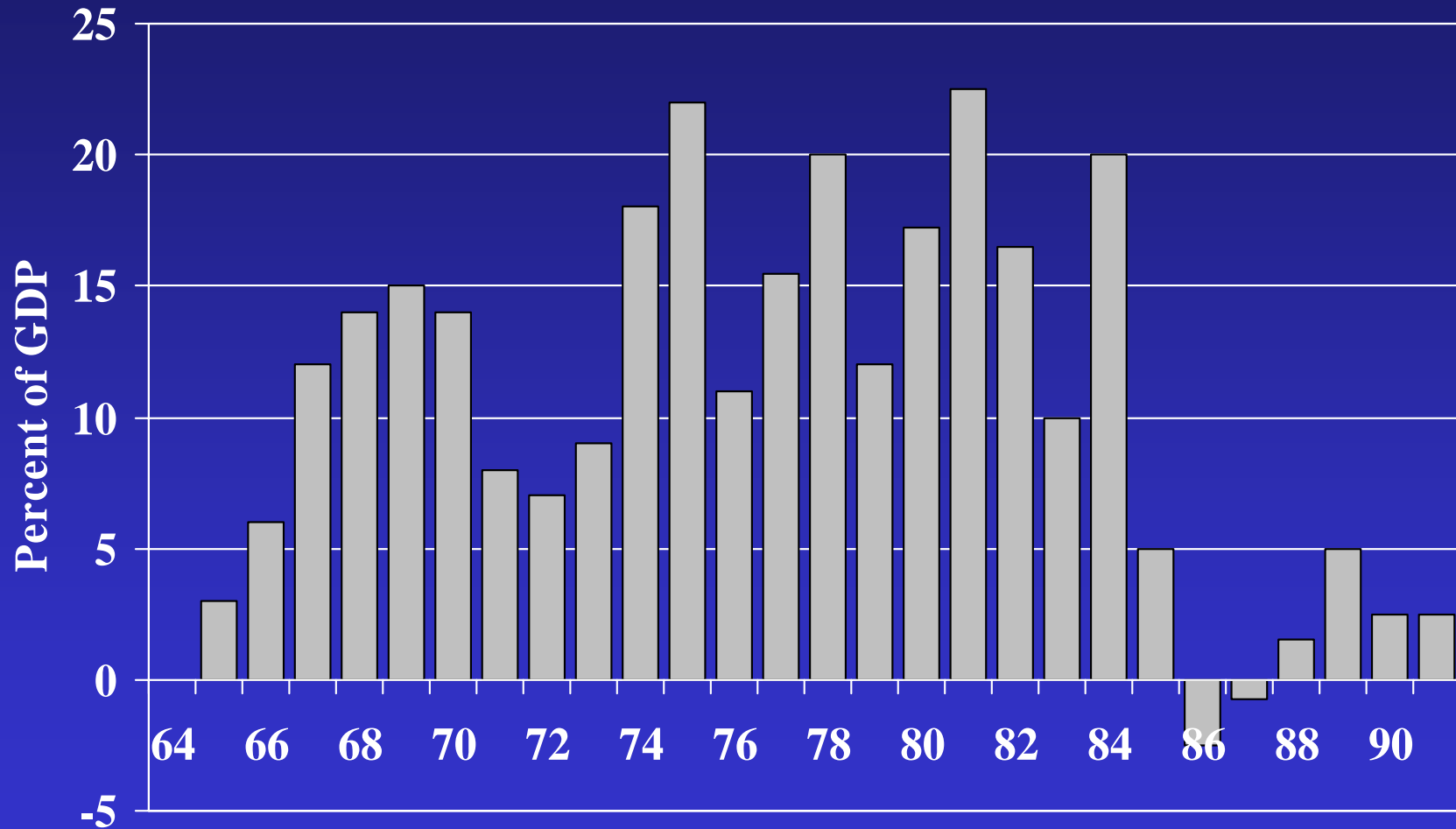


Stabilization and Fiscal
Consolidation:
The Case of Israel

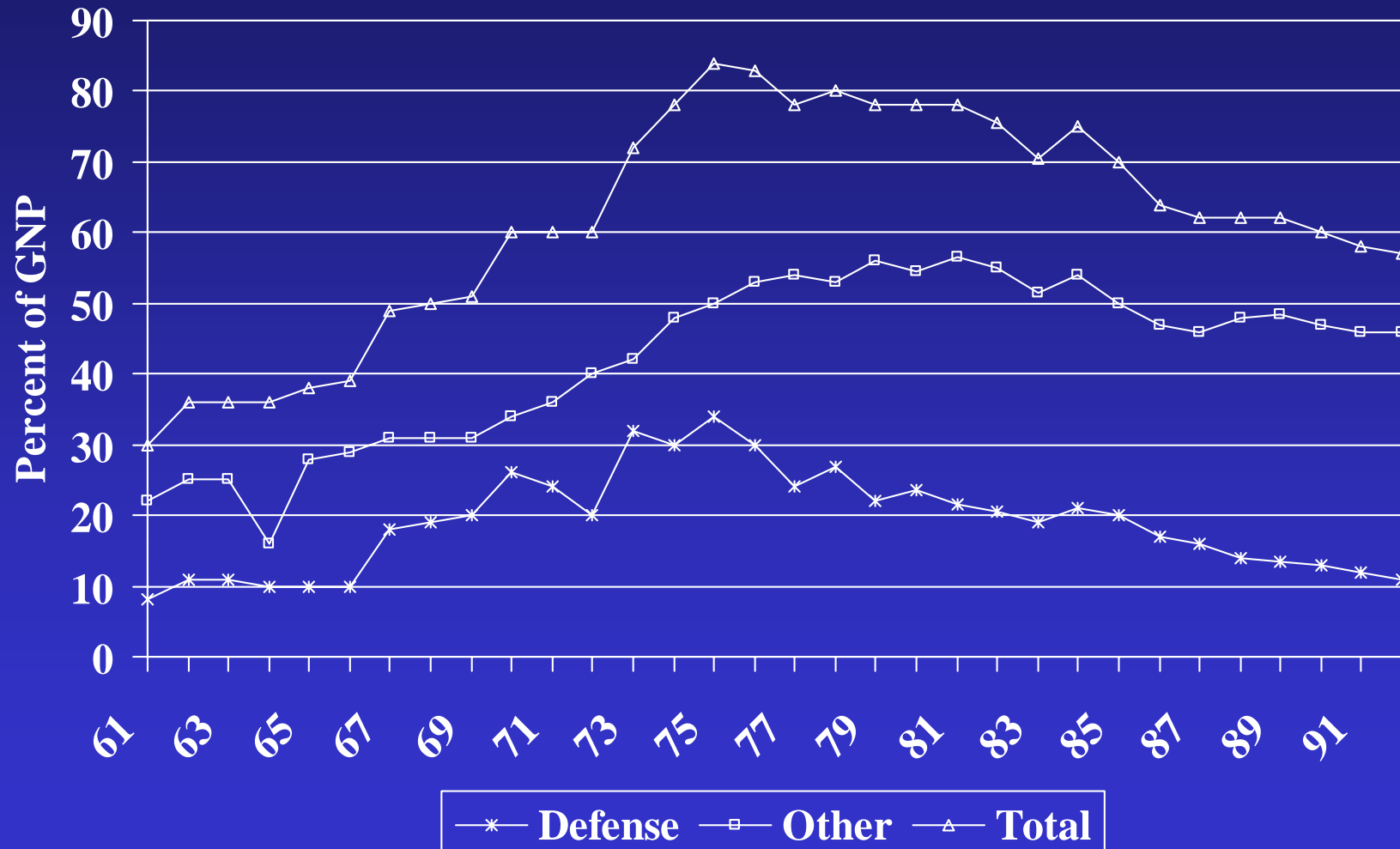
Efraim Sadka
Tel Aviv University

- Inflation is normally considered to be a monetary phenomenon. “Classical” Dichotomy between nominal and real variables.
- This may be true as long as fiscal policy is “within the ball park”.
- However: persistent, high public sector deficit (and persistent, high public expenditures) are doomed to lead to large current account deficits, a rising external debt, balance-of-payment crises, currency devaluation and spiraling inflation. The absence of budget discipline, coupled with an almost inevitable monetary accommodation, will eventually fuel an inflationary process that could run out of control.

Total Public Sector Deficit



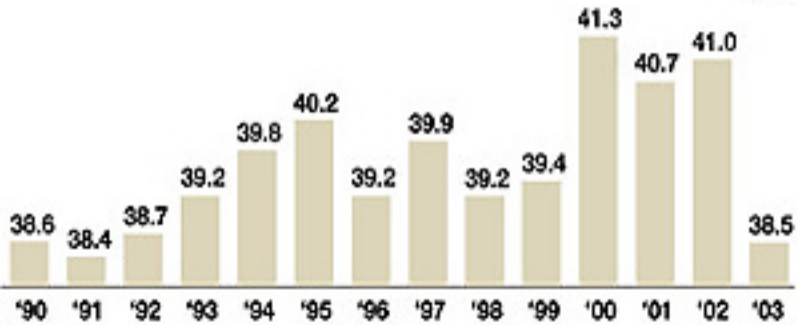
Public Spending (% of GNP)



