



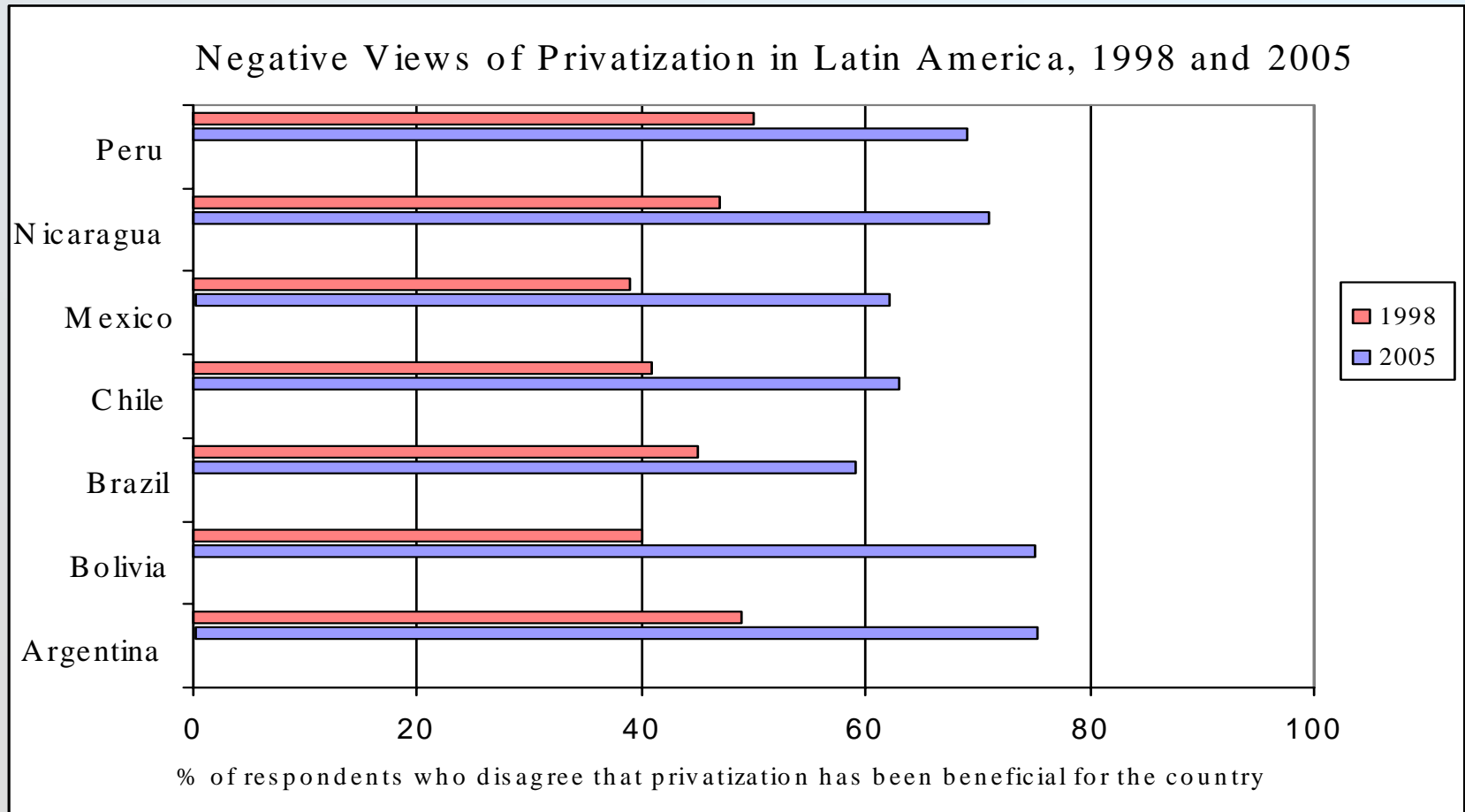
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# **Privatization and development: Some Lessons from Experience**

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Sr. Vice President and Chief Economist  
The World Bank

*ABCDE, Bled, Slovenia  
May 17-18, 2007*

# Widespread dissatisfaction with privatization in Latin America





# Outline

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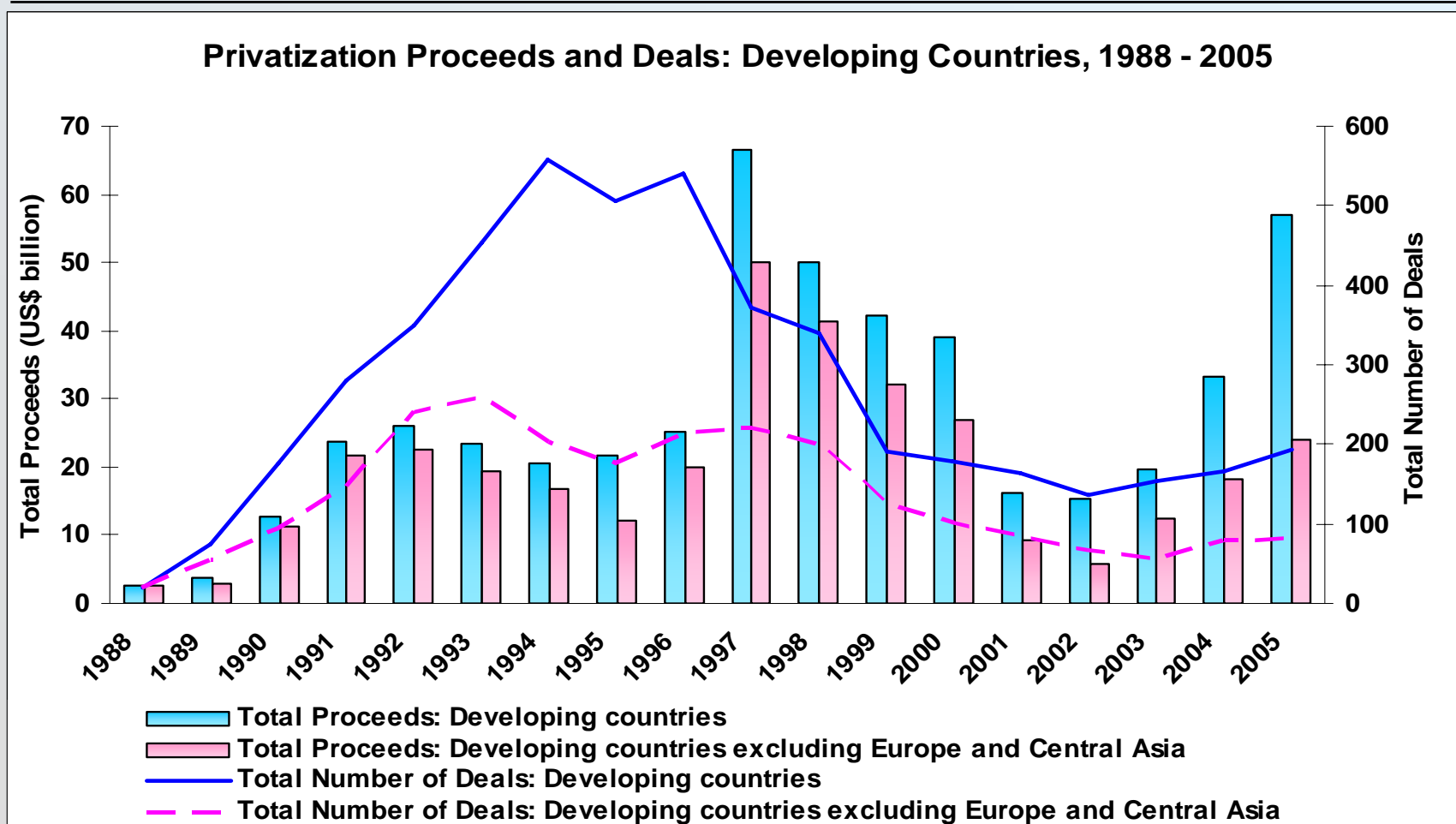
1. Trends in Privatization in Developing Countries
2. The Simple Economics of Privatization
3. Empirical Evidence
4. Concluding Remarks



