

The Shape of a Prescription Drug Peace Treaty

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Acknowledgement

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conducted with my colleague,
Deborah Socolar

Overview

I. Problems

II. Causes

III. Today's solutions

IV. Possible futures

V. A peace treaty

-- short-run and long-run provisions

VI. Durably affordable medications for all

I. Problems

A. Spending

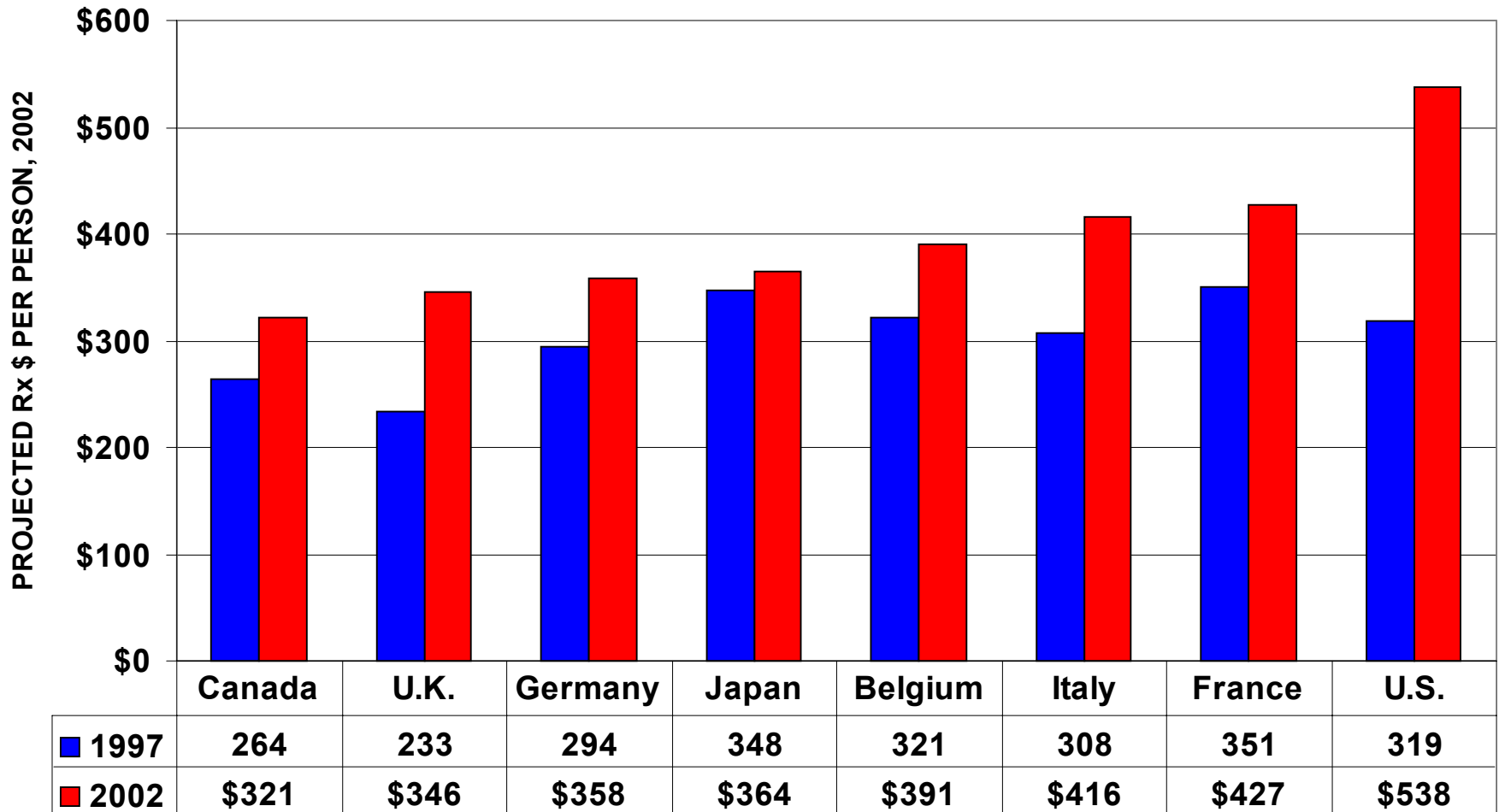
B. Prices

C. Waste

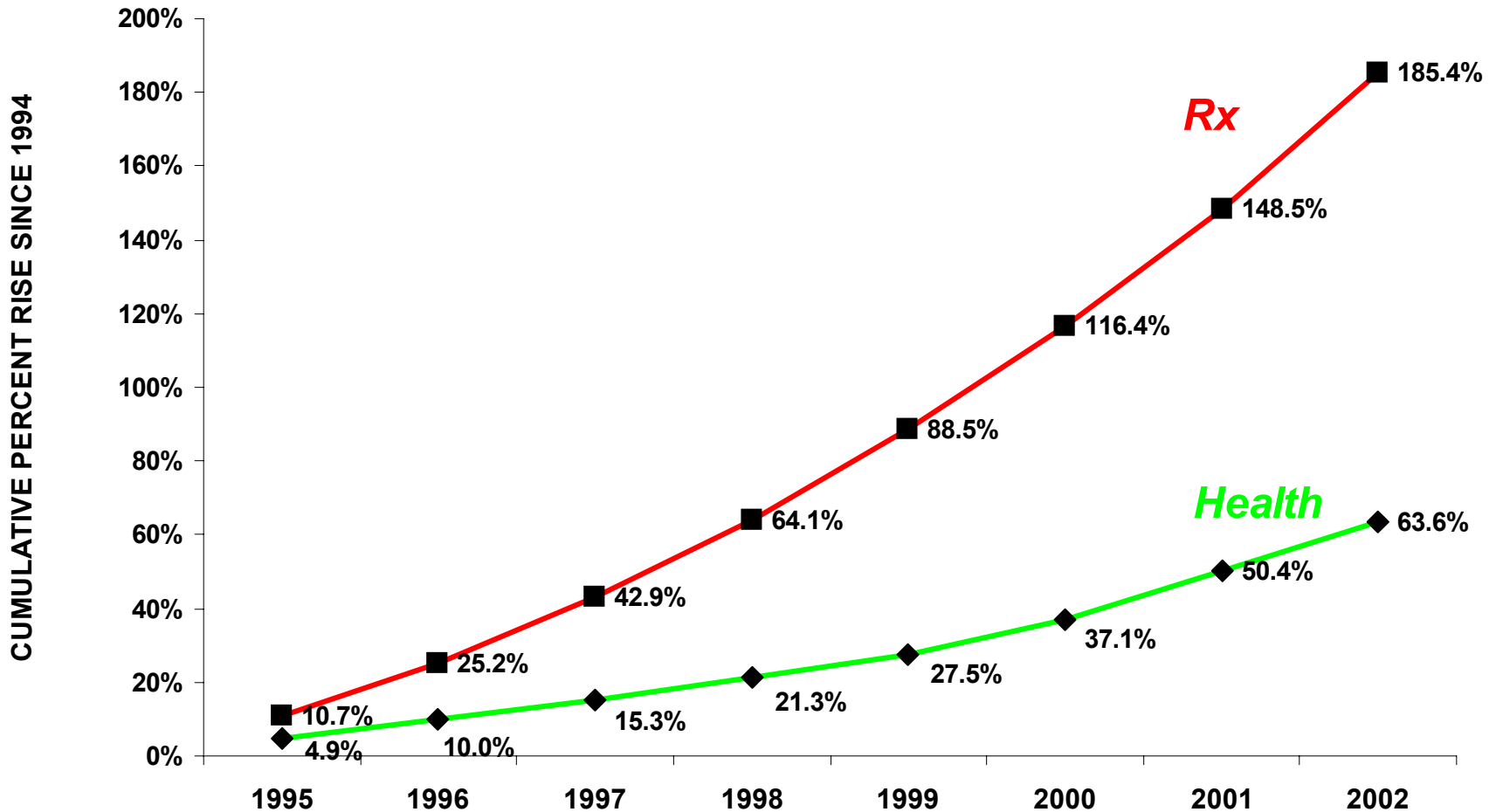
D. Suffering

E. Tragedy

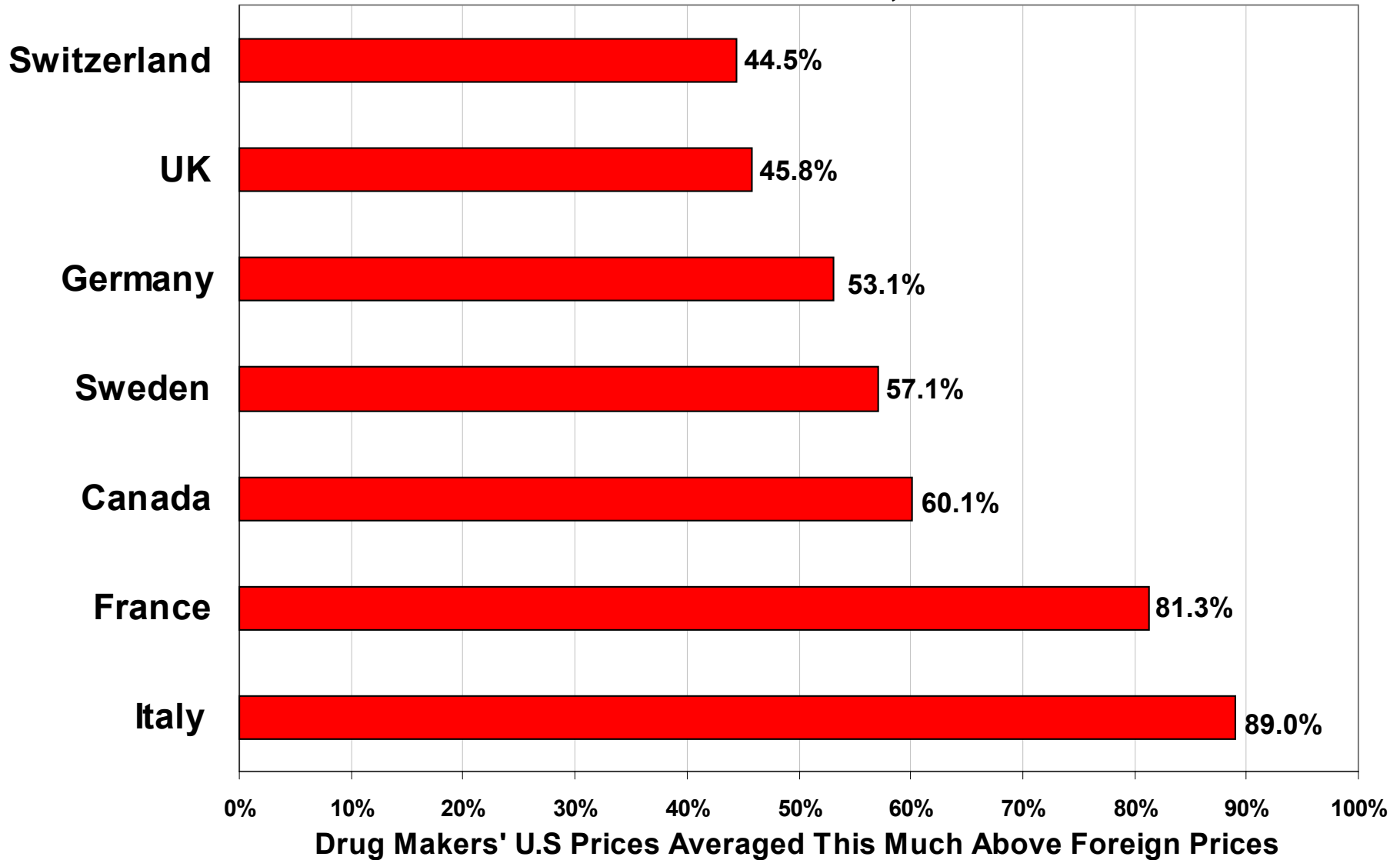
PRESCRIPTION DRUG SPENDING PER PERSON, 1997 + 2002 (projected)