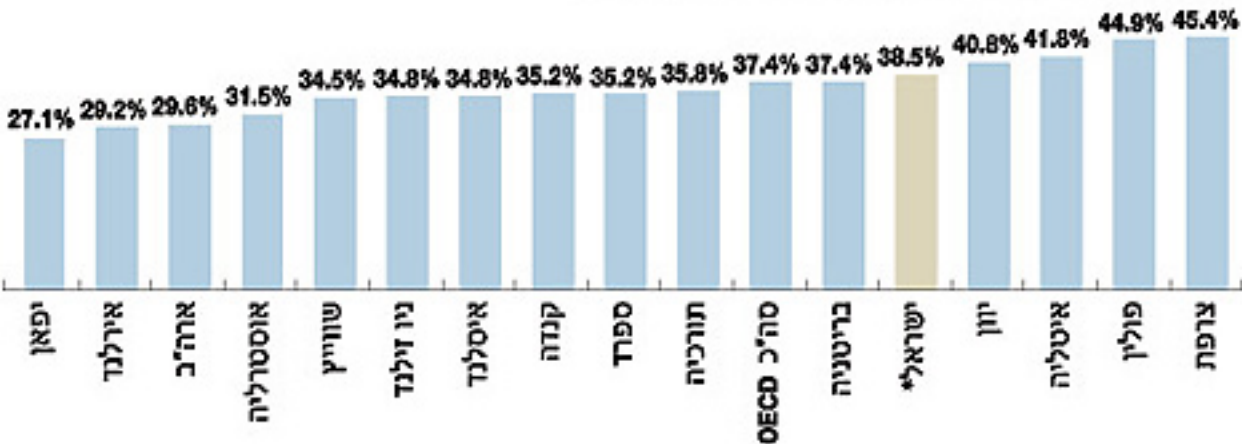
נטל המס בישראל

סך גביית המסים ביחס לתוצר

אחוז

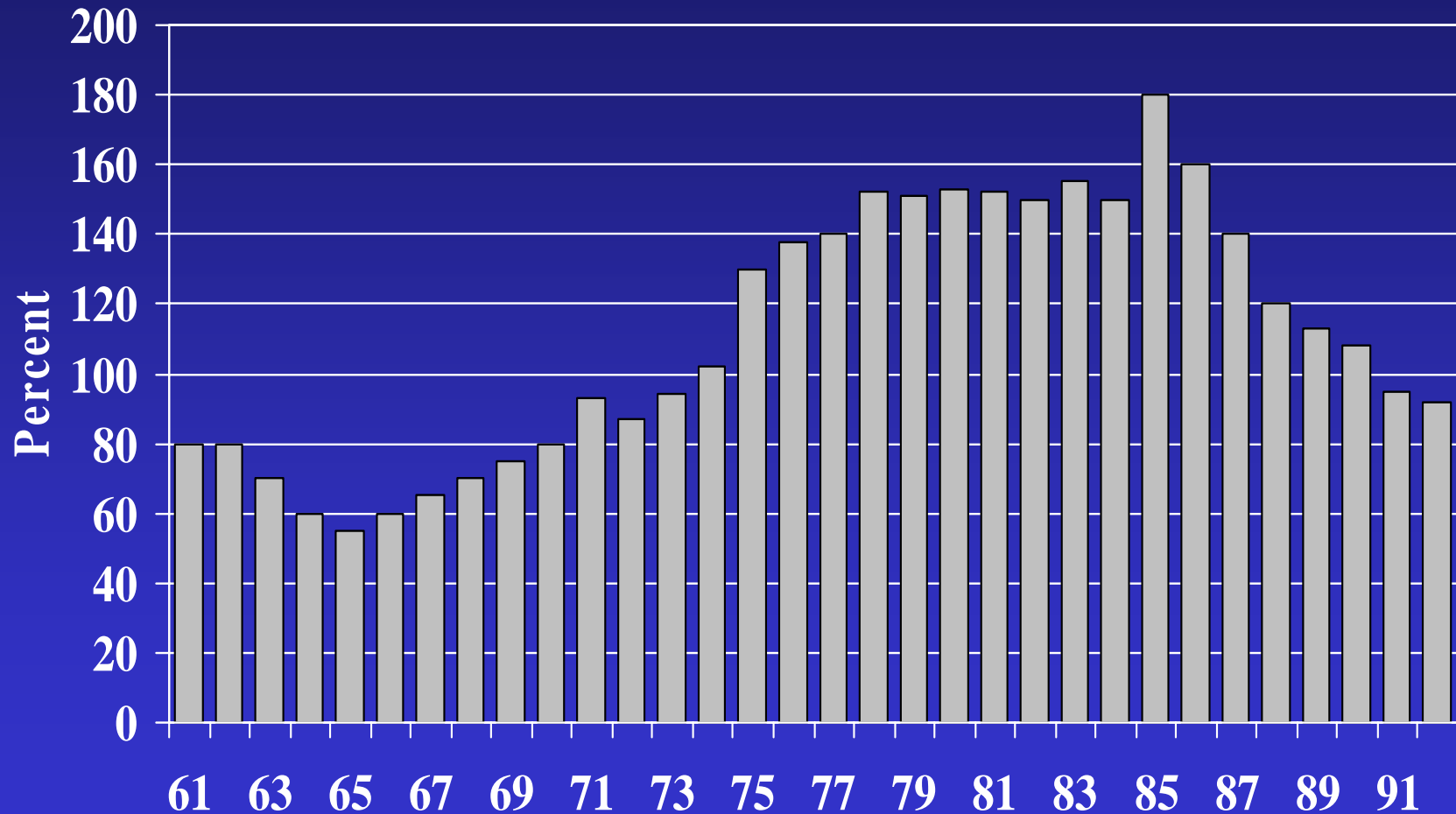


נטל המס בישראל ובמדינות נבחרות

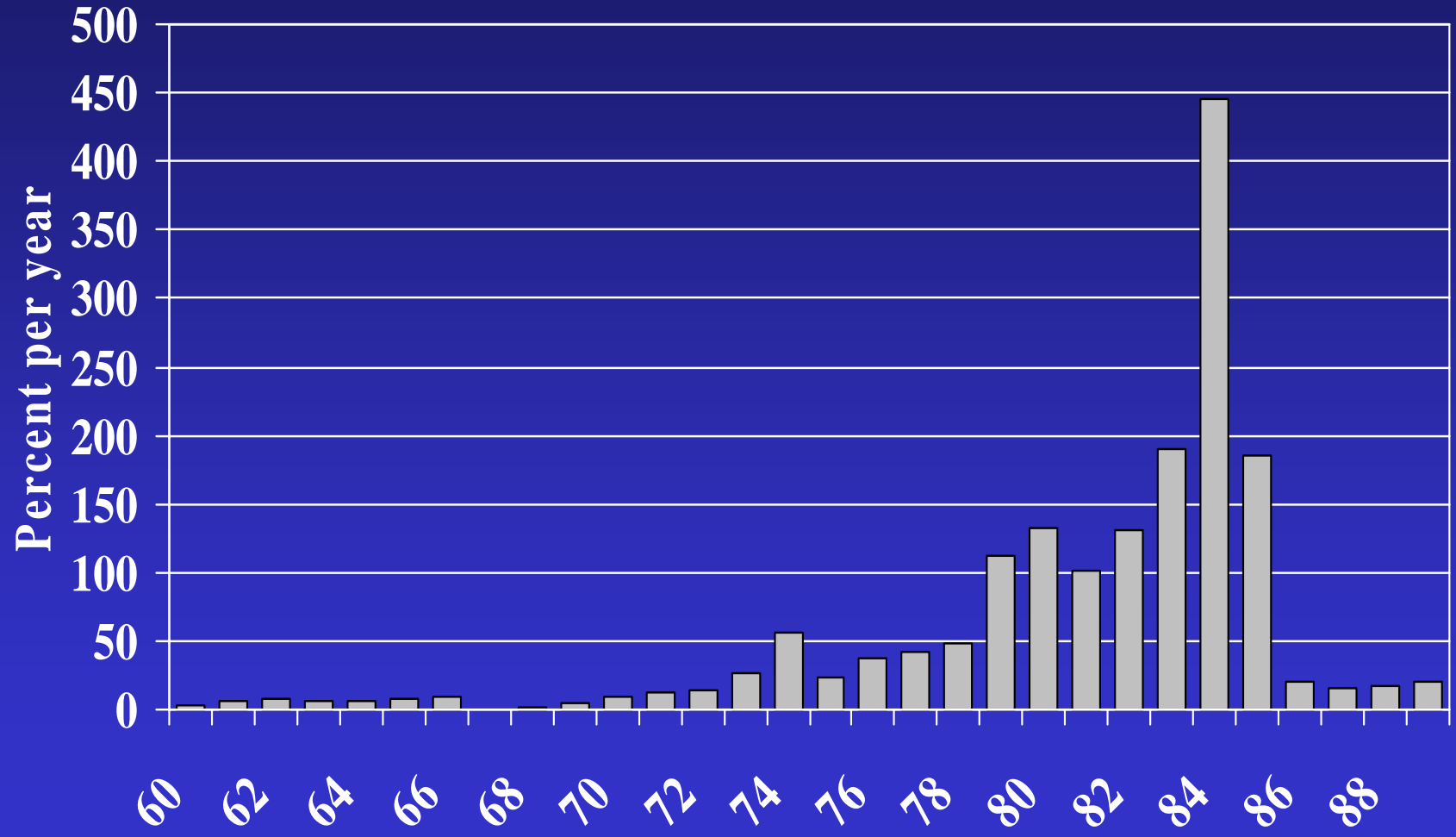


*נתוני 2003, נתוני המדינות האחרות מתייחסים לשנת 2001

The Ratio of Public Debt to GNP



Annual Inflation Rates, 1960-89



- Israel managed to stabilize its economy in mid-1985. Before that several stabilization attempts were made. Most notable among them:
 - “Five-Five Plan” (devaluation of five percent per month and increases of five percent per month in the controlled subsidized prices of basic necessities).
 - “Package Deals” (voluntary wage-price freezes).
- They all failed after a few months, because they failed to handle the **real** thing: the large public sector deficit (some even increased the deficit).

