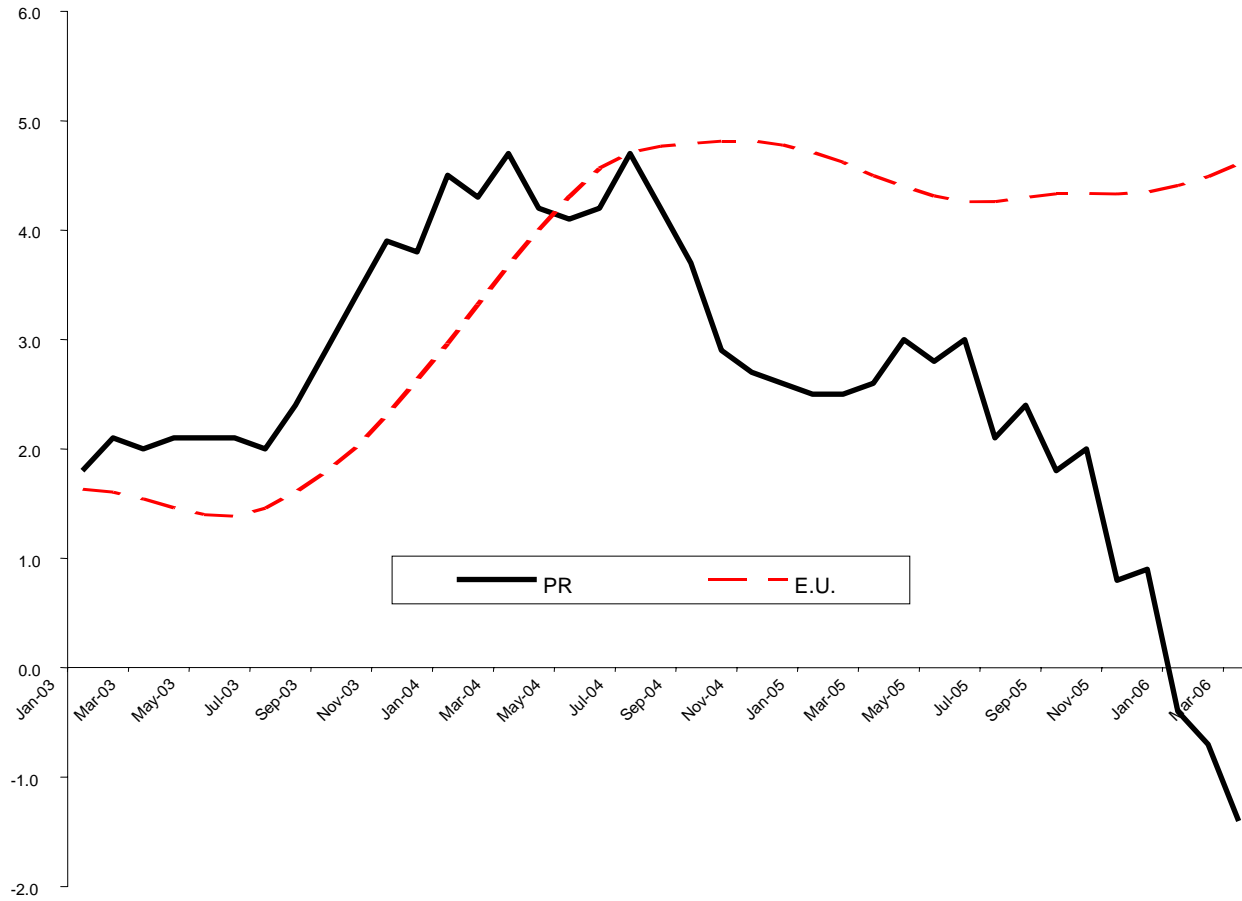
Average rate of real GNP growth
United States and Puerto Rico, and
Gap (PR less US)



Index of Puerto Rico Planning Board and US Reserve Bank Philadelphia: dic 1979 to march 2006



Index of Puerto Rico Planning Board and US Reserve Bank Philadelphia: Jan 2003 to March 2006