CUMULATIVE RISE IN RETAIL Rx + TOTAL HEALTH SPENDING, 1994 - 2002



U.S. EXCESS ABOVE 7 NATIONS' FACTORY DRUG PRICES, 2000



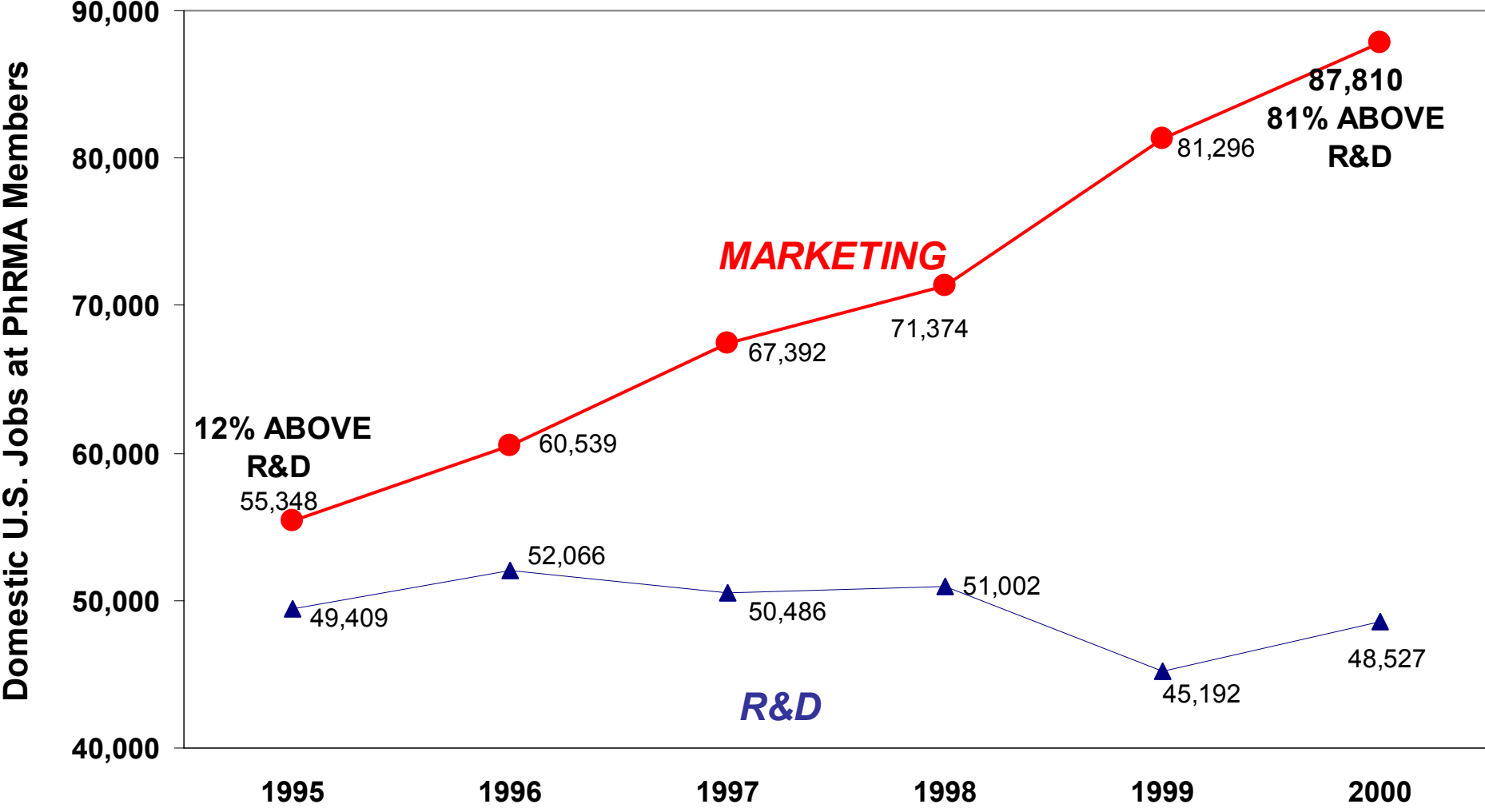
Are high U.S. prices an artifact?

- Is anyone taking a bus from Toronto to Buffalo to buy prescription drugs?
- Is anyone taking a bus from Detroit to Windsor to buy anything but prescription drugs?