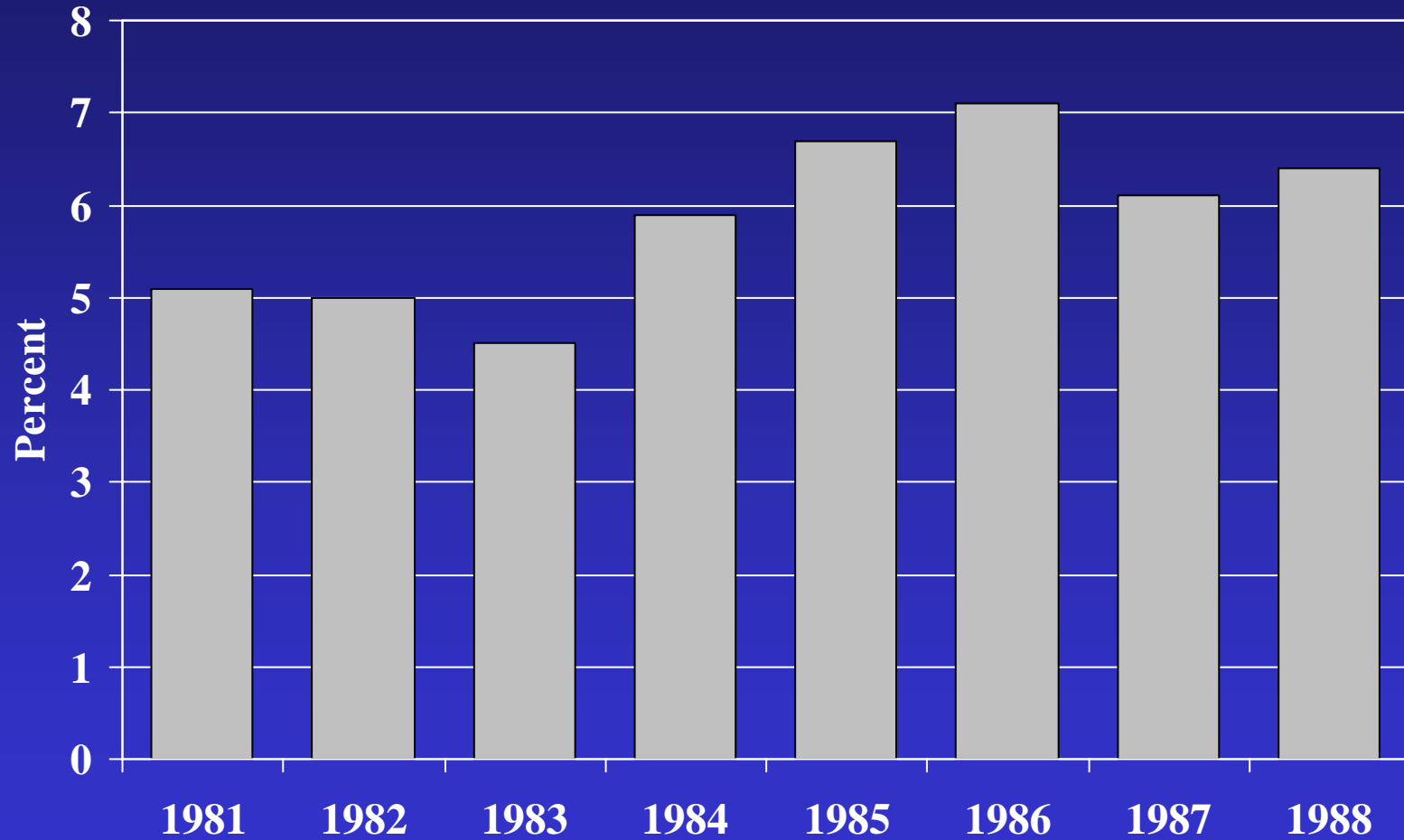
- The 1985 stabilization:
 - **Total and Immediate Elimination** of the public sector deficit.
 - This elimination was achieved mainly by “good” or “successful” cuts (Alberto Alesina and Roberto Perotti). Budget cuts can actually increase rather than decrease the Debt/GDP ratio, if they cause recession (lowering GDP, increasing transfer payments such as unemployment insurance, and reducing the revenues). “Good” cuts are those that rely on spending cuts (wage bill and transfer payments) rather than on tax increases; such fiscal adjustments are often associated (in the longer-run) with increases in growth, crowding in of private investments and reduction in unemployment.

In the Israeli case, the fiscal adjustments consisted mainly of spending cuts (defense expenditures, subsidies, wage freeze in the public sector).

Tax revenues rose too. The increase was caused mainly as a result of a lower inflation and by tightening the inflation-proofness of the income tax in the business sector – A unique Israeli feature (which is well worth elaboration; see below)

- The stabilization did not have a significant effect on unemployment.