Short -run challenges 2006

■ Government size

- Per centage of government employment to total non farm payroll employment

1 DC	34.2%	42 Connecticut.....	14.9%
2 Puerto Rico....	30.9%	43 Indiana.....	14.8%
3 Alaska.....	28.2%	44 Illinois.....	14.6%
4 Wyoming.....	25.7%	45 Florida.....	14.5%
5 New Mexico.....	25.2%	46 Wisconsin.....	14.5%
6 North Dakota...	23.2%	47 Delaware	14.0%
7 Mississippi.....	21.7%	48 Rhode Island.....	13.6%
8 Montana.....	21.5%	49 Pennsylvania.....	13.3%
9 Hawaii	20.6%	50 Massachusetts....	13.1%
10 Oklahoma.....	20.4%	51 Nevada.....	12.4%

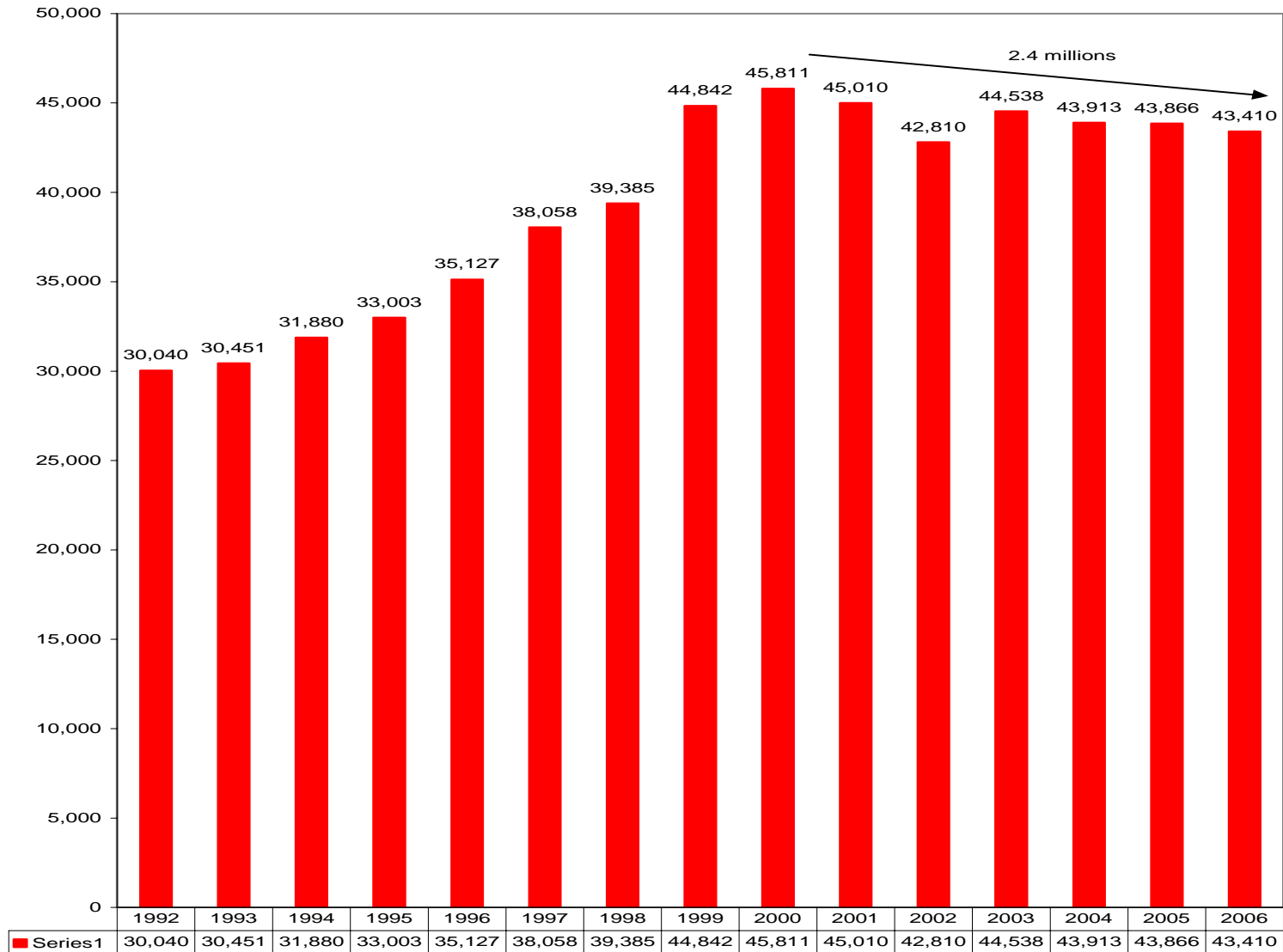
Number of construction permitts

	Number of Construction Permits	Number of PRIVATE Construction Permits	Number of PUBLIC Construction Permits
	#	#	#
1992	6,537	6,307	230
1993	7,581	7,226	356
1994	8,448	8,137	311
1995	8,456	8,077	379
1996	7,811	7,346	465
1997	8,112	7,469	643
1998	8,588	8,249	339
1999	8,276	7,975	301
2000	8,754	8,353	401
2001	8,898	8,476	422
2002	8,900	8,597	303
2003	9,396	8,826	570
2004	10,037	9,311	726
2005	9,727	9,012	715
2006	9,451	8,923	528

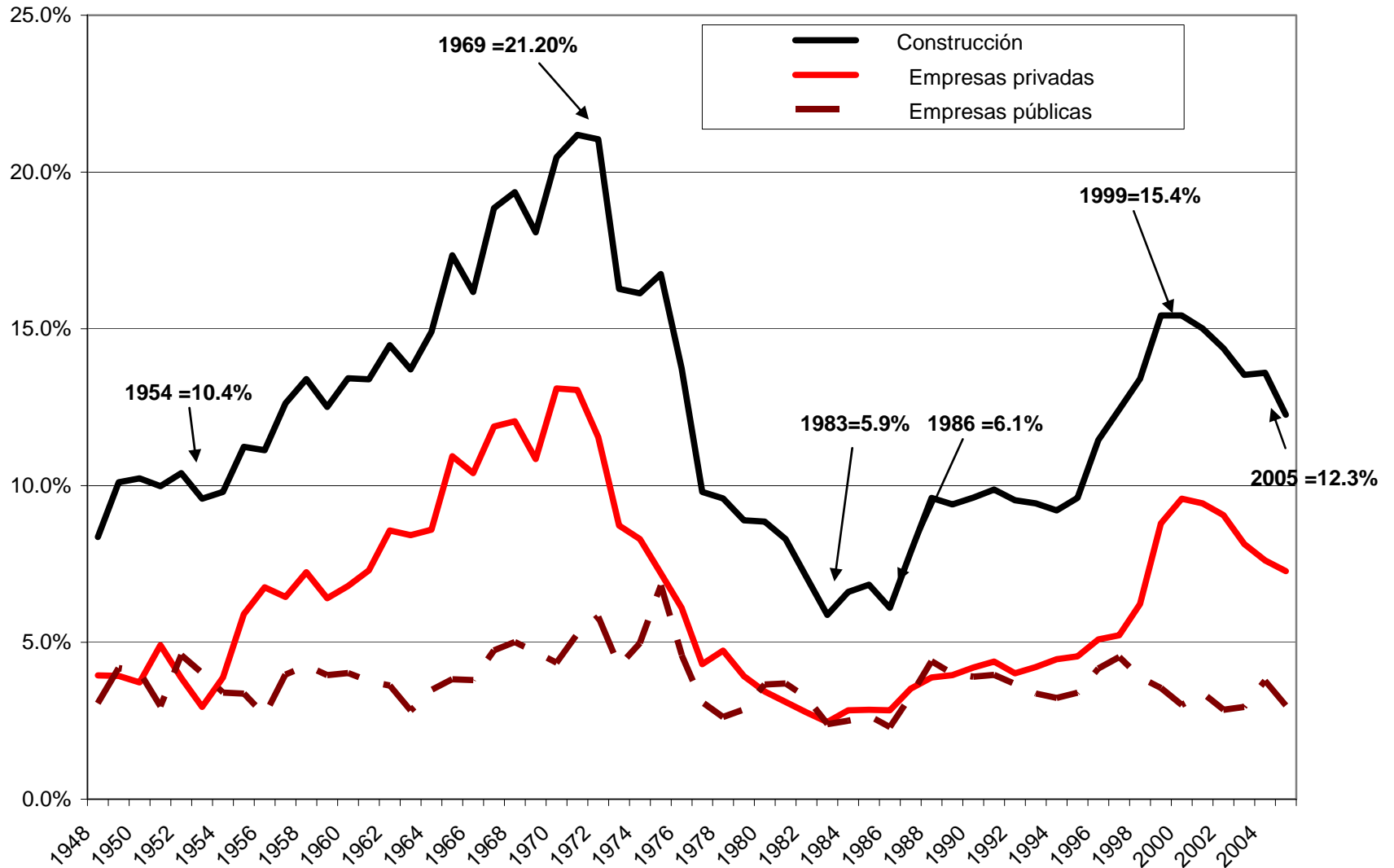
Value of Construction permitts (000\$)