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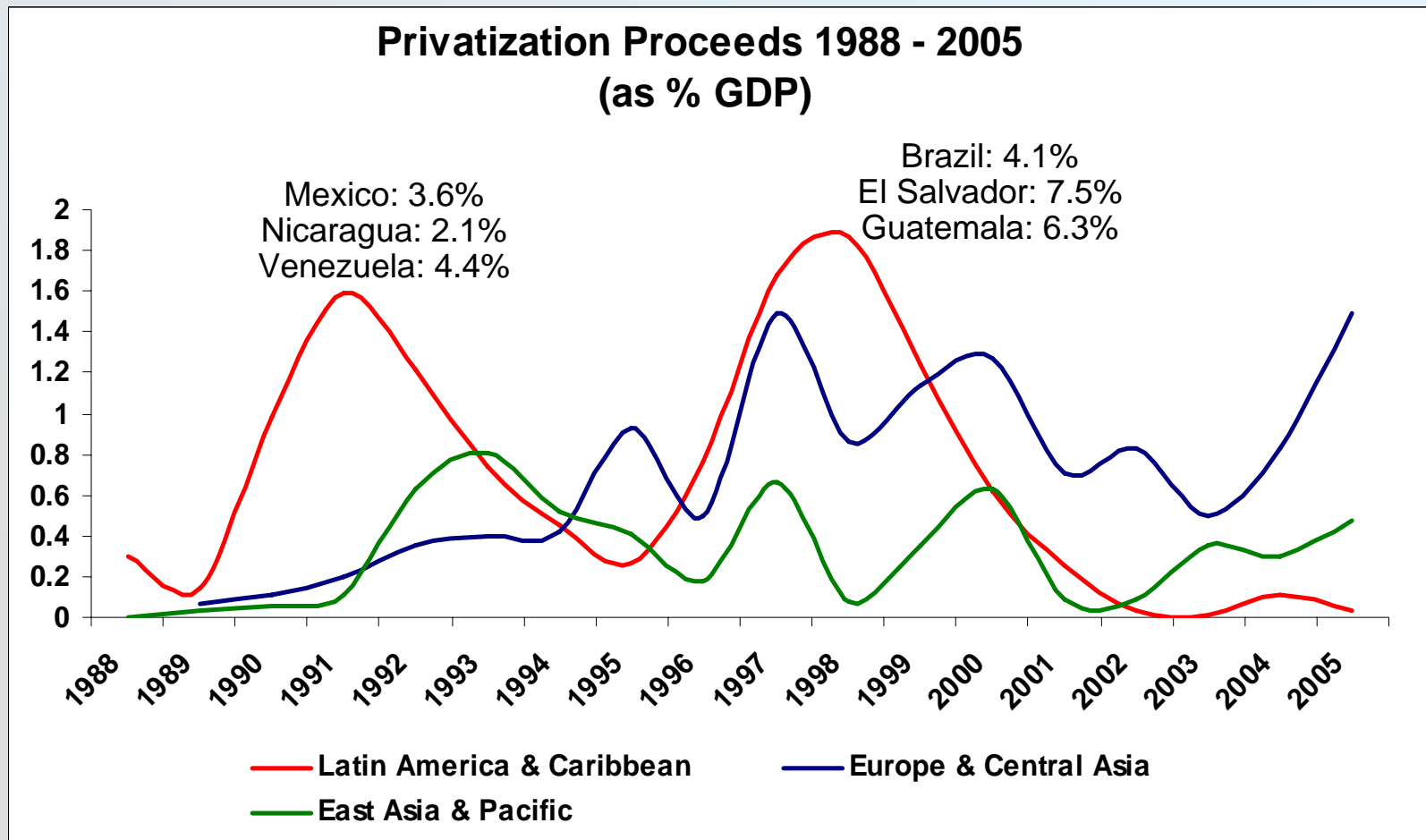
# 1. Trends in Privatization in Developing and Transition Countries

# Privatization advanced rapidly in the 1990s...



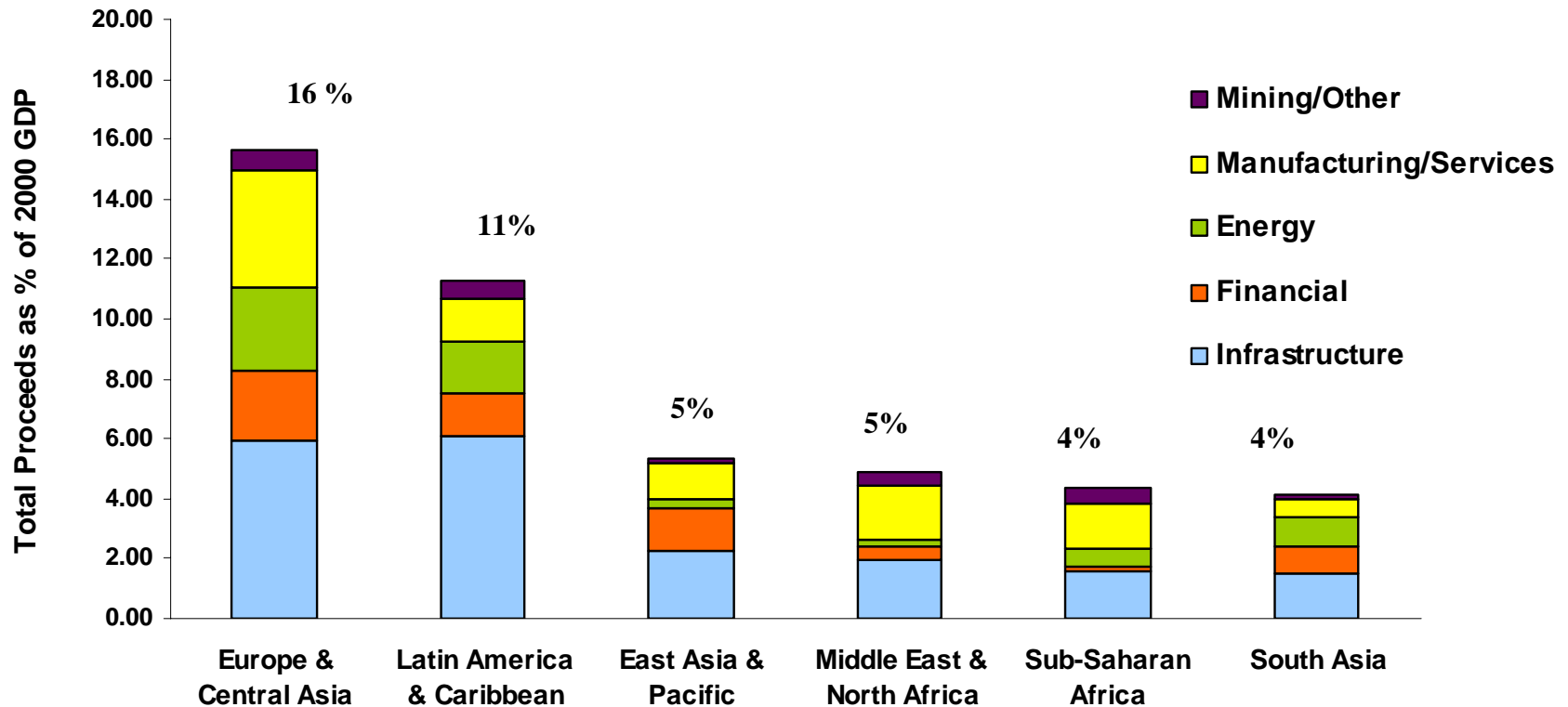
Source: World Bank Privatization Database and WDI

... with Latin America leading the privatization wave and Europe and Central Asia taking over after 2000