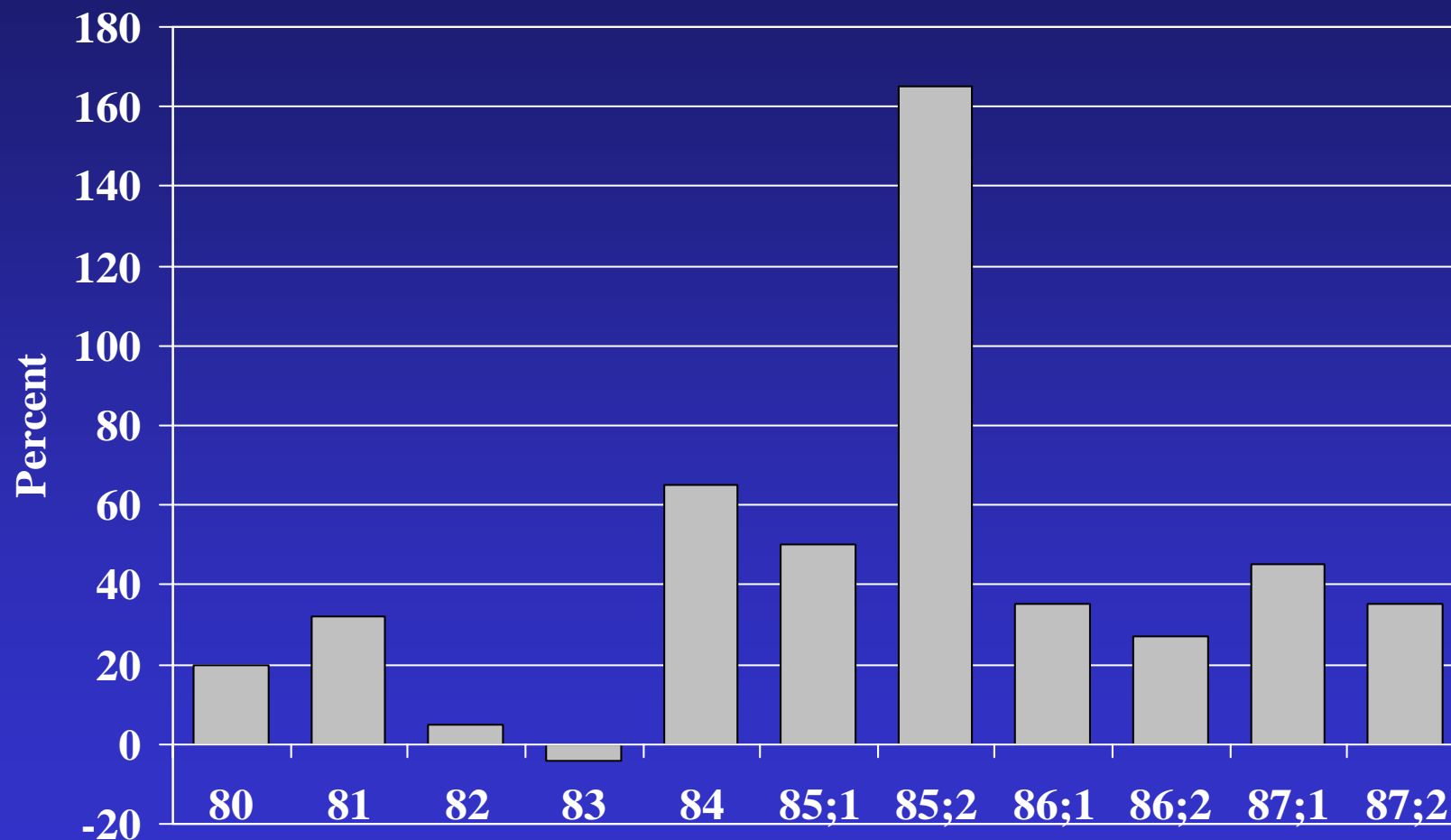
Unemployment Rate, 1981-88



- A perfectly synchronized monetary policy would have called for a discrete, one-shot “jump” in the money supply in order to accommodate the increased demand for money in the new environment of price stability, and then a slow growth of this supply.

In practice: tight monetary policy from the beginning, bringing about unprecedented high short-term interest rates.

The Real Cost of Bank Credit, 1980-87



- Traditionally, inflation is considered to induce automatic stabilizing effects.

Israeli experience suggests quite the opposite: All in all, one should adopt the term “**The Inflation Subsidy**”. In fact, a key automatic **Destabilizer**, a major contributor to the spiraling inflationary process was the tax system, especially in the business sector.

- The features that are traditionally considered to be inflation-induced automatic stabilizers are:
 - (i) The real depreciation of money. However, like with any tax, the tax base (that is, money holdings) shrinks as the tax rate (that is, inflation) rises, so that tax revenues do not necessarily rise. The Israeli experience: the so-called inflation tax can hardly generate one percent of GNP in revenues, no matter how high is the rate.
 - (ii) with a progressive income tax, inflation increases real tax revenues, when income tax brackets are not indexed. However, it is naïve to believe that a government which fails to exercise a fiscal discipline can actually resist public pressure to index the income tax brackets, when inflation picks up.

- Against these two mild or altogether non-existent stabilizing effects there are two major destabilizing effects.

(i) First, there is the so-called “Tanzi effect”: Due to collection lags, defined as the time that elapses between the date when the tax liability accrues and the time when the tax payment is received by the government, inflation causes erosion of the **Real** tax revenues. In the Israeli case, this erosion reached 10% (!) of overall tax revenues.

(ii) Second, the Israeli experience suggests that inflation virtually demolishes the income tax base in the business sector:

(a) (Nominal) capital gains are taxed upon realization while (nominal) interest is deductible on an accrual basis. This gives rise to a very simple, yet powerful tax-avoidance technique: use debt-finance to invest in fixed assets (equipment, real estate), to acquire new firms, etc.

Furthermore, as inflation rises, there arises a mounting pressure on the government to either lower the tax on nominal capital gains, or tax only the real part of capital gains; and the government sooner or later yields to such pressures. Needless to say, no such measures are applied with respect to the deductibility of nominal interest.

The outcome of such **partial (unbalanced)** tax adjustments for inflation – a further reduction in tax revenues from the business sector.

It took a few years of high inflation until the government attempted to enact a comprehensive adjustment for inflation in the tax system; and this applied mainly to corporations only. 15

(b) An example of a tax avoidance for self-employed (proprietorships):

Revenues	\$200,000
Expenses	<u>\$150,000</u>
Taxable Income	\$ 50,000

The rate of exchange:

\$ 1 = NIS 1 at the beginning of the tax year

\$ 1 = NIS 2 at the end of the tax year

Now, if you can get the revenues at the beginning of the tax year and postpone payment of expenses to the end of the year then:

Revenues	NIS 200,000
Expenses	<u>NIS 300,000</u>
Net Loss	NIS 100,000

Why would your clients and suppliers agree to let you maneuver your revenues and expenses in this way? After all, you reduce your taxable income but theirs rise. However, they are indifferent, if they are non-profit organizations (including the government), or if they are corporations whose taxable income is calculated on a real basis, or if they are foreign entities, etc.

(c) The outcome: A sharp decline in tax revenues from corporations and proprietorships. Also, the distribution of the tax burden shifted Dramatically. With price stability, the income tax burden was distributed as follows:

Wage-Earners: 1/3

Corporations and Self-Employed: 2/3

As inflation picked up, the distribution of the tax burden shifted against wage-earners as follows:

Wage-Earners: 2/3

Corporations and Self-employed: 1/3

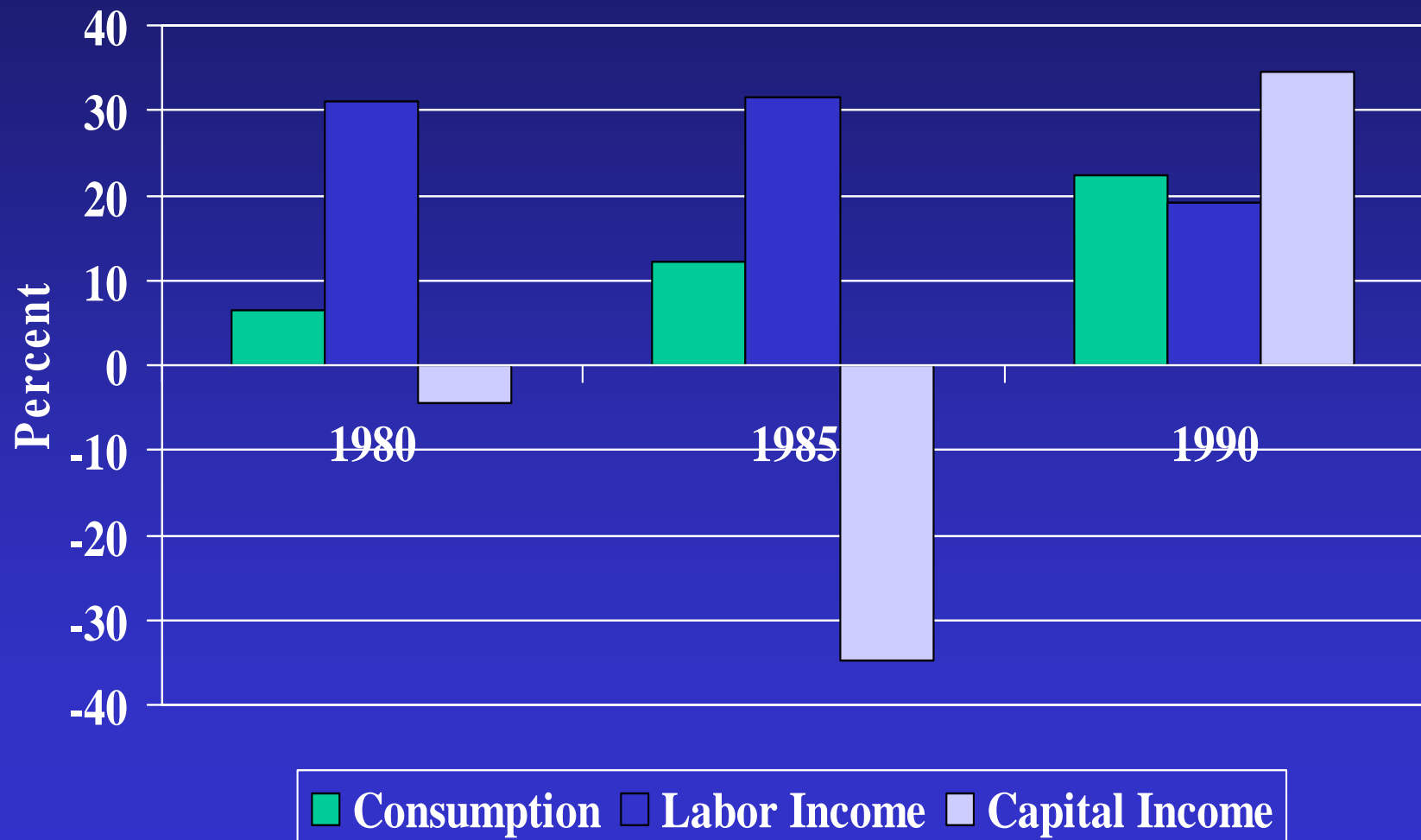
Similarly, effective average tax rates on capital income:

<u>1980</u>	<u>1985</u>	<u>1990</u>
-4.4%	-34.8%	34.5%

(The decline in the effective tax rate on capital income occurred even though the statutory corporate tax went down from 60% in 1980 to 40% in 1990)

- Indeed, the 1985 stabilization program was associated with an increase in tax revenues brought about by: (i) the automatic destabilizer feature of the tax system; (ii) changes in the tax laws aimed at providing a more comprehensive adjustment for inflation.

Effective Average Tax Rates



- Conclusion / Recommendation:

A nominal tax system acts as an automatic destabilizer; furthermore, governments tend to yield to public pressure and to provide some adjustments (relieves) for inflation; and partial adjustments might be worse than no adjustments at all.

Therefore, fully adjust the income tax system for inflation (an inflation-proof tax system).

An inflation-proof tax system is efficient, fair, equitable and does not act as an automatic destabilizer.

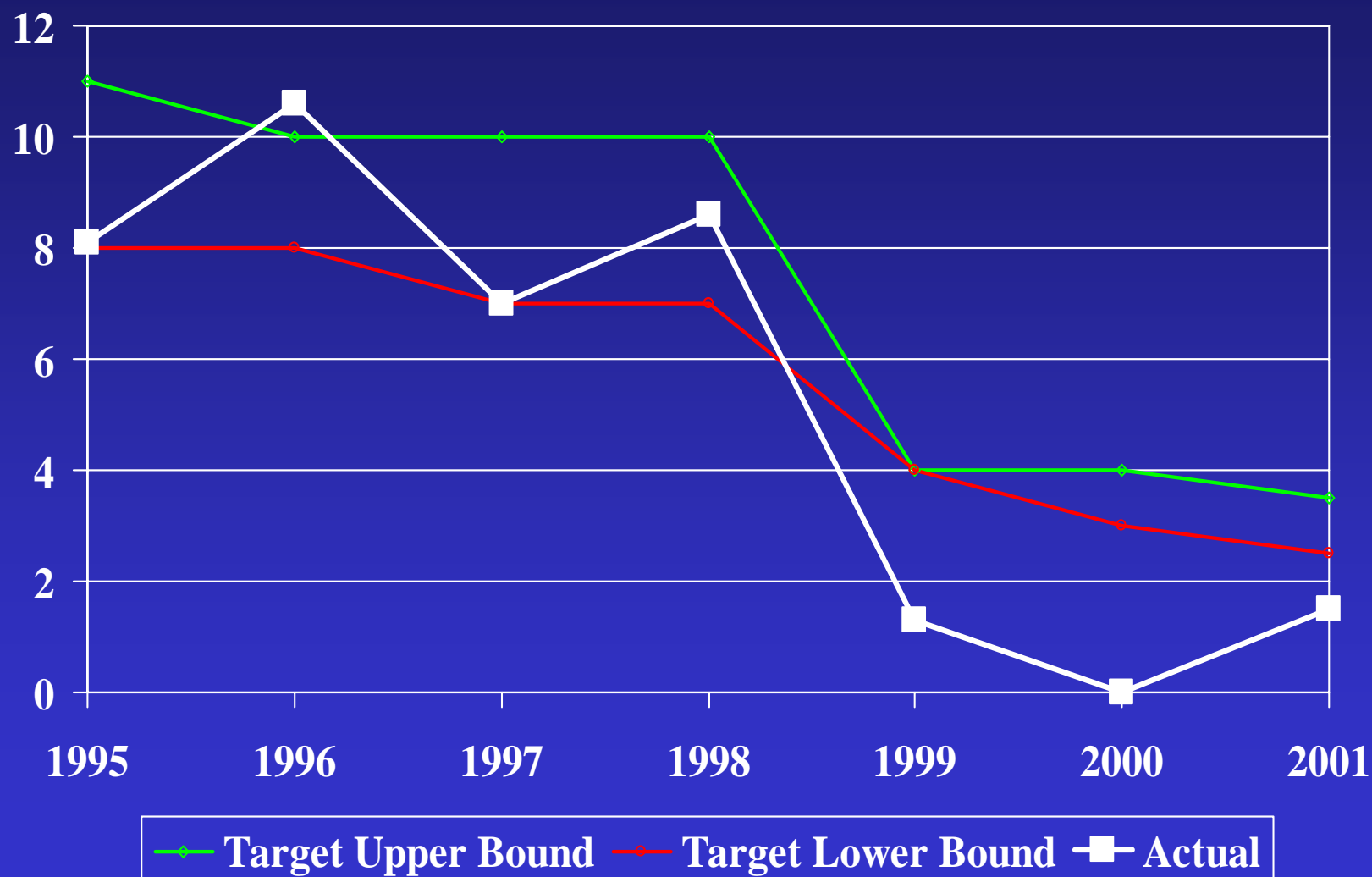
- The 1985 stabilization program managed to bring inflation down immediately to the 15-20% range. And gradually later to the high, single-digit range.
- Price stability (price increases at annual rates of 1-3%) was achieved in the second half on the last decade, but at a real cost of a long period of economic slowdown and rising unemployment that started in 1996 and were aggravated by the eruption of the Intifada in the last quarter of 2000.

- Cost of living adjustments (COLA) to wages are very useful at a time of disinflation. Their absence in Israel in recent years induced wage contracts based on official inflation targets.