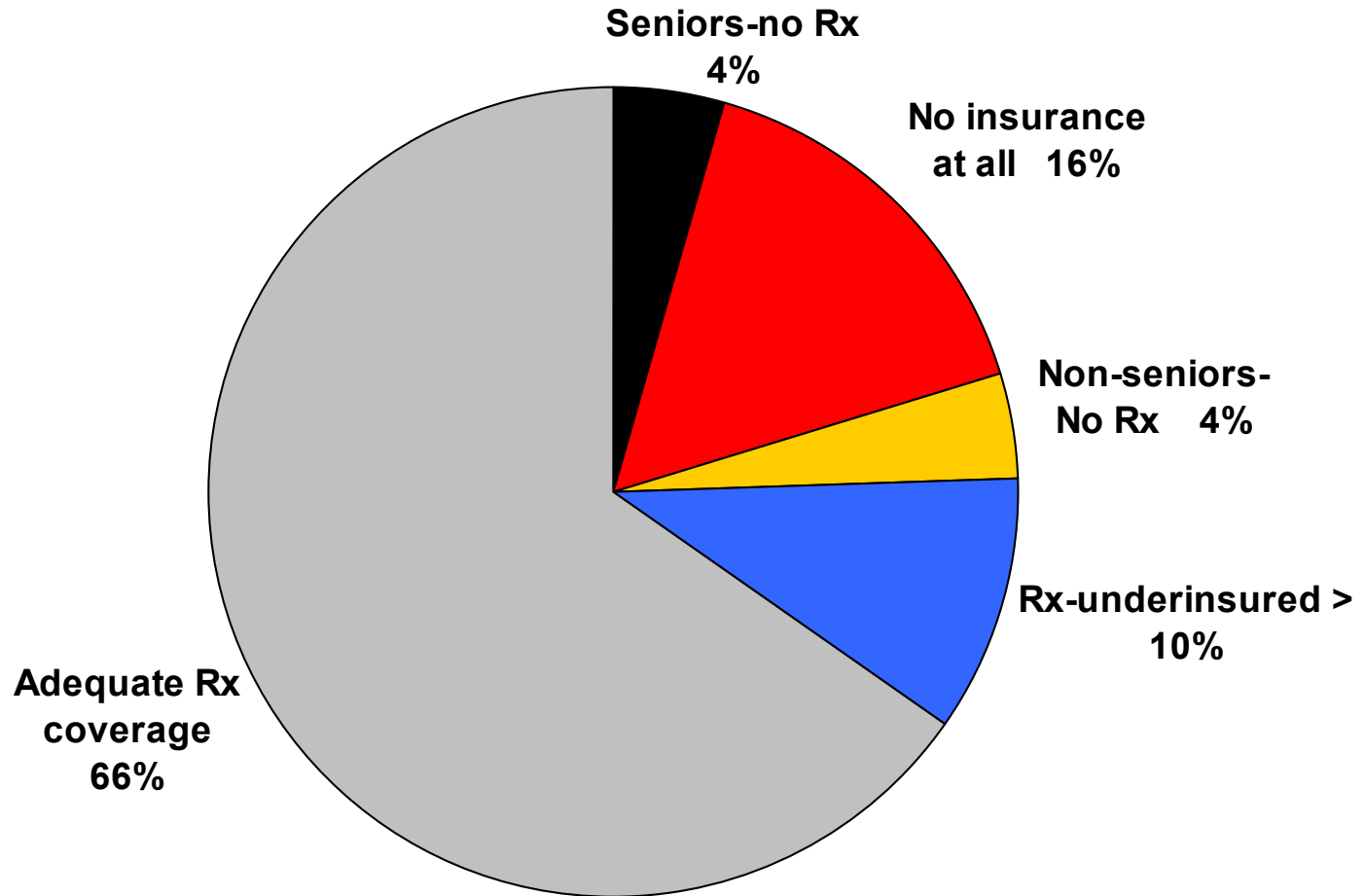
Price rises: bigger than they seem

- Estimates of price increases must consider more than inflation in price of old drugs
- They must also consider high price of new drugs, when new drugs offer little/no additional benefit
- Newness can be a camouflaged price hike
- High price of a new drug should be split between added value and higher price

BRAND NAME DRUG MAKERS' MARKETING AND R&D JOBS, 1995 - 2000



98 MILLION LACKED PRESCRIPTION DRUG FINANCIAL SECURITY IN 2000



Tragedy

A story with a sad or disastrous ending caused by

- fate (ancient version); so humans can't change outcome
- OR
- moral weakness or social pressures (modern version); so humans can change outcome

Three choices

- **Continued suffering** and dying for lack of needed drugs. Intolerable.
- **Paying much more** public and private money for needed drugs. Unaffordable.
- **Changing our ways**, to secure needed drugs at small additional costs while rewarding innovation. Unavoidable.

II. Causes

A. Spending

B. Prices

C. Waste

D. Suffering

E. Tragedy

Causes of High Spending and Prices

Government failure to contain prices,
resulting from

- industry pressures
- claims that research would suffer
- claims that free market justifies high prices
- belief in free lunch

Causes of waste

- Weak evidence on who needs which Rx
- Is marketing more secure than innovating?
- Copy-cattig: better to steal an idea?
(attributed to Jack Welch)
- Oligopoly means lack of free market discipline

Causes of Suffering

- Unwillingness to include Rx in Medicare in 1965 even though 1965's Rx % of health costs not equaled until late-1990s
- Loss of retiree and HMO Rx coverage
- High prices and costs make Medicare coverage too costly
- It is starkly wrong to bemoan problem of lack of Rx coverage when high prices and high overall costs help block that coverage

Causes of Tragedy

- Stunted empathy
- “High prices are essential to innovation.”
- Inertia
- Lack of imagination
- The difficulty of crafting something better

III. Solutions that enjoy good political currency today

A. To lower prices or spending

B. To expand coverage

To lower prices or spending

- PBMs
- formularies
- counter-detailing
- drug discount cards
- greater use of generics
- importing from Canada/Mexico
- de-insure patients--make them pay more
- fragmented public and private demands for discounts

Today's solutions to high prices/spending

- Probably won't be very effective in making drugs affordable--each is badly flawed
- No coordination between these controls and patients' needs or drug makers' needs
- If these controls do cut use and therefore spending, they may well cut dollars drug makers say are needed to finance research

To expand coverage

- let competing HMOs worry about it
- legislate Medicare Rx benefit without substantial price controls

Today's ways to expand coverage

- Neither likely to be enacted
- Neither likely to work if enacted
- Medicare HMOs hard to save
- Medicare Rx without lower prices = high premiums and subsidies but low benefits
- Ten-year federal cost of modest plan:
 \$118 B in June 1999 and
 \$318 B in June 2001
- Industry hopes for windfall profit on new volume

IV. Possible futures and probabilities

- More money for business as usual 5%
- More co-pays, formularies to cut use 20%
- Costly coverage improvements,
leading to pressure to cut prices 20%
- Radical new Congress guts prices 20%
- Other 35%

Possible futures

- Some hope formularies, higher co-pays, and other private solutions will slow spending
- Some see these private solutions as parallels to the private managed care cost containment methods that followed the Clintons' failure to win universal coverage in 1993-1994
- But if these work for a time, they will anger patients/voters