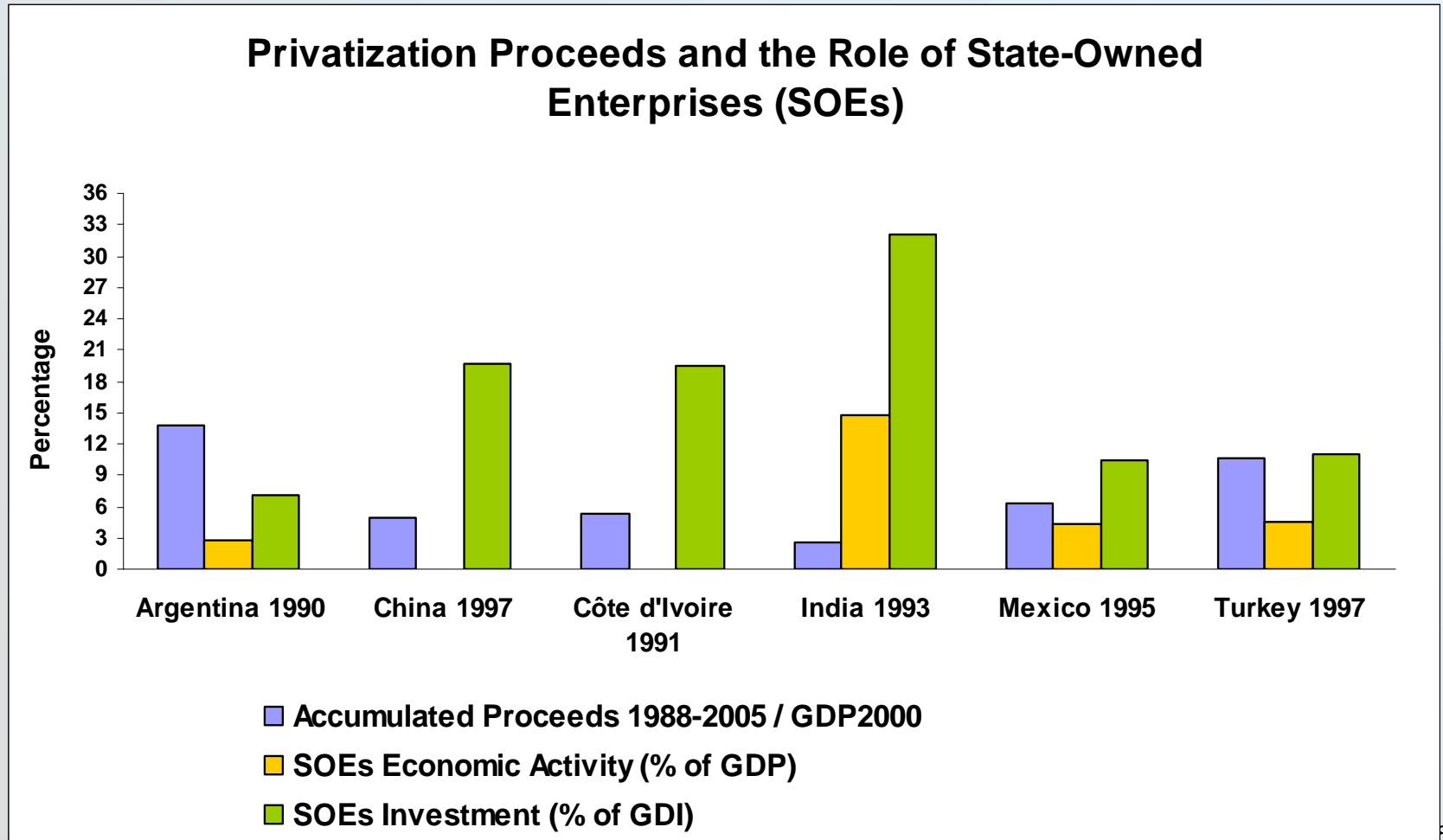
# Cumulated Importance and Sectoral Composition of Privatization differ widely across regions

## Accumulated Proceeds by Sectors, 1988-2005



Source: World Bank Privatization Database and WDI

# Extent of privatization must be measured against the size of the public sector



Source: WDI 2000



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## 2. The Simple Economics of Privatization

# Efficiency and Equity Effects of Privatization: a simple stylized example

## Private Monopoly (Universal service, cap price, no subsidy)

### Subsidized SOE

<b>Price €</b>	<b>80</b>
<b>Quantity</b>	<b>85</b>
<b>Rationing</b>	<b>7</b>
<b>Employment</b>	<b>1062.5</b>
<b>Wage €</b>	<b>10</b>
<b>Public Subsidy (incl. Fixed Costs)</b>	<b>4825 1000)</b>
<b>Consumer Cost</b>	<b>6800</b>

<b>Price € (set)</b>	<b>120</b>
<b>Quantity</b>	<b>88</b>
<b>Rationing</b>	<b>0</b>
<b>Employment</b>	<b>880</b>
<b>Wage €</b>	<b>10</b>
<b>Public Subsidy</b>	<b>0</b>
<b>Consumer Cost</b>	<b>10560</b>
<b>(SOE quantity)</b>	<b>10200</b>



### Efficiency Gains (SOE as reference)

<b>Production</b>	<b>3</b>
<b>Employment</b>	<b>-182.5</b>

### Distributional effects (in €, SOE as reference)

<b>Taxpayers</b>	<b>4825</b>
<b>Consumers</b>	<b>-3400</b>
<b>("Access")</b>	<b>+240</b>
<b>Employees</b>	<b>-1825</b>
<b>Business owners</b>	<b>760</b>
<b>Total</b>	<b>360</b>



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### 3. Empirical Evidence



# Conceptual and Methodological Issues

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Two criteria can be used to evaluate privatization:

- ❑ Efficiency
- ❑ Distributional Impact

How to combine them?

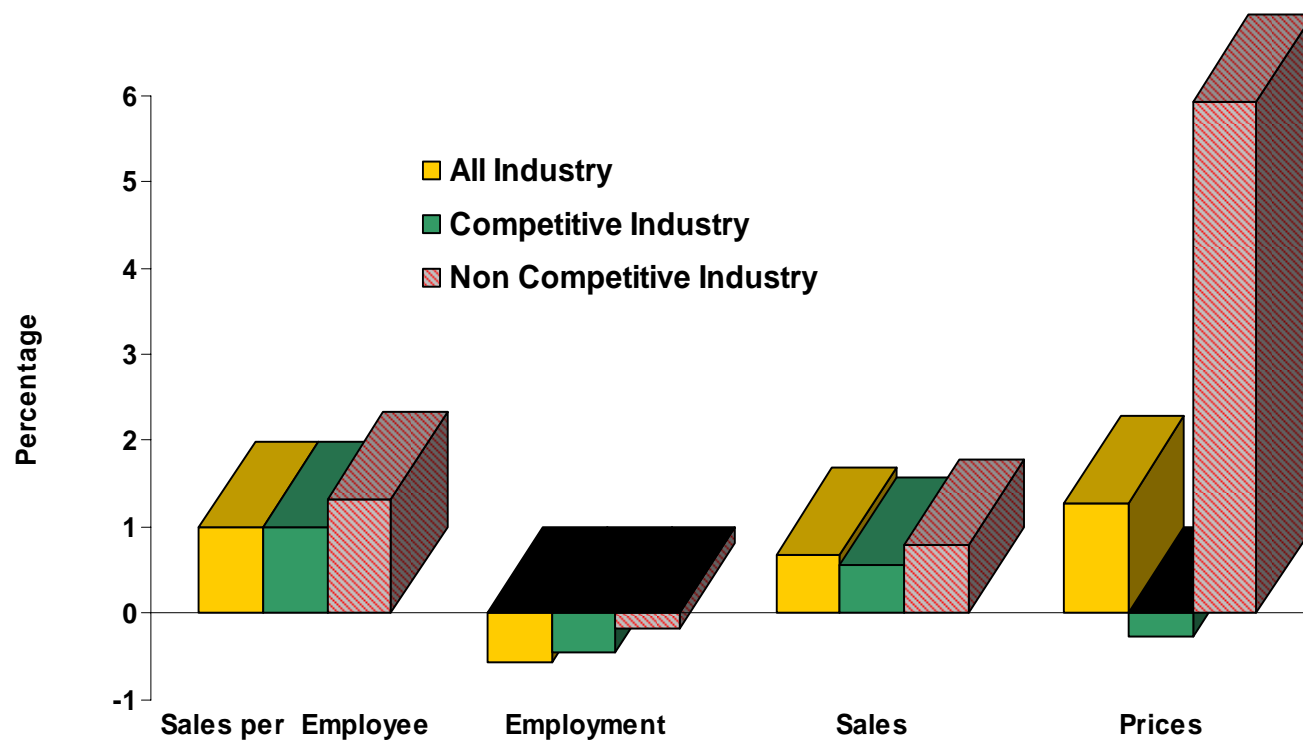
Empirical identification of the impact of privatization :

- ❑ Before and after
- ❑ Using a counterfactual (or a benchmark)