	Value of the Construction Permits (Thousand \$)	Value of PRIVATE Construction Permits (Thousand \$)	Value of Public Construction Permits (Thousand \$)
	\$	\$	\$
1992	\$877,700	\$686,960	\$190,740
1993	\$1,006,632	\$723,317	\$283,315
1994	\$1,075,951	\$874,724	\$201,227
1995	\$1,432,017	\$937,236	\$494,781
1996	\$1,229,106	\$862,991	\$366,115
1997	\$1,445,729	\$1,029,705	\$416,024
1998	\$1,359,658	\$1,008,473	\$351,185
1999	\$1,595,371	\$1,191,874	\$403,497
2000	\$2,426,507	\$1,699,817	\$726,690
2001	\$3,040,716	\$2,013,170	\$1,027,546
2002	\$2,227,913	\$1,789,418	\$438,495
2003	\$2,717,643	\$1,886,926	\$830,717
2004	\$2,941,487	\$2,025,709	\$915,877
2005	\$2,945,511	\$2,090,629	\$854,882
2006	\$2,819,039	\$2,249,077	\$569,962

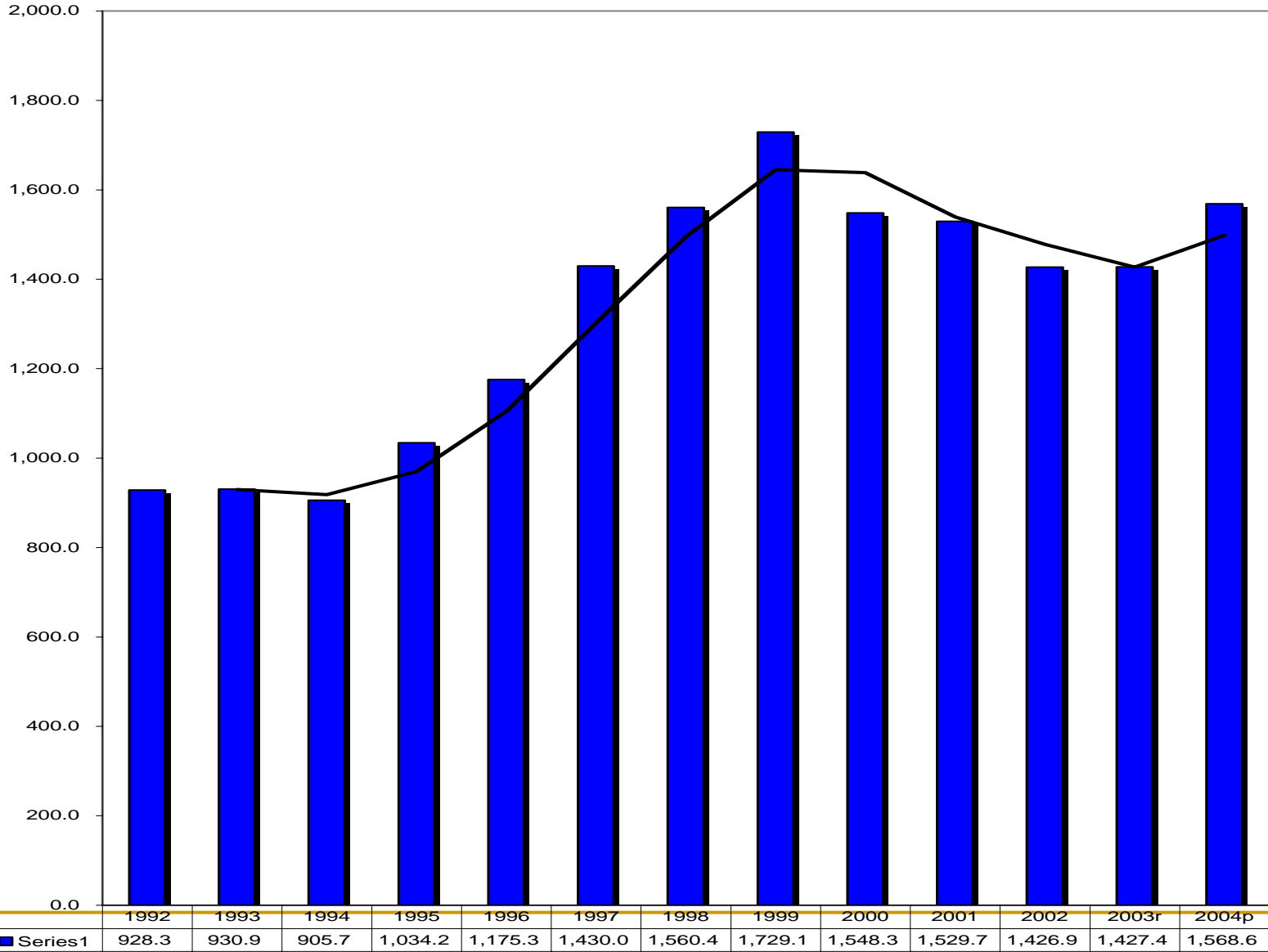
**Sales of Cement (94 pound sacks)
Puerto Rico (In 000)**