- Just as patients rebelled when HMOs' financial incentives to do less caused harm
- De-insurance violates economic and medical realities
 - marginal costs of medications usually low
 - high prices mean restricted use of needed medications
 - restrictions on use will be discredited by adverse medical events
- High prices and adverse events will elect an angry Congress, which will gut today's prices

V. Why a peace treaty?

- ~ \$200 B for Rx in 2002 should be enough
- Protect patients, payors, and drug makers
- Pre-empt devastating price cuts
- Higher factory prices spur cuts in use
- Lower factory prices permit all needed use
- Total revenue = price * quantity (!)
- Need package deal to align lower prices with higher volume, to protect total revenue, profits, and research

Peace treaty aims

- **Short-run:** To finance and deliver all existing medications to all Americans who need them, at the lowest possible spending increase consonant with protecting research and manufacturers
- **Long-run:** To increase financing of breakthrough research, cut waste, get right medications to the patients who need them

Peace treaty provisions, short-run

1. Legislate Canadian-level factory prices for brand-name drugs, cutting manufacturers' revenues by ~ \$44 B in 2002
-- if do nothing else
2. Replace much or most of lost revenue through higher private market volume responding to lower prices (extent depends on price-elasticity of demand)

Peace treaty provisions, short-run

3. Provide the rest of the revenue needed to maintain pre-reform return on equity, for each drug maker, via publicly-subsidized purchases for people who can't afford even the newly-discounted private prices.

Peace treaty provisions, short-run

4. To maintain return on equity, publicly subsidized prices would be set to replace that share of the \$44 B in lost revenue not recouped privately (in step 2), plus marginal cost of new volume. The upper limit on revenue replacement would be that required to maintain return on equity, allowing for reasonable cost rises.

Strengths of short-run elements

- All needed prescriptions are filled
- Each manufacturer is financially whole: returns on equity (though not on revenue) would be maintained at pre-reform levels for, say, 5 years--for drugs available at outset
- Incremental cost to payors is modest

How modest are higher costs?

	<u>Cost per Additional Prescription</u>			<u>Total Additional Cost</u>
	<u>Marginal cost of manufacturing</u>	<u>Dispensing cost</u>	<u>Manufacturing + Dispensing</u>	* 977 million <u>additional Rx</u>
Lower estimate	\$3.51	\$3.00	\$6.51	\$6,360,270,000
Higher estimate	\$7.03	\$5.00	\$12.03	\$11,753,310,000
Average	\$5.27	\$4.00	\$9.27	\$9,056,790,000

Estimates' assumptions

Marginal cost estimates

- Lower = 5 % of 2001 average retail price
- Higher = 10 %

977M additional prescriptions/year (a 1/3 rise)

- 5/non-Medicare uninsured person
- 3/non-Medicare underinsured person
- 15/Medicare uninsured person
- 10/Medicare underinsured person

Aspects of estimates

- Increase captures total incremental costs, with no added co-pays or premiums
- Increase = 3.9 - 7.2% of 2001's \$165 B total U.S. Rx spending-- less than 6 months' rise
- Increase = small fraction of federal cost of inferior Medicare-only benefit
- Increase excludes \$44 B squeezed out by price cuts and recycled to buy more drugs

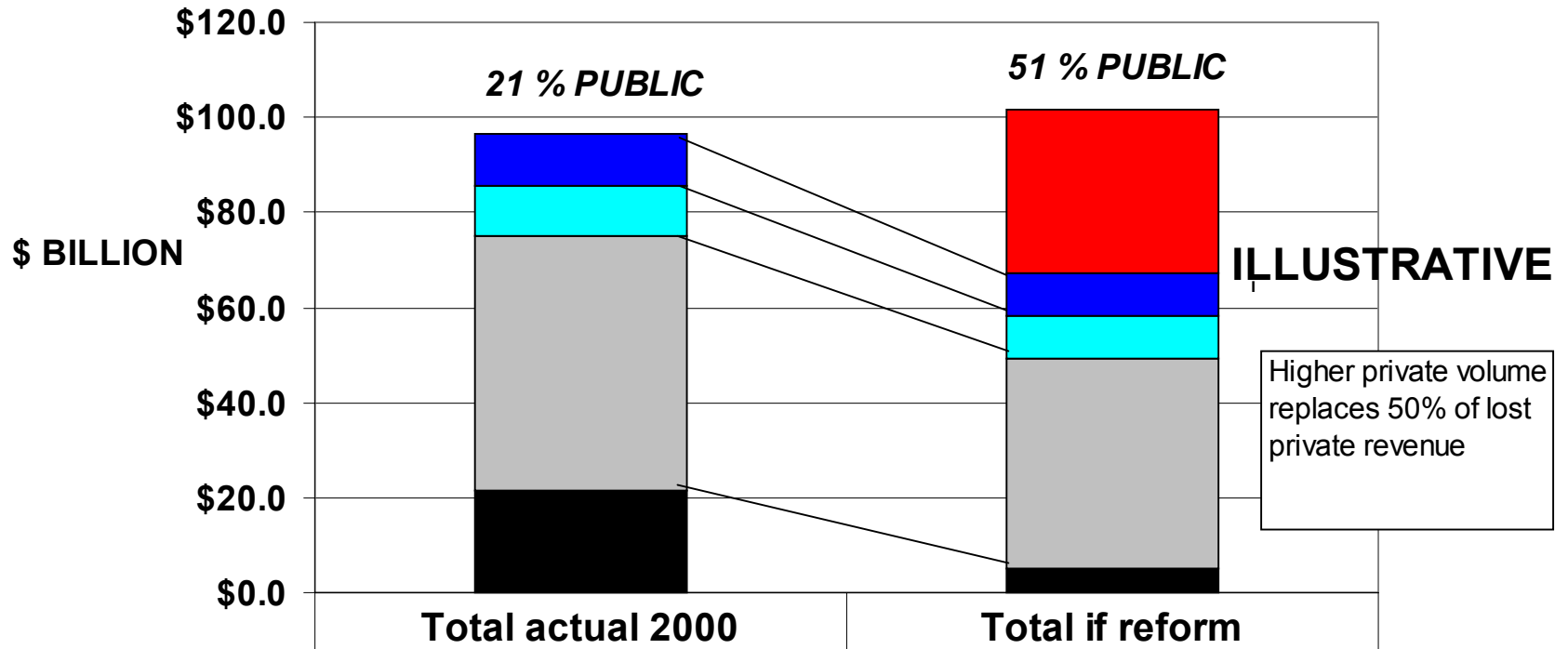
More aspects of estimates

- Estimates ignore generics, now less than 10% of U.S. Rx cost
- Generic share would probably fall in response to lower brand name prices
- Estimates ignore one-time cost of building retail capacity to dispense one-third rise in annual volume of prescriptions