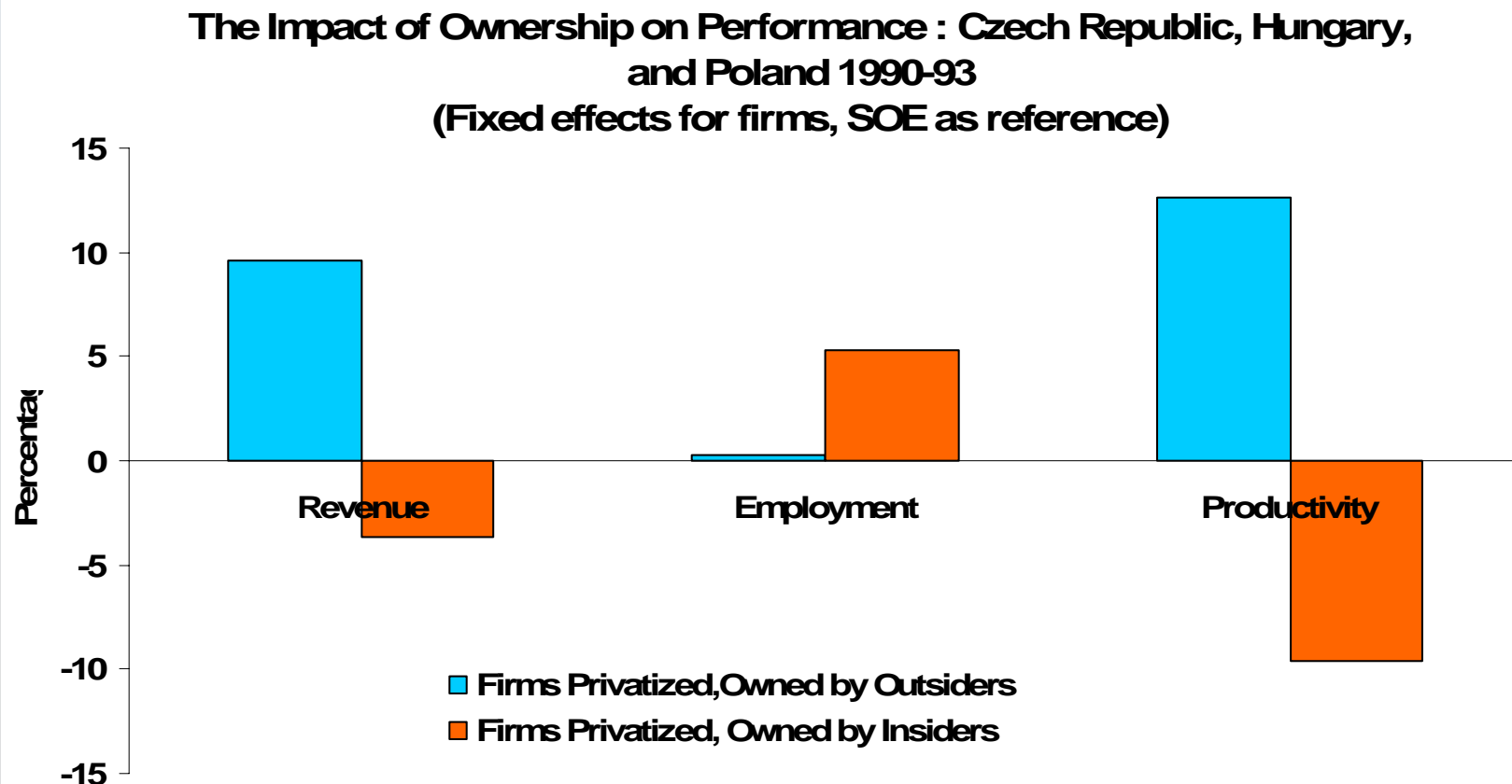
# Efficiency Outcomes

## 1983-91 Mexican Privatization of Non-Financial Firms

Efficiency Performance in Competitive and Non Competitive Industries  
(change in the median before and after privatization)



# Efficiency Outcomes: Relationship between privatization and type of ownership in Transition Economies

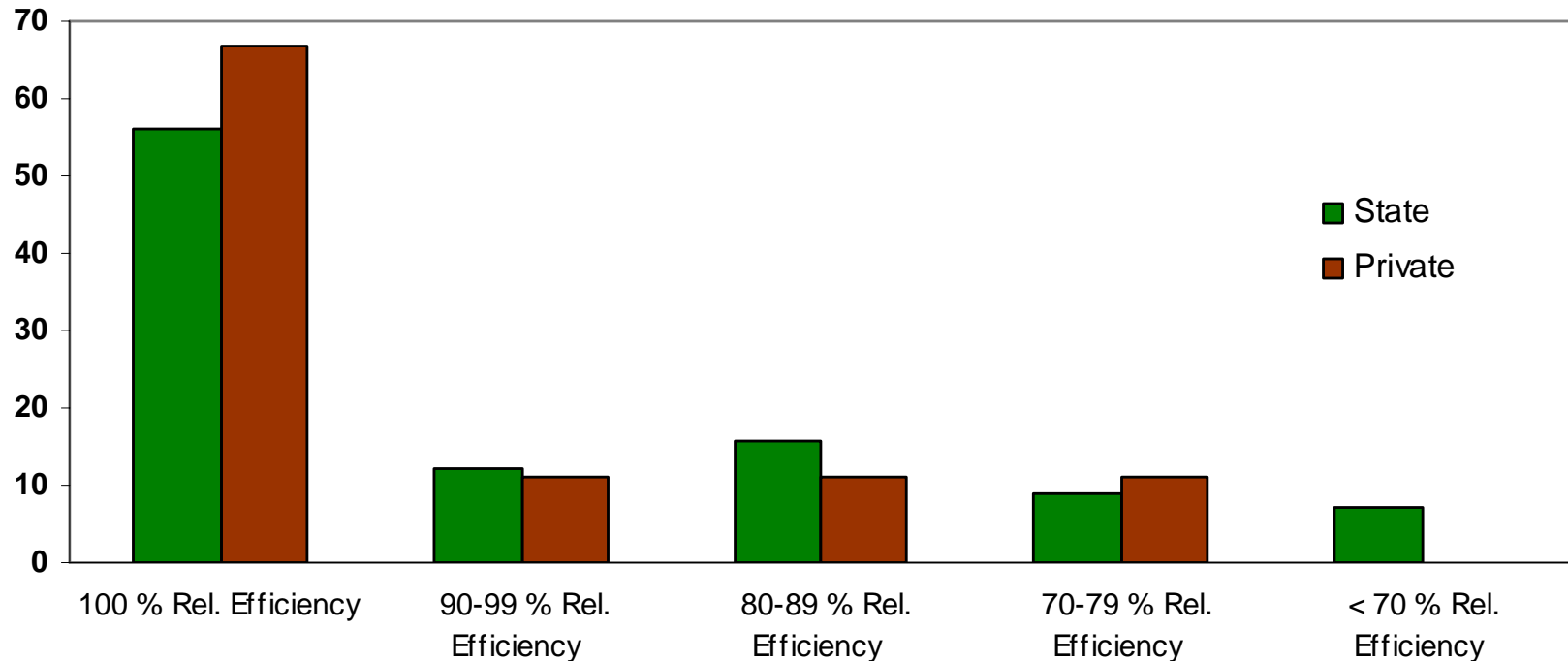


Note: The fixed effects coefficients are estimated controlling by year and country. The coefficients for privatization owned by outsiders are statistically significant at 1 percent for revenue and productivity.