Construction private and public as percentage of GNP in Puerto Rico Fiscal Years 1948 al 2005



**Infrastructure from Government-excluding PRTC (priv 1999) and Bid Daddy
Aqueduct and Urban Train**



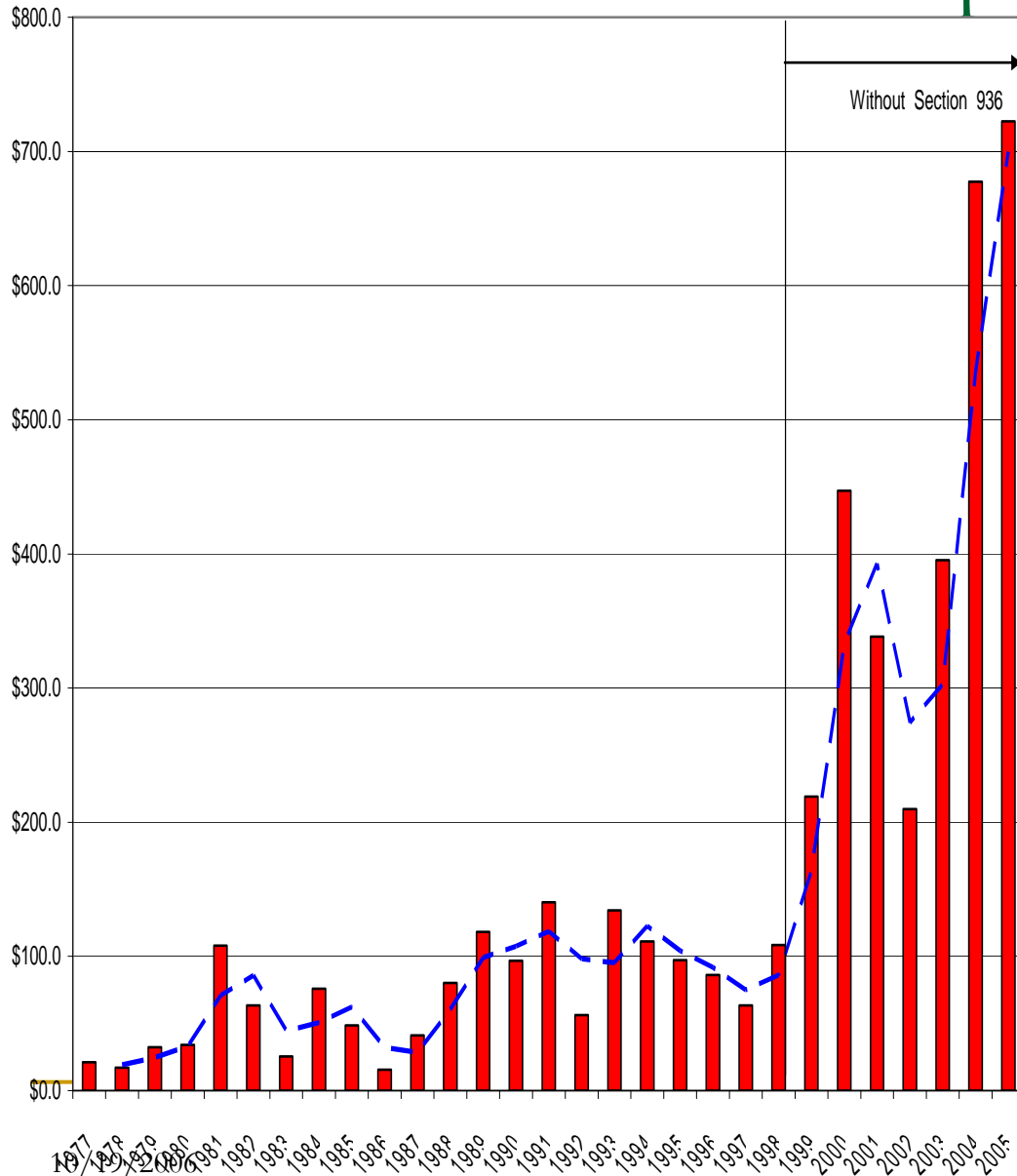
Contribution to growth of construction industry