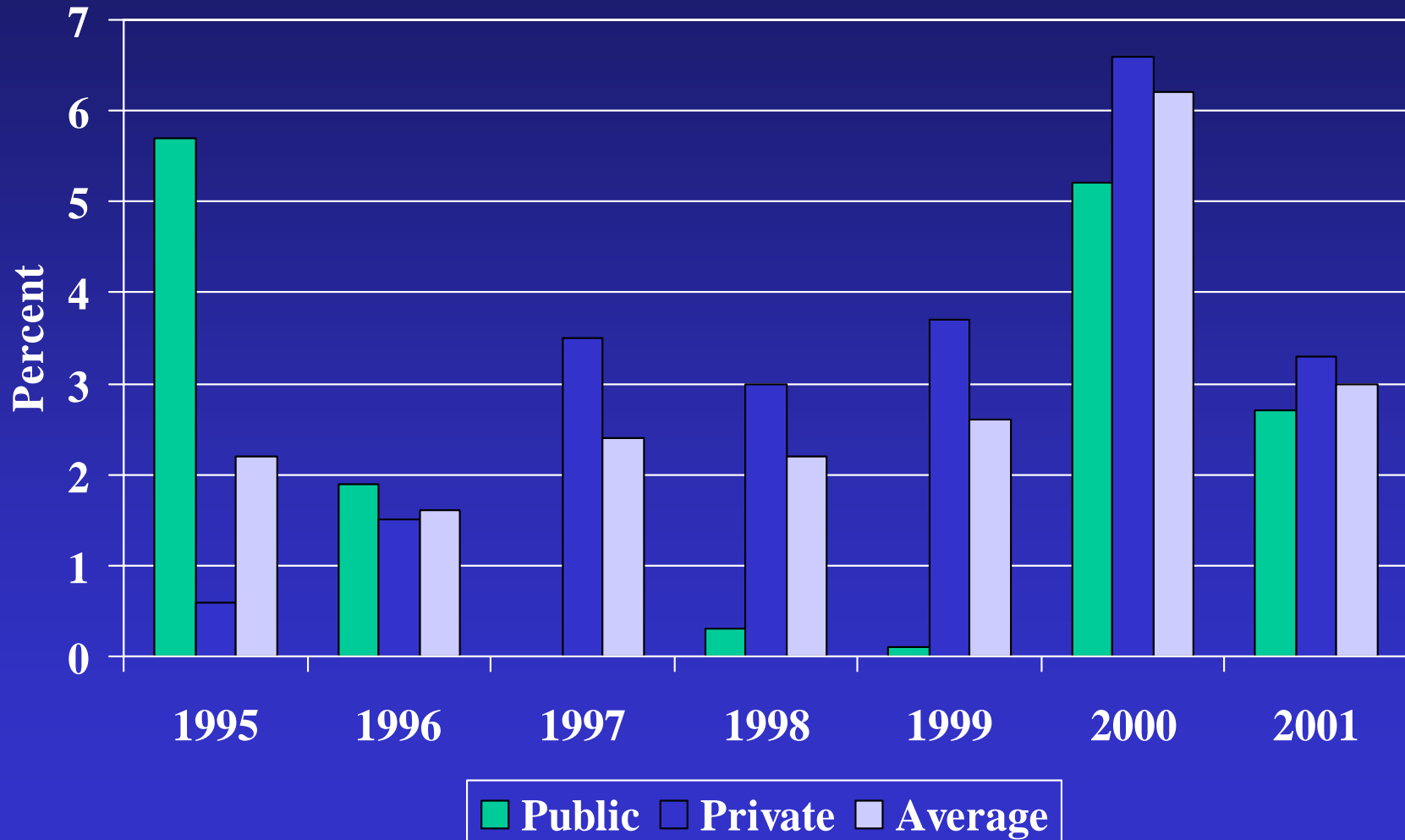
When these targets were consistently (some may say deliberately) missed from below, real wages rose and, consequently, unemployment rose too.

Bringing down the annual inflation rate to the 1-3% range in the second half of the last decade imposed a fairly high economic toll.