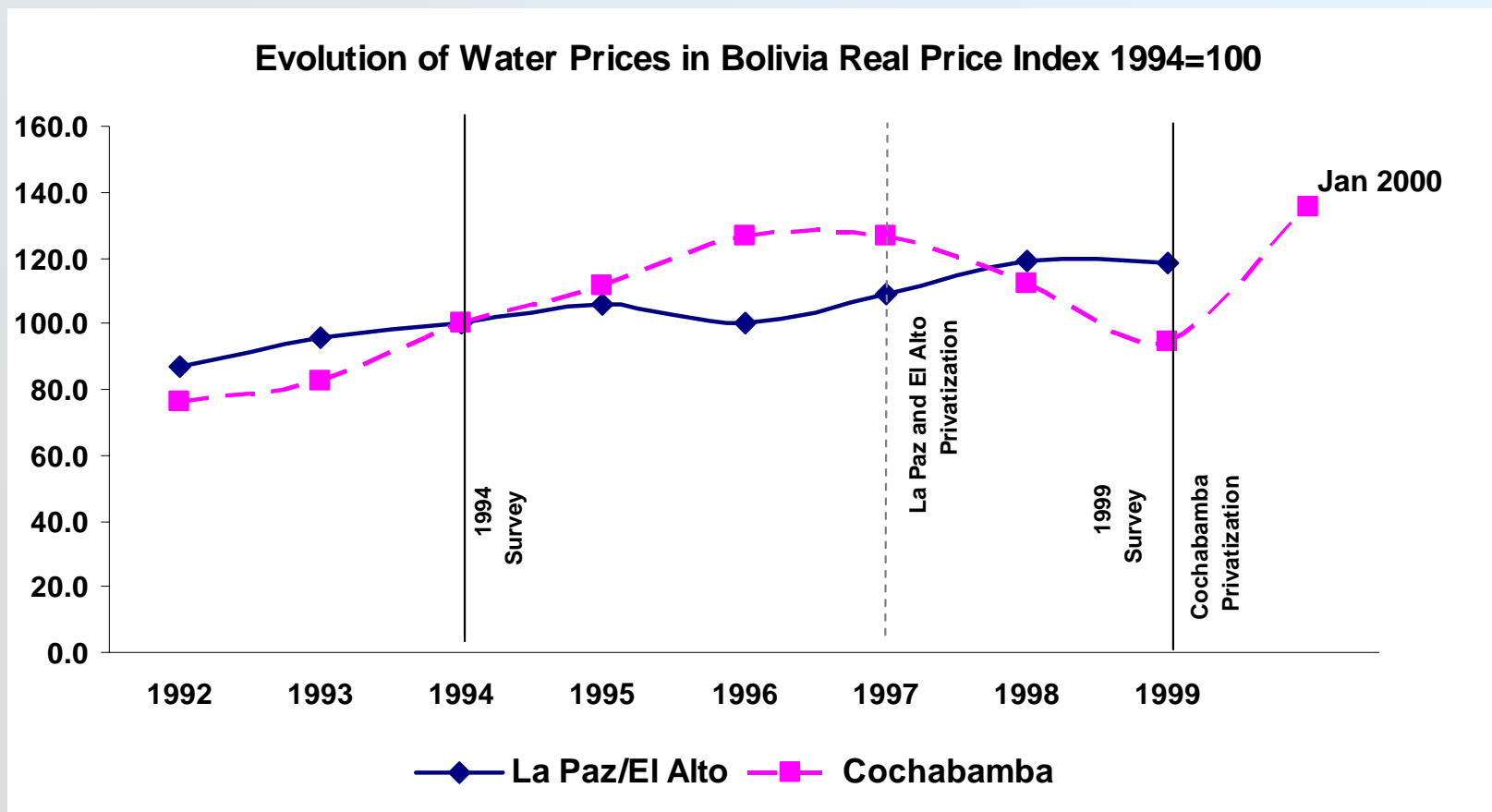
Source: Frydman, Gray, Hessel, and Rapaczynski (1999)

# Efficiency Outcomes: Water Utilities in Africa

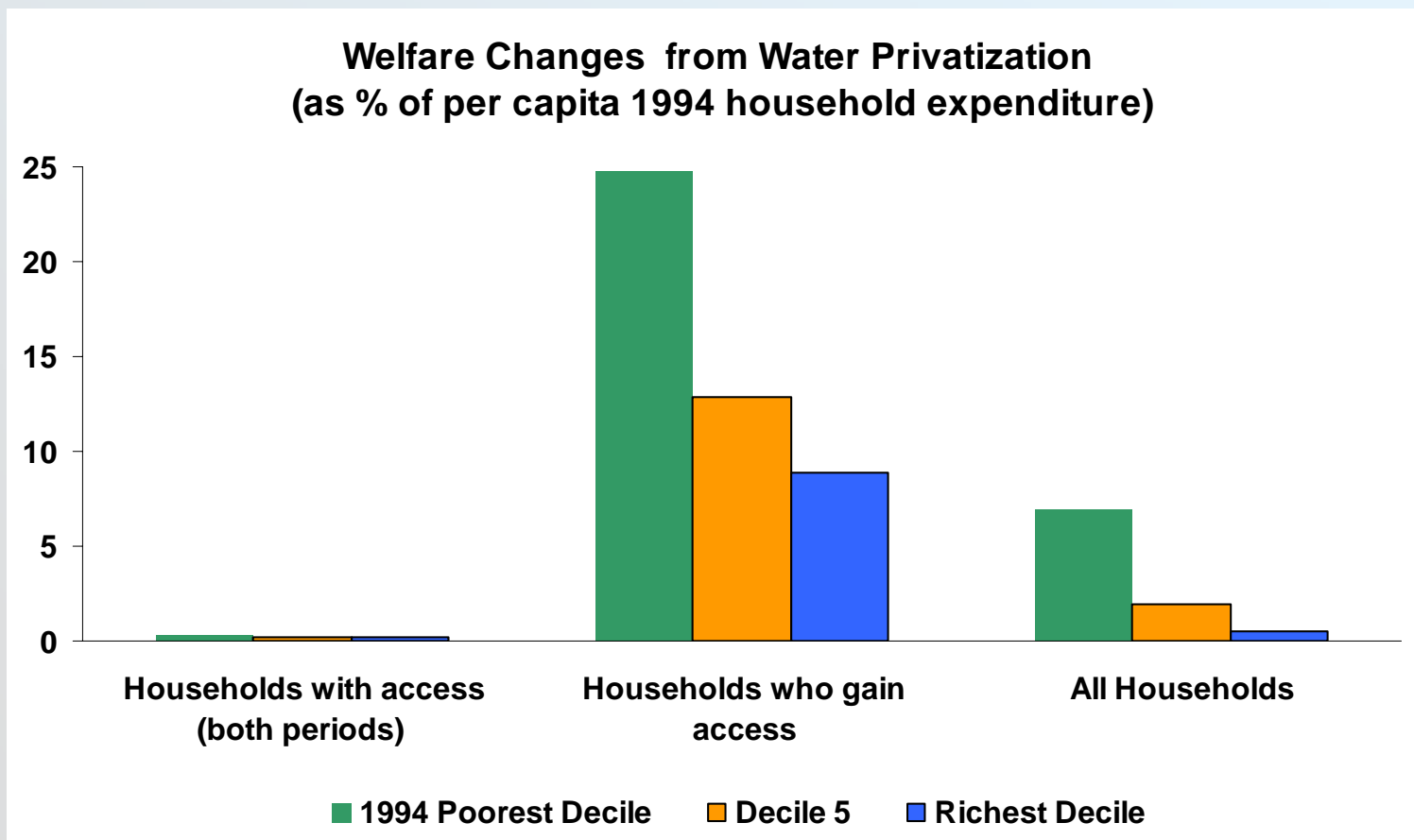
Percentage of State and Private Water Utilities in Africa ranked by Relative Efficiency using Data Envelopment Analysis, 2000