Contribution of construction to growth by state			Growth	
1 Nevada	1.16	Idaho	10.10	
2 Florida	0.58	Oregon	9.60	
3 Arizona	0.43	Nevada	7.80	
4 Vermont	0.39	Alaska	7.20	
5 Virginia	0.35	New Mexico	6.60	
6 North Dakota	0.34	Florida	6.50	
7 Idaho	0.33	Arkansas	6.00	
8 Utah	0.3	Virginia	5.80	
9 Maryland	0.29	Utah	5.50	
10 Far West	0.29	New Hampshire	5.40	
11 California	0.28	Tennessee	5.30	
12 Delaware	0.26	Far West	5.30	
13 Montana	0.26	Delaware	5.20	
14 West Virginia	0.23	California	5.20	
15 Connecticut	0.22	Alabama	5.10	
16 Southeast	0.22	Texas	5.10	
17 New Mexico	0.19	Hawaii	5.00	
18 Washington	0.17	Southwest	4.90	
19 New Hampshire	0.16	Rocky Mountain	4.90	
20 Rocky Mountain	0.16	Maine	4.70	

Negative contribution to growth by state

	Contribution of construction industry to growth	GSP growth
Mississippi	-0.16	2.90
Wyoming	-0.14	3.70
Illinois	-0.13	2.20
Louisiana	-0.1	4.50
Rhode Island	-0.09	3.70
District of Columbia	-0.08	4.70
Kentucky	-0.07	3.00
Michigan	-0.07	-0.70
New York	-0.06	4.50
Great Lakes	-0.05	2.00
Kansas	-0.04	3.20
Oklahoma	-0.04	3.30
Texas	-0.03	5.10
Missouri	-0.01	2.60
Ohio	-0.01	3.00

Construction in pharmaceutical



- Construction investment has been grown rapidly since 1996.
- 1996 to 2005:
a compound rate of growth =>26.6%.
- 1986 to 1995
a compound rate of growth =>22.6%.