Complications and problems, short-run (1)

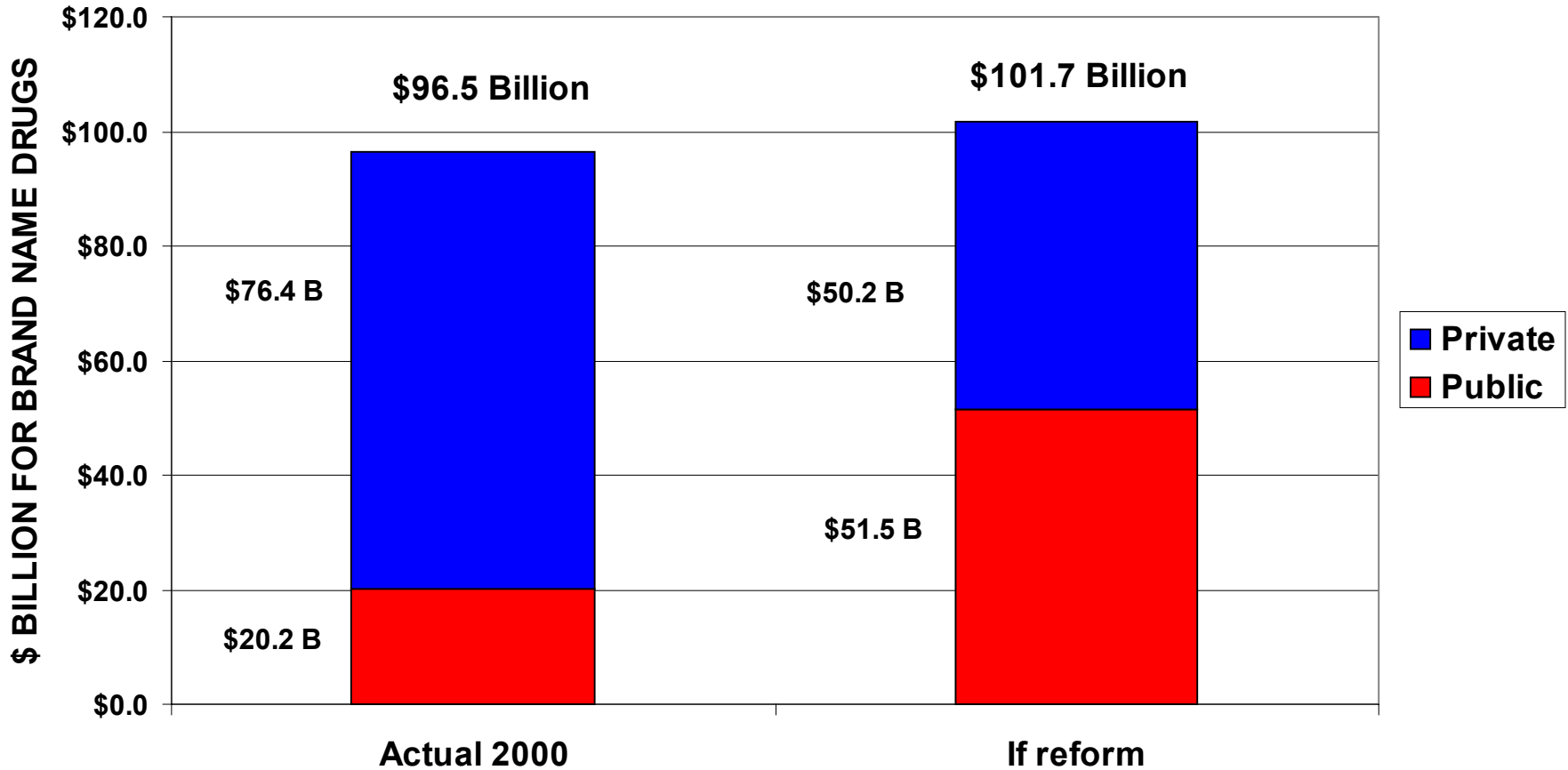
- Public share of Rx cost rises visibly and private share falls somewhat less
- Asymmetry between pain and gain: private parties who pay less may be less vocal than taxpayers who pay more
- Absent good clinical standards, lower prices could lead to unnecessary use

BRAND NAME Rx PAYMENT BY SOURCE, 2000 AND POST-REFORM, AT FACTORY PRICES



	Total actual 2000	Total if reform
■ new public prog	\$0.0	\$34.6
■ hosp+NH	\$11.0	\$9.0
■ Medicaid	\$10.3	\$8.8
■ private ins.	\$53.8	\$44.3
■ cash	\$21.3	\$5.0

ILLUSTRATIVE PUBLIC AND PRIVATE Rx PAYMENTS, BEFORE AND AFTER REFORM, FACTORY PRICES



Complications and problems, short-run (2)

- How to measure revenue each manufacturer needs to sustain return on equity
- How to set public payor's price for each drug at level needed to sustain company-wide return on equity, and cover each drug's marginal cost of manufacturing
- Burden on pharmacies/pharmacists
- Risk to research and innovation

Dealing with Complications

short-run

- We can learn from other nations' regulatory experience, such as U.K.'s profit regulations
- Researchers will find gainful employment measuring marginal costs and needed revenue
- Building a trusting private-public partnership is key to peace treaty.