# Distributional Impact: 1997 Privatization of Water Distribution in La Paz and El Alto (Bolivia)

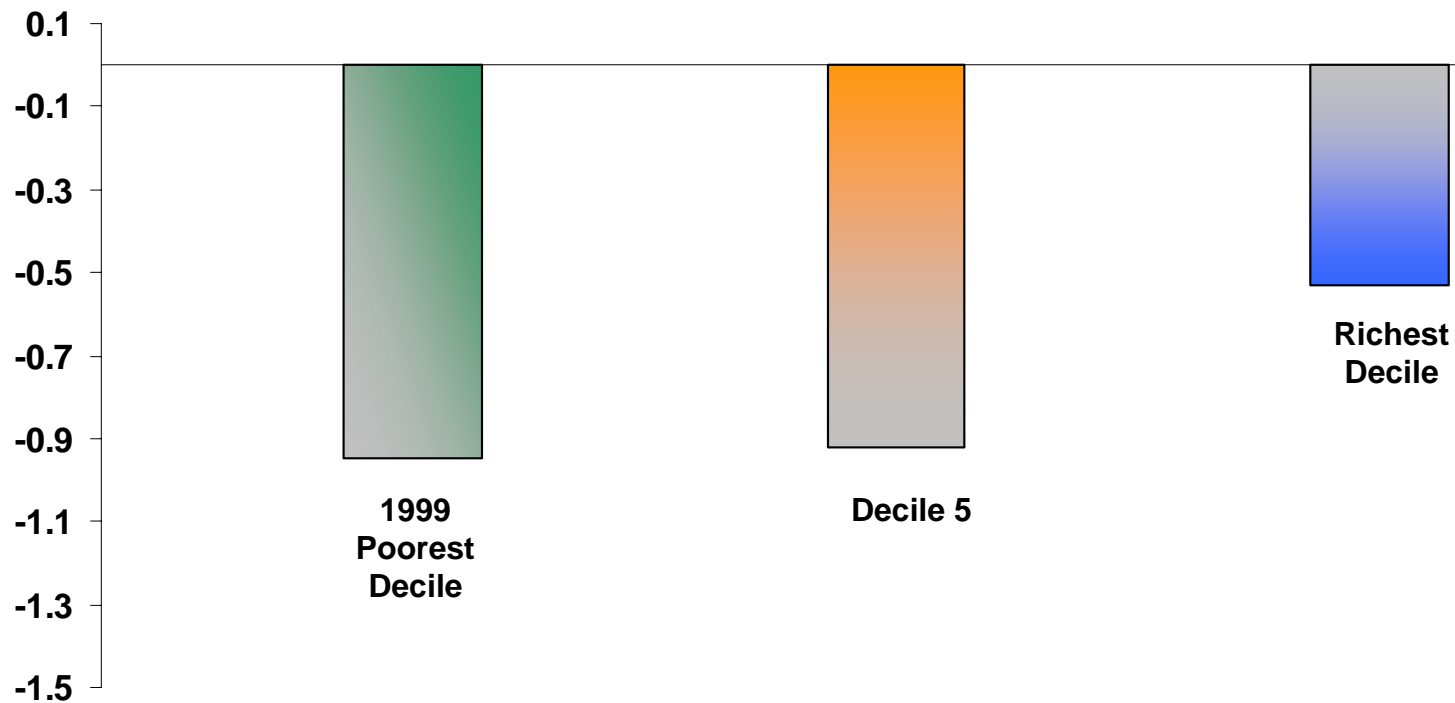


# Welfare Changes (by decile) due to the 1997 Privatization

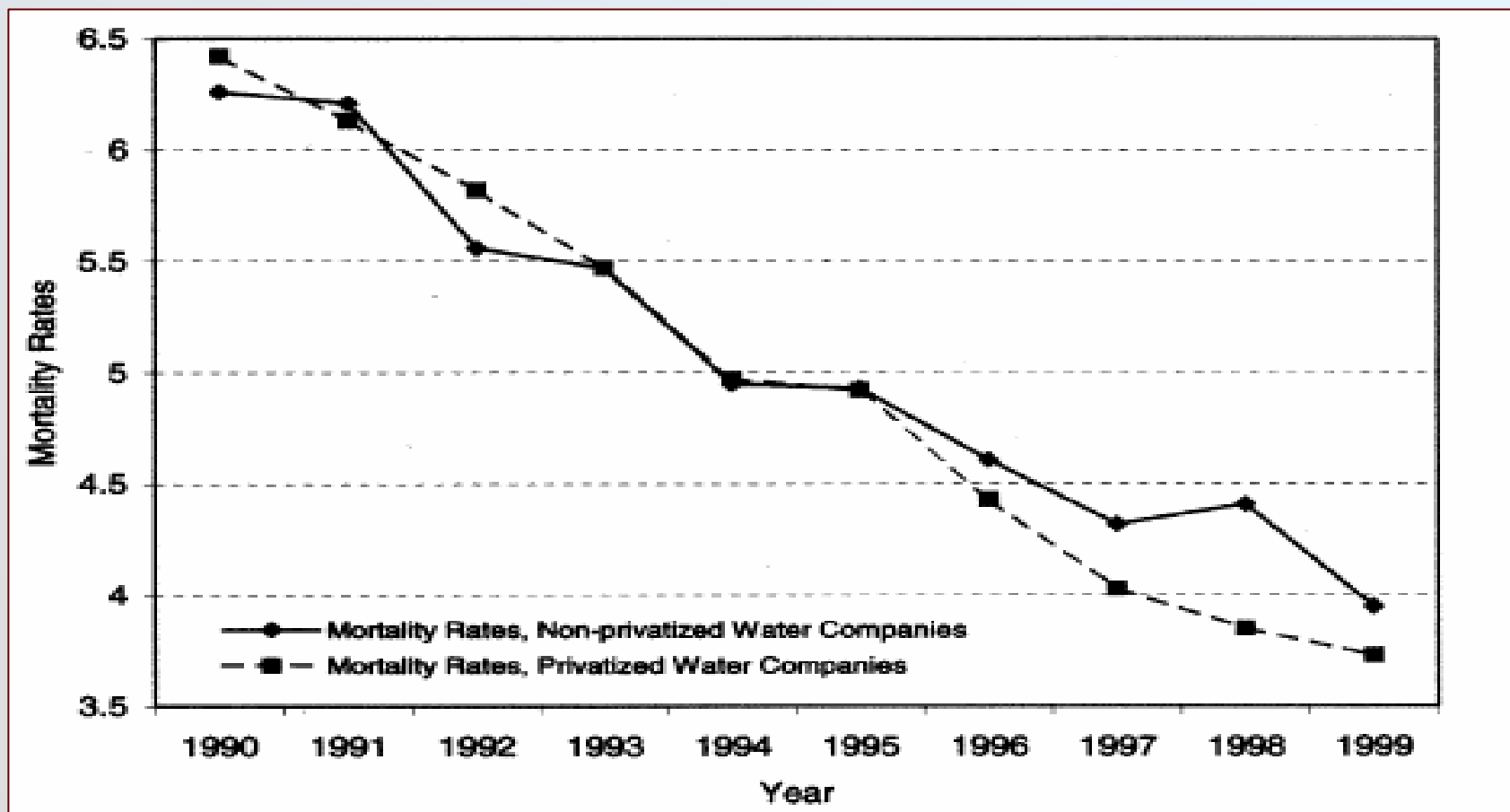


# Distributional Impact: The “Water War” Cochabamba (Bolivia), 1999

**Welfare Changes from Water Privatization : Cochabamba  
(as % of per capita 1999 household expenditure)**



# Distributional Impact: Argentina Child Mortality Rates



Source: Galiani, Gertler, and Schargrodsy (2005)

## 4. Concluding Remarks

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- Paucity of full evaluations in developing countries
- Efficiency gain of privatization seems warranted: productivity and output gain with (not always) employment loss.
- Uncertainty on distributional effects; opacity and the negative perception of privatizations.
- Little doubt on overall gain for 'competitive' privatizations.
- More to be done on ex-ante/ex-post impact evaluation, regulation, and losers' compensation in other cases