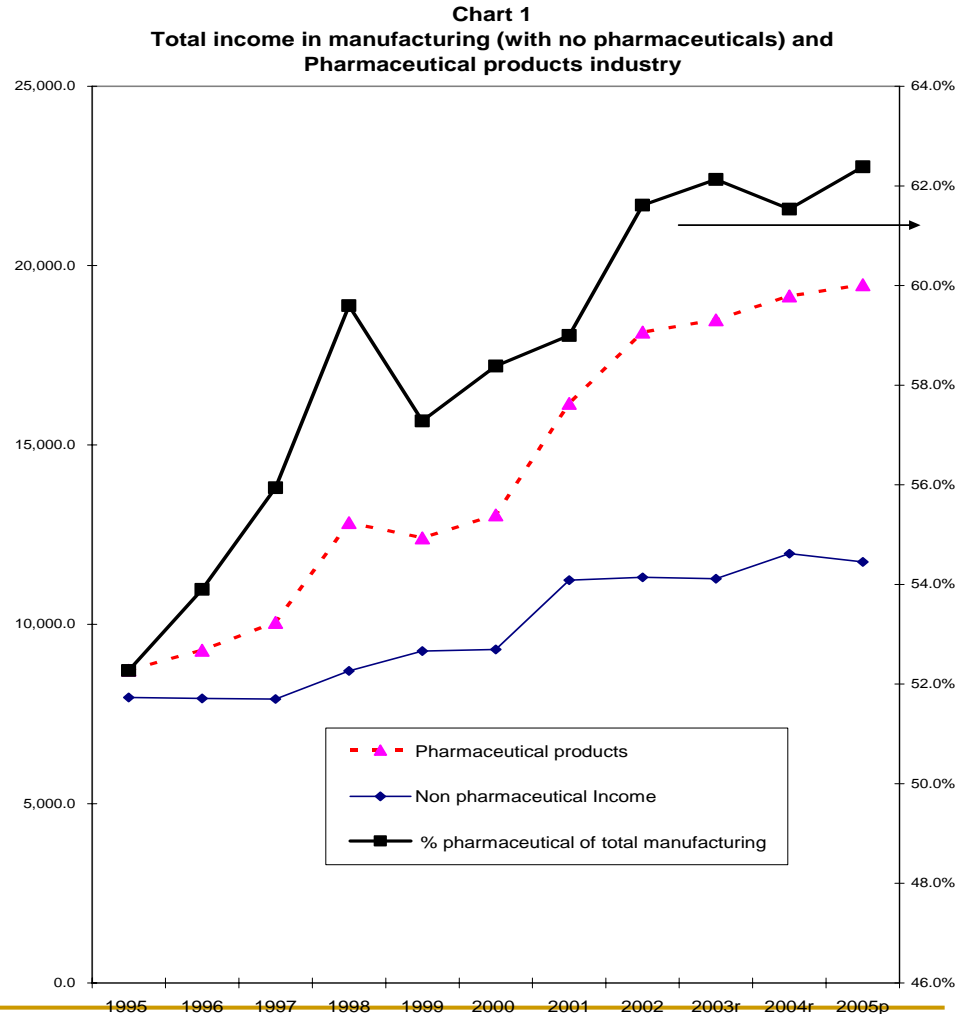
Construction private investment: 1994 to 2005

Private investment (millions \$)	37,132.2
Housing	19,095.1
Private investment (no housing)	18,037.1
Pharmaceutical	3,472.8
% Pharmaceutical as % of Non-housing private investment	19.3%

- Private investment between 1994 to 2005 amounted \$37 billions; housing \$19 billions.
- Private non-housing investment was \$18 billions;
- and, pharmaceutical was \$3.5 billions;
- 19% of total non-housing investment

Gross Income :Payments to resources: labor and capital (propiertors')

- In FY 1995:
 - % Pharmaceutical income represented of Manufacturing: 52.3%.
- In FY 2005:
 - % Pharmaceutical income to Manufacturing: 62.4%.



Final Words

- Puerto Rico needs to restore economic growth (over 3% real annually) by fostering:
 - Long run=> Reshape economic development model:
 - Five priority areas:
 - Energy: search for cheaper sources; alternative energy
 - Health: foster the clusters including medicine, biotech, new products and technologies,, etc
 - Education: emphasizing high techh, new wave genetics,
 - Securty: waste and disposable, highways, etc
 - Digitalization and Information Epoch: catch the tech waves;
 - Short run = > reactivate
 - Construction industry
 - Revise burocratic process of permitts
 - Tourism