Dealing with Complications

short-run

- Competition and regulation are allies, not antagonists.
 - Competition and adequate financing will spur innovation.
 - Regulation to lower price and achieve universal coverage will sustain political and financial support.

Inevitable limitations of short-run elements

- Short-term elements make today's meds affordable for all
- They do little to slow rise in drug spending
- They do little to squeeze out waste
- Alone, they may sustain today's level of innovation but don't spur greater innovation

Peace treaty provisions

long-run elements

1. Raising the money
2. Paying for medications
3. Identifying and rewarding good innovation
4. Financing research
5. Protecting competition
6. Ending marketing waste
7. identifying and promoting affordable drugs

1. Raising the money

- The public share of the Rx dollar will rise from about 20% to 50%.
- Why not go whole hog and consider complete public financing
- + Would simplify administration
- - Drug makers would see threat of constricted revenues if must compete in budget against other priorities

2. Paying for medications

- In a free market, we all pay the same price for the same thing
- Why should different payors pay different prices for drugs?
- So why not set a single price at which all public and private payors pay for the same drug?

3. Identifying and rewarding good innovation

- After 5 years of short-term profit protection, future profits would depend on value of new drugs developed.
- Cease rewarding copy-cat research unless it offers demonstrably big benefits
 - It's no longer needed to engender competition to hold down prices, since regulation does that

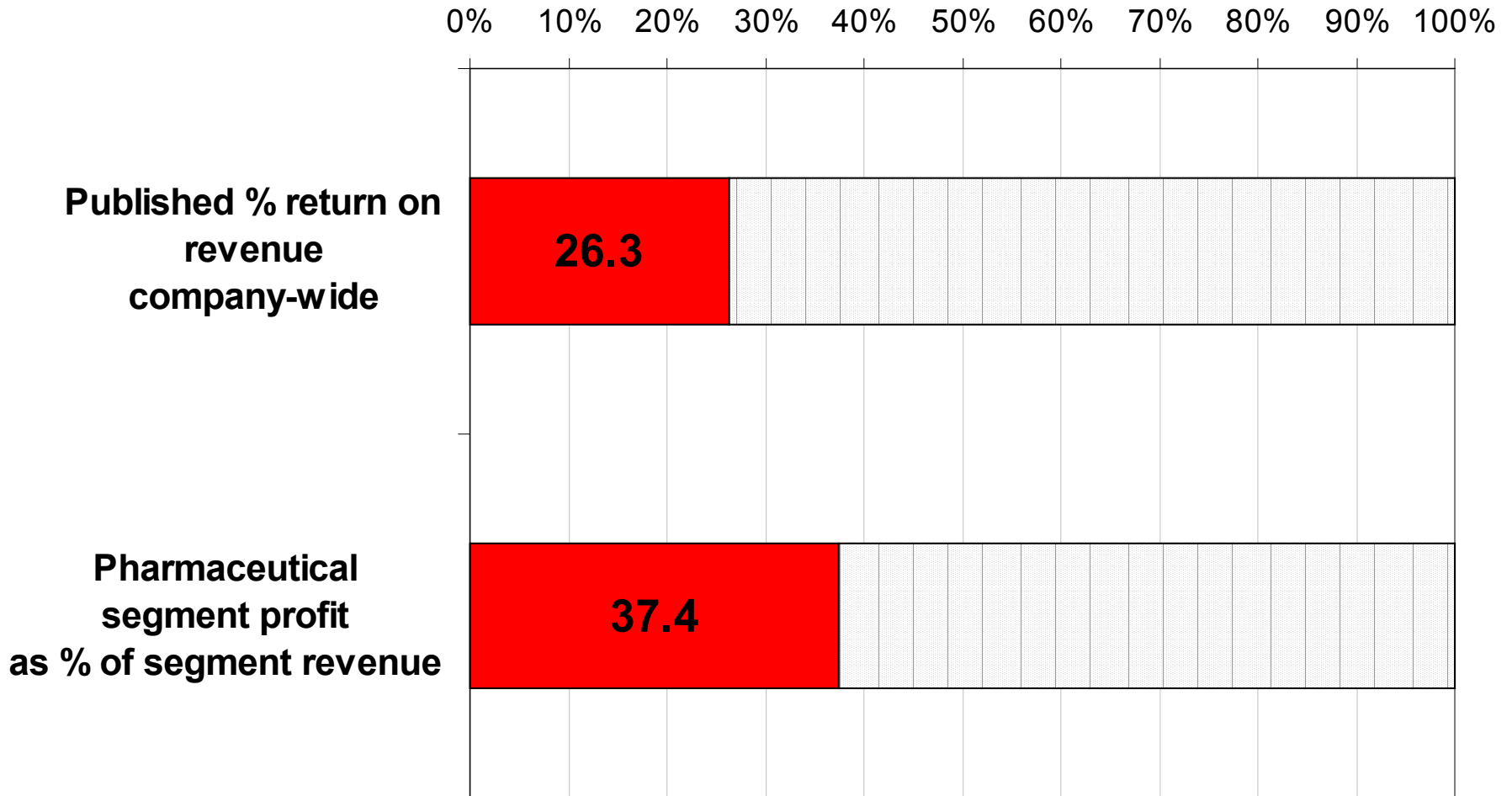
3. Identifying and rewarding good innovation

- If 40 % of research is copy-cat, ending it would liberate some \$9-10 B annually
- Set prices on valuable innovative drugs to yield generous but fair profits on investment
- What is “generous but fair”? Enough to sustain desired level of investment
- (What level of investment is desired?)

3. Identifying and rewarding good innovation

- To begin to set a benchmark, we need to know current profits on making drugs
- Merck, for example, reported company-wide return on revenue of 26.3 % in 1999
- How much did it make on prescription drugs, after teasing out its low-return-on-revenue Medco business?