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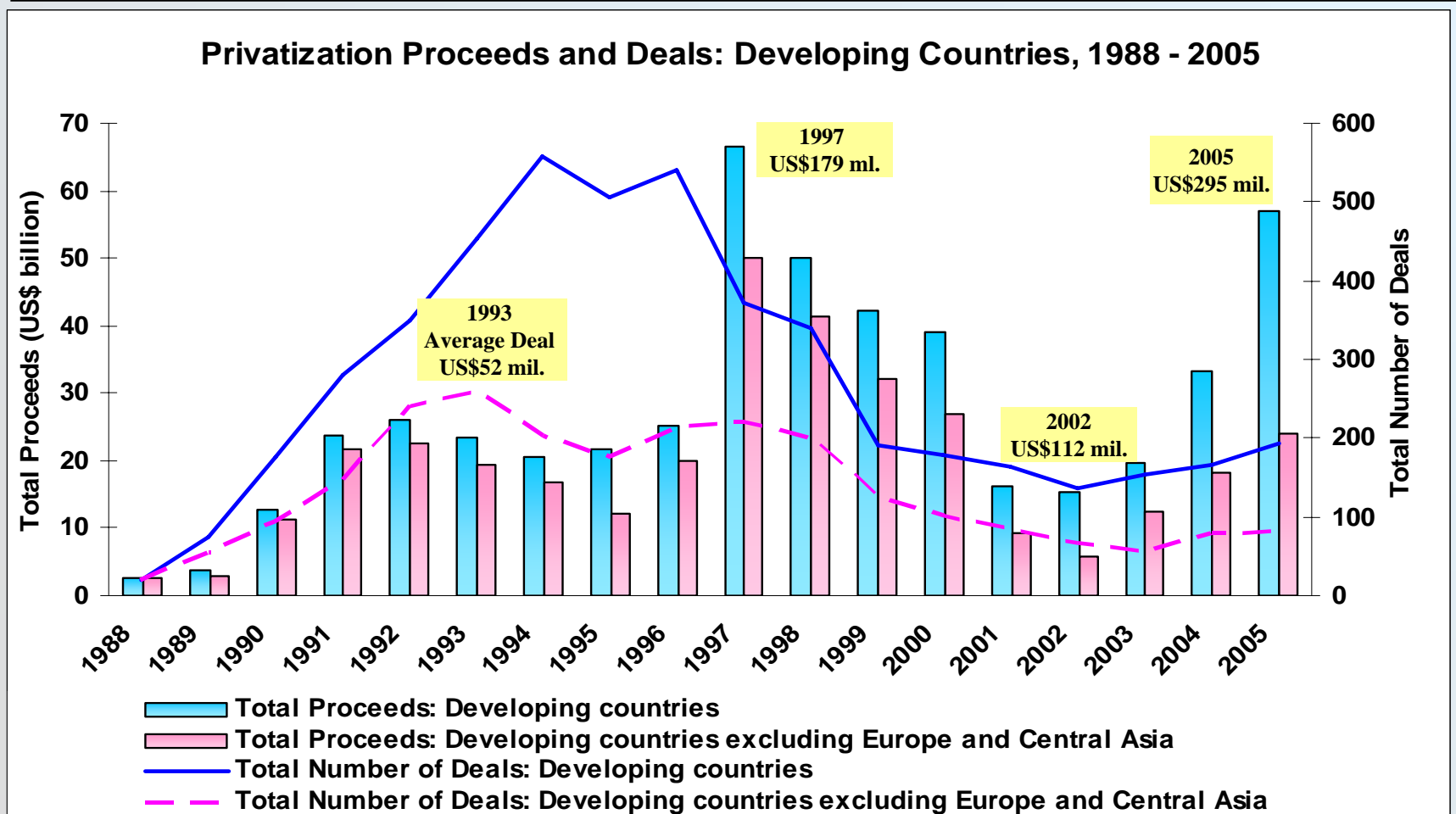
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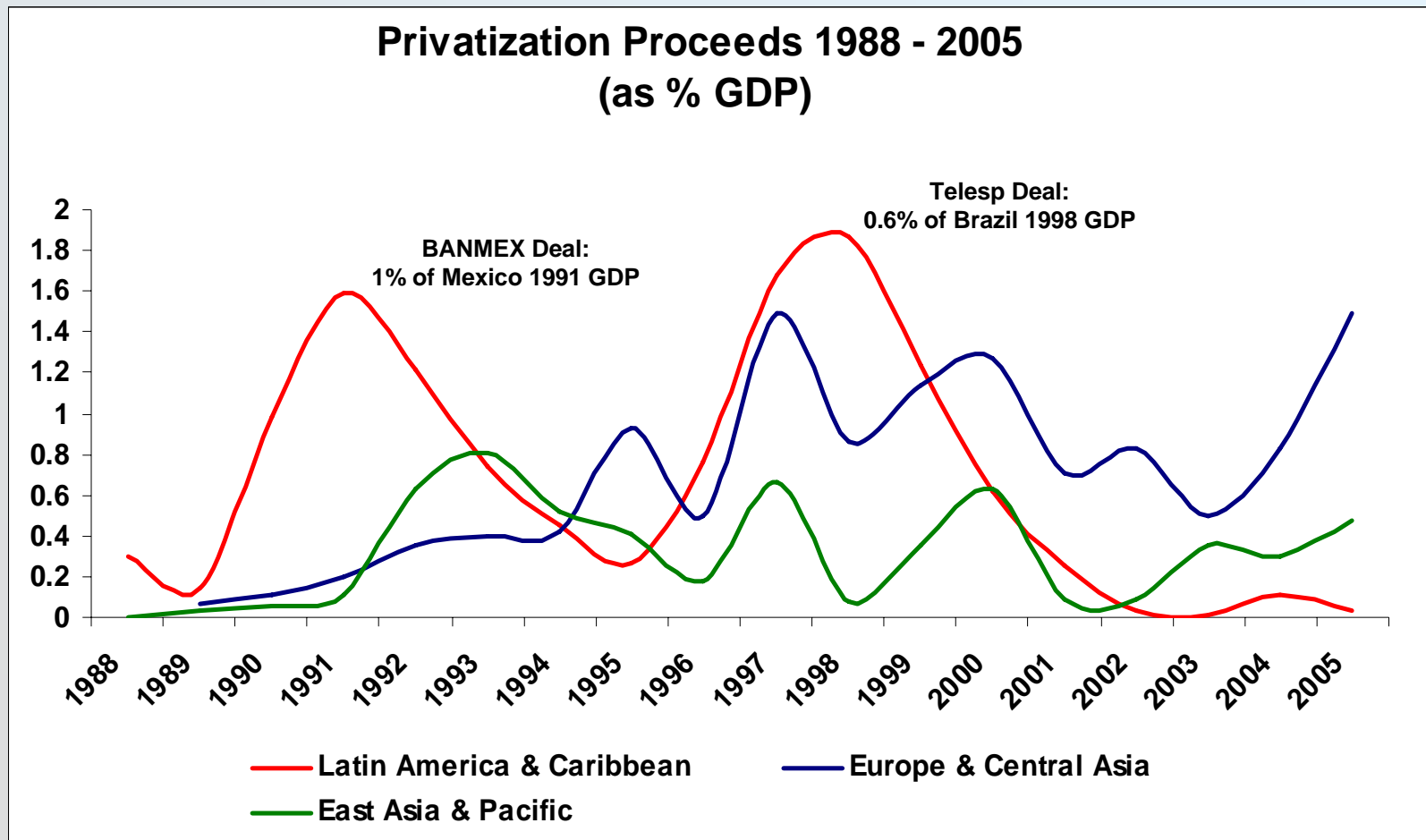
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# 1. Motivation

# Privatization advanced rapidly in the 1990s...



with Latin America leading the privatization wave  
and Europe and Central Asia taking over after 2000



# Efficiency and Equity Effects of Privatization: a simple stylized example

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## Subsidized State-Owned Enterprise (SOE)

<b>Price € (set)</b>	<b>80</b>
<b>Wage €</b>	<b>10</b>
<b>Quantity</b>	<b>85</b>
<b>Q demand</b>	<b>92</b>
<b>E (employees)</b>	<b>1062.5</b>
<b>Subsidy (incl. Fixed Costs)</b>	<b>4825</b>
<b>Consumer Cost</b>	<b>6800</b>

# Summary Results:

## SOE vis-à-vis Private and Optimally Regulated Monopolies

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### Private Monopoly (cap price, no subsidy)

#### Efficiency Gains (SOE as reference)

q	3
E	-182.5

### Optimally Regulated Monopoly

#### Efficiency Gains (SOE as reference)

q	5
E	-162.5

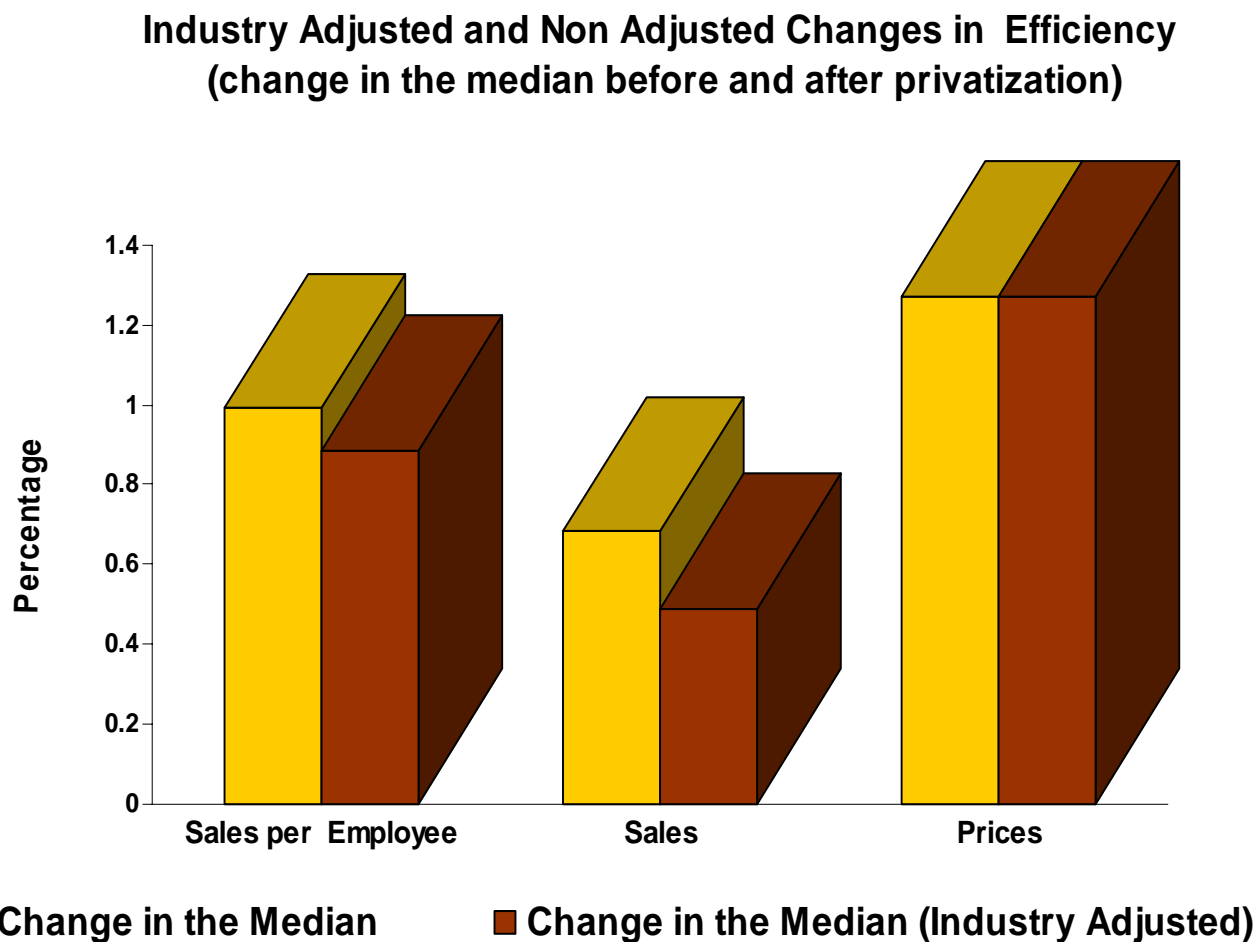
#### Change of Income (in €, SOE as reference)

Taxpayers	4825
Consumers	-3400
Employees	-1825
Business	760
Total	360

#### Distribution of Income (in €, SOE as reference)

Taxpayers	3825
Consumers	-1700
Employees	-1625
Business	0
Total	500

# 1983-91 Mexican Privatization of Non-Financial Firms Defining the counterfactual



Source: La Porta and López de Silanes (1999)

# Efficiency and Equity Effects of Privatization: Optimal Regulation or Competitive Unbundling

Subsidized SOE		Optimally Regulated Monopoly (or competitive unbundling)		
Price €	80	Price € (set)	100	→
Quantity	85	Quantity	90	
Rationing	7	Rationing	0	
Employment	1062.5	Employment	900	
Wage €	10	Wage €	10	→
Public Subsidy (incl. Fixed Costs)	4825 1000)	Public Subsidy (Fixed cost)	1000	
Consumer Cost	6800	Consumer Cost	9000	
		(SOE quantity)	8500	

Efficiency Gains (SOE as reference)	
Production	5
Employment	-162.5

Distributional effects (in €, SOE as reference)	
Taxpayers	3825
Consumers ("Access")	-1700 +400)
Employees	-1625
Business owners	0
Total	500

# Efficiency and Equity Effects of Privatization: a simple stylized example

**Private Monopoly**  
(Universal service, cap price,  
no subsidy)

**Subsidized SOE**

<b>Price €</b>	<b>80</b>
<b>Quantity</b>	<b>85</b>
<b>Rationing</b>	<b>7</b>
<b>Employment</b>	<b>1062.5</b>
<b>Wage €</b>	<b>10</b>
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<b>Price €</b>	<b>120</b>
<b>Quantity</b>	<b>88</b>
<b>Rationing</b>	<b>0</b>
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<b>Public Subsidy</b>	<b>0</b>
<b>Consumer Cost</b>	<b>10560</b>
<b>(SOE quantity)</b>	<b>10200</b>



**Efficiency Gains**  
(SOE as reference)

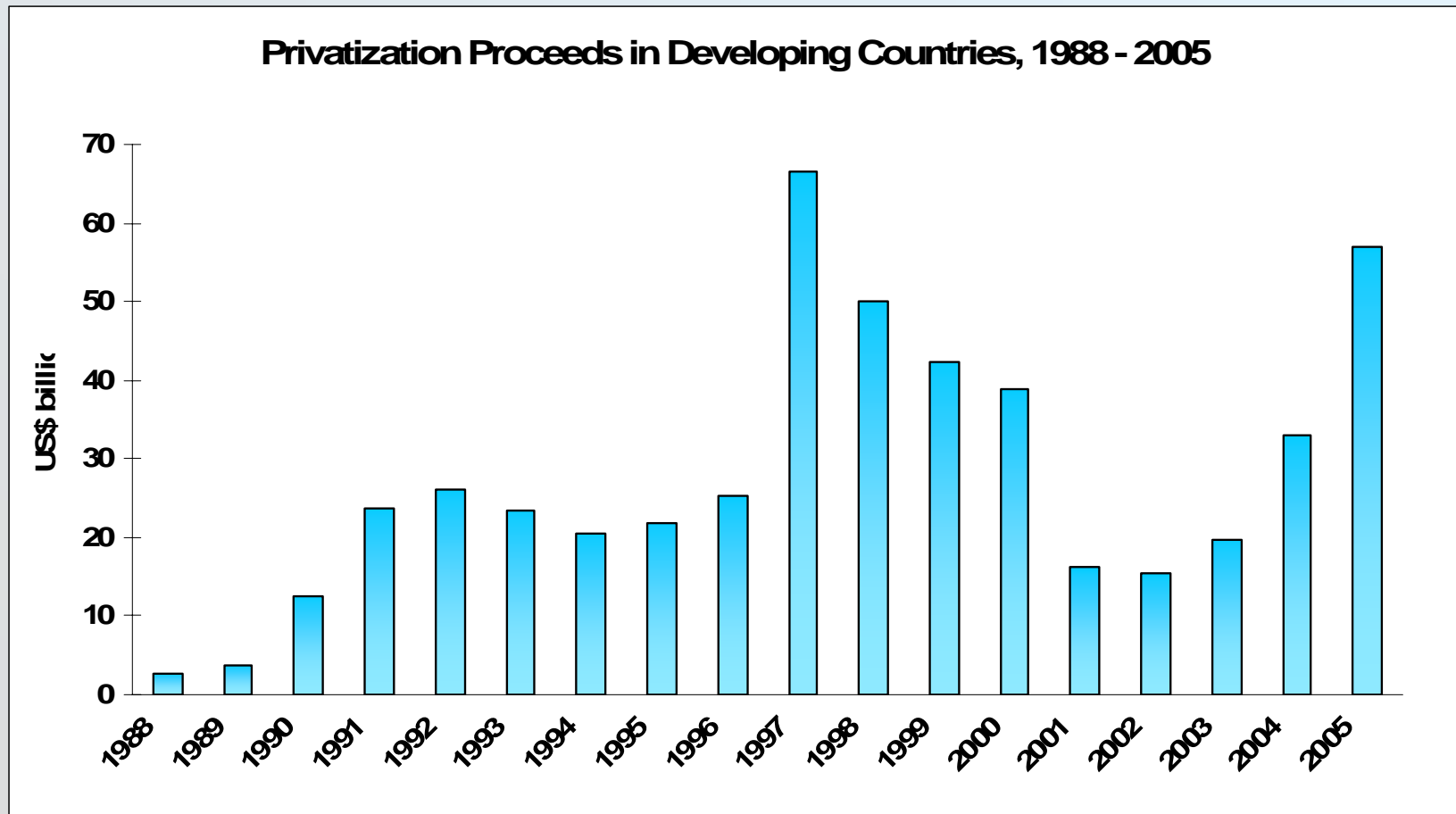
<b>Production</b>	<b>3</b>
<b>Employment</b>	<b>-182.5</b>



**Distributional effects**  
(in €, SOE as reference)

<b>Taxpayers</b>	<b>4825</b>
<b>Consumers ("Access")</b>	<b>-3400 (+240)</b>
<b>Employees</b>	<b>-1825</b>
<b>Business owners</b>	<b>760</b>
<b>Total</b>	<b>360</b>

# The Importance of Privatization in Developing Countries ...



Source: World Bank Privatization Database

# SOE vis-à-vis Optimally Regulated Monopoly (or "unbundling" with full competition)

## Subsidized SOE

<b>Price € (set)</b>	<b>80</b>
<b>Wage €</b>	<b>10</b>
<b>Quantity</b>	<b>85</b>
<b>Q demand</b>	<b>92</b>
<b>E (employees)</b>	<b>1062.5</b>
<b>Subsidy (incl. Fixed Costs)</b>	<b>4825</b>
<b>Consumer Cost</b>	<b>6800</b>

## Optimally Regulated Monopoly or competitive privatization

<b>Price €</b>	<b>100</b>
<b>Wage €</b>	<b>10</b>
<b>Quantity</b>	<b>90</b>
<b>Q demand</b>	<b>90</b>
<b>E (employees)</b>	<b>900</b>
<b>Subsidy (Fixed Costs)</b>	<b>1000</b>
<b>Consumer Cost</b>	<b>9000</b>
<b>SOE quantity</b>	<b>8500</b>

## Efficiency Gains (SOE as reference)

Q	5
E	-162.5

## Change of Income (in € SOE as reference)

Taxpayers	3825
Consumers	-1700
Employees	-1625
Business	0
<b>Total</b>	<b>500</b>