Merck Firm-Wide and Pharmaceutical Segment Return on Revenue, 1999



3. Identifying and rewarding good innovation

- A 37.4 % return seems high
- Drug makers claim that high profits are needed to finance risky research. But each year's profits are residue after financing research, and have been high for decades
- And they have not been willing to identify a profit floor below which research would suffer, or a profit ceiling above which no further research would be elicited

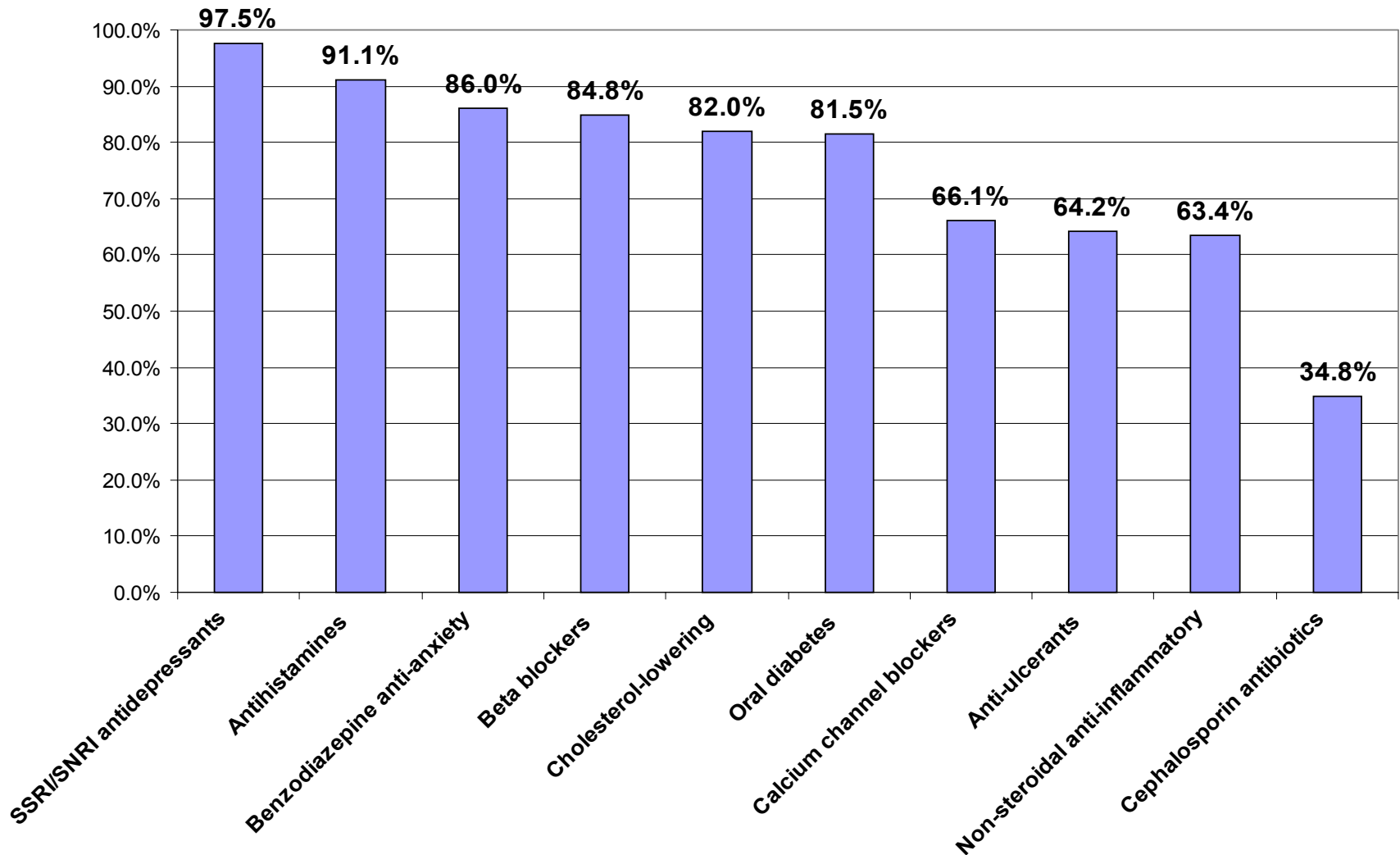
4. Financing research

- Continued NIH budget growth means more public money to finance the riskiest research
- Politically, the public will increasingly demand a fair return on its growing investment, in the form of affordable medications
- How to ensure that innovation is not stifled by bean-counters or study sections?

5. Protecting competition

- Mergers mean less competition
- High marketing costs can spur mergers
- So can high research and development costs
- Competition requires competitors
- Eliminating marketing costs and sharing research costs with the public will spur competition, especially when innovation and value are rewarded

MARKET CONCENTRATION IN THE TOP THERAPEUTIC CATEGORIES, 1998



6. Ending marketing waste

- Drug makers boast about research spending
- But don't even estimate their own marketing costs
- Marketing cost estimates appear inaccurate and incomplete
- They are huge and growing

6. Ending marketing waste

- Marketing = wrong way to give doctors information on need, efficacy, or cost
 - 1 of 4 MDs prescribes recommended antibiotic for urinary tract infection
 - Right Rx prescribed 49 % in 1990 but 24 % in 1998 (14 Jan 02 *Ann Int Med*)
- Aggressive marketing of high-price drugs spurs payors to erect barriers to use
- Negotiate end to marketing as a peace treaty provision

7. Identifying effective and affordable drugs and promoting their use

- Well-insulated public or independent organization collates available evidence and collects additional
- Disseminate results to all physicians
- Recycle a fraction of the saved marketing dollars to finance this work, and use the rest of the savings to finance another \$10 B for research

VI. Winning Durably Affordable Medications for All

- Insisting on more money for business as usual will raise private barriers to use, spur radical public action to slash prices, or both
- Better to combine the two initial and more recent threads of state governments' efforts
 - to finance care for uninsured people and
 - to cut prices

And combine them in one peace treaty

VI. Winning Durably Affordable Medications for All

- A peace treaty will be difficult to negotiate and implement
- But if more money for business as usual is unaffordable and unsustainable, what is the alternative?