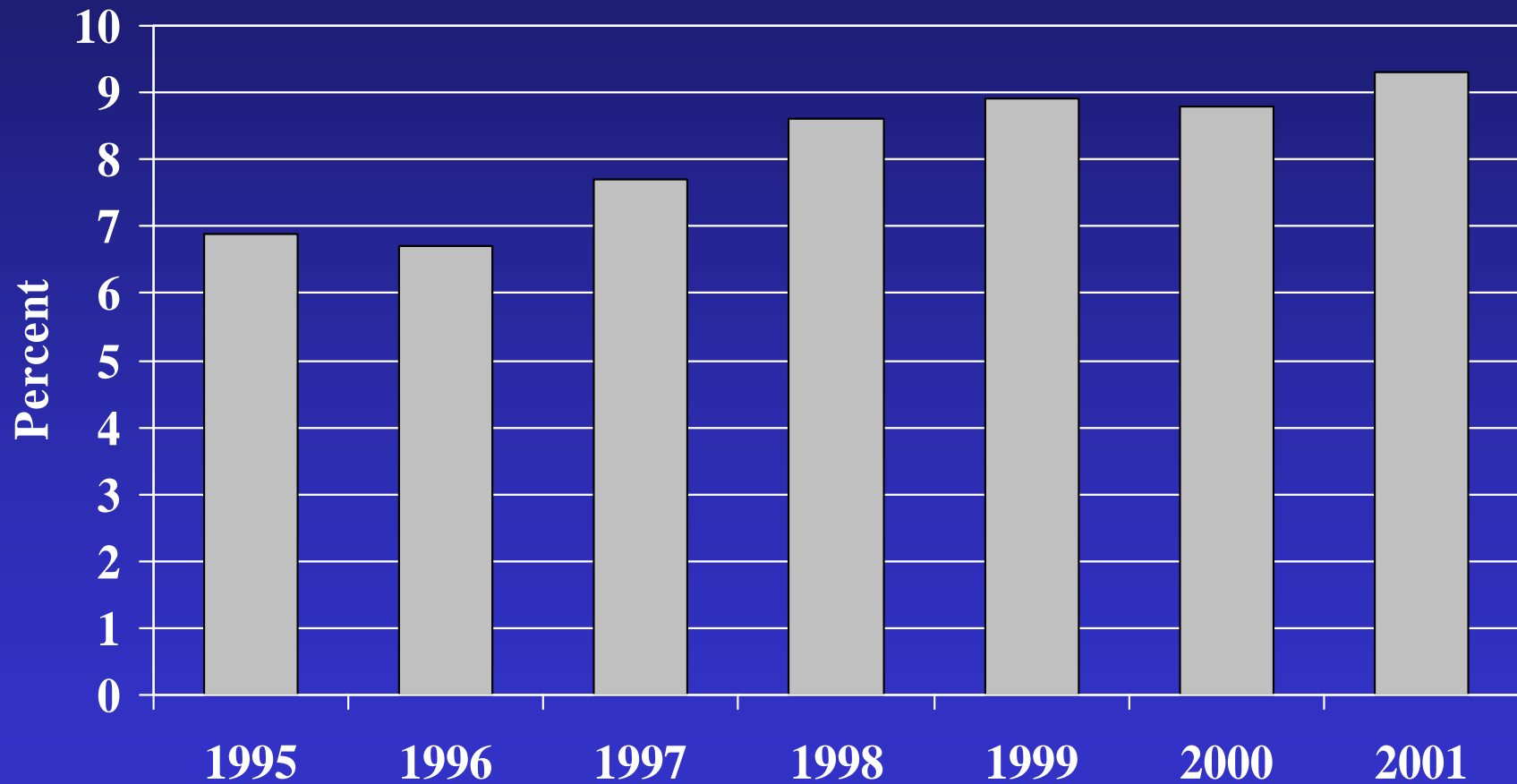
Rate of Inflation – Target and Actual



Change in Real Wage



Unemployment Rate, 1995-2001



- *“There is a time for everything and a reason for every activity under heaven:
... a time to tear down and a time to build ...
a time to tear and a time to mend”*
(Ecclesiastes)

With a totally irresponsible government, one should emphasize almost exclusively just one thing: fiscal discipline, without any “if”, “but”, etc.

Nowadays, we should make two reservations:

- First, it is important not to conduct pro-cyclical fiscal policy.

One should look at the “cyclically adjusted” budget deficit. One measure, suggested by Blanchard, would be to calculate what the budget balance would be in a certain year, if unemployment had not changed from the preceding years.

That is, we eliminate from the budget balance changes in taxes and transfers induced by changes in unemployment with unchanged tax-transfers laws.

- Second, it is important to emphasize that fiscal policy cannot be judged on the basis of just one variable: the budget balance. One should also look at the levels of expenditures and taxes and their composition.

Of particular interest is the level of public investment. Maintaining balanced budget by depressing public investment is a bad policy prescription. It has a negative effect on total factor productivity, labor productivity and economic growth in the long-run.

Accumulated Investment Gap in Roads and Rails (in the 90s)

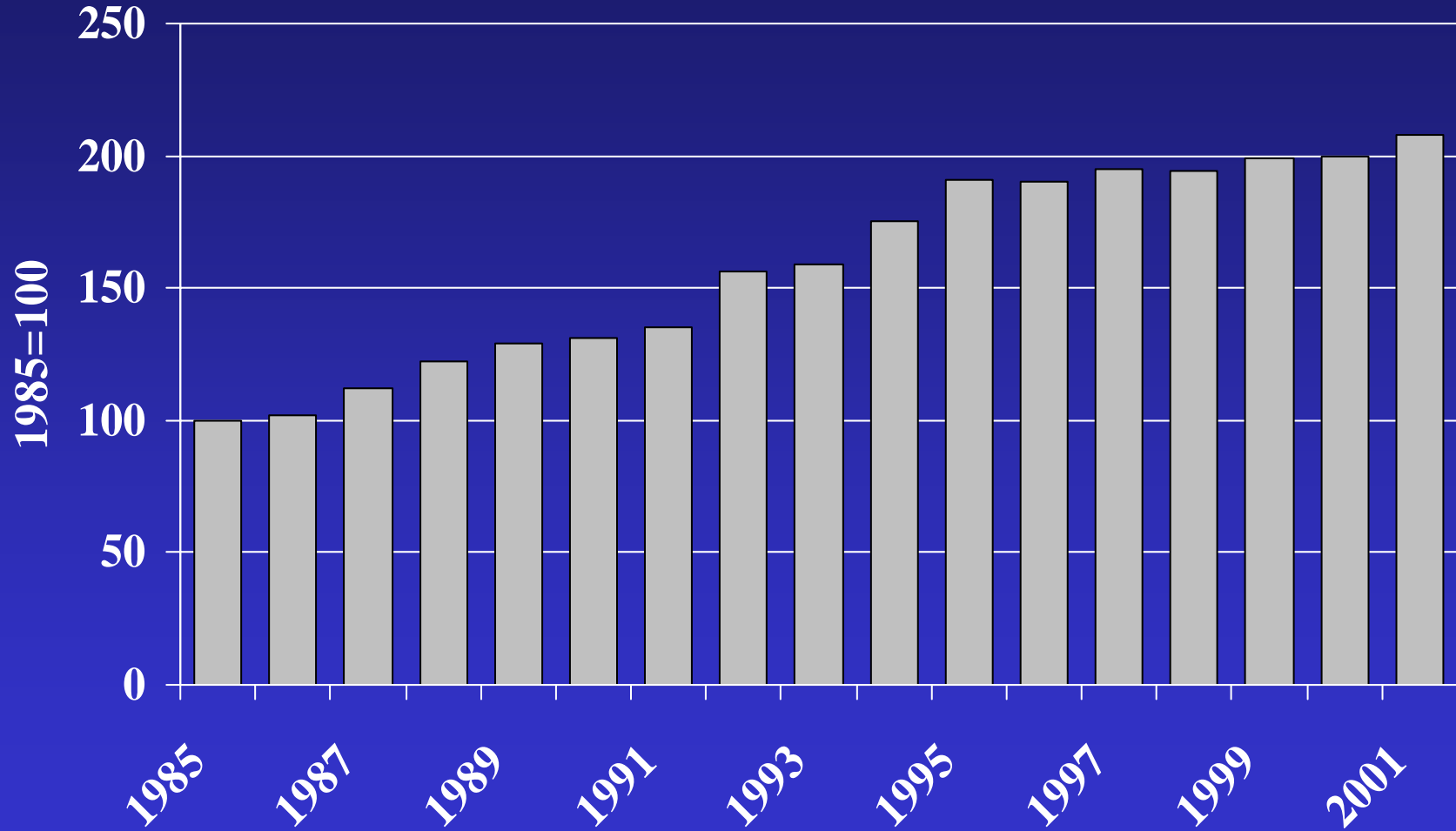
1.42% =Average Investment in the Western Countries, 1991-95

Year	Investment in Israel		Yearly gap in investment between Israel and the Western Countries
	(% of GDP)	(in Billion Shekel, 1999 prices)	
1990	0.47%	1.3	0.95%
1991	0.62%	1.8	0.80%
1992	0.71%	2.2	0.71%
1993	0.90%	2.8	0.52%
1994	0.88%	3.0	0.54%
1995	0.83%	3.0	0.59%
1996	0.92%	3.5	0.50%
1997	0.81%	3.2	0.61%
1998	0.99%	4.0	0.43%
1999	0.79%	3.2	0.63%
		Total	6.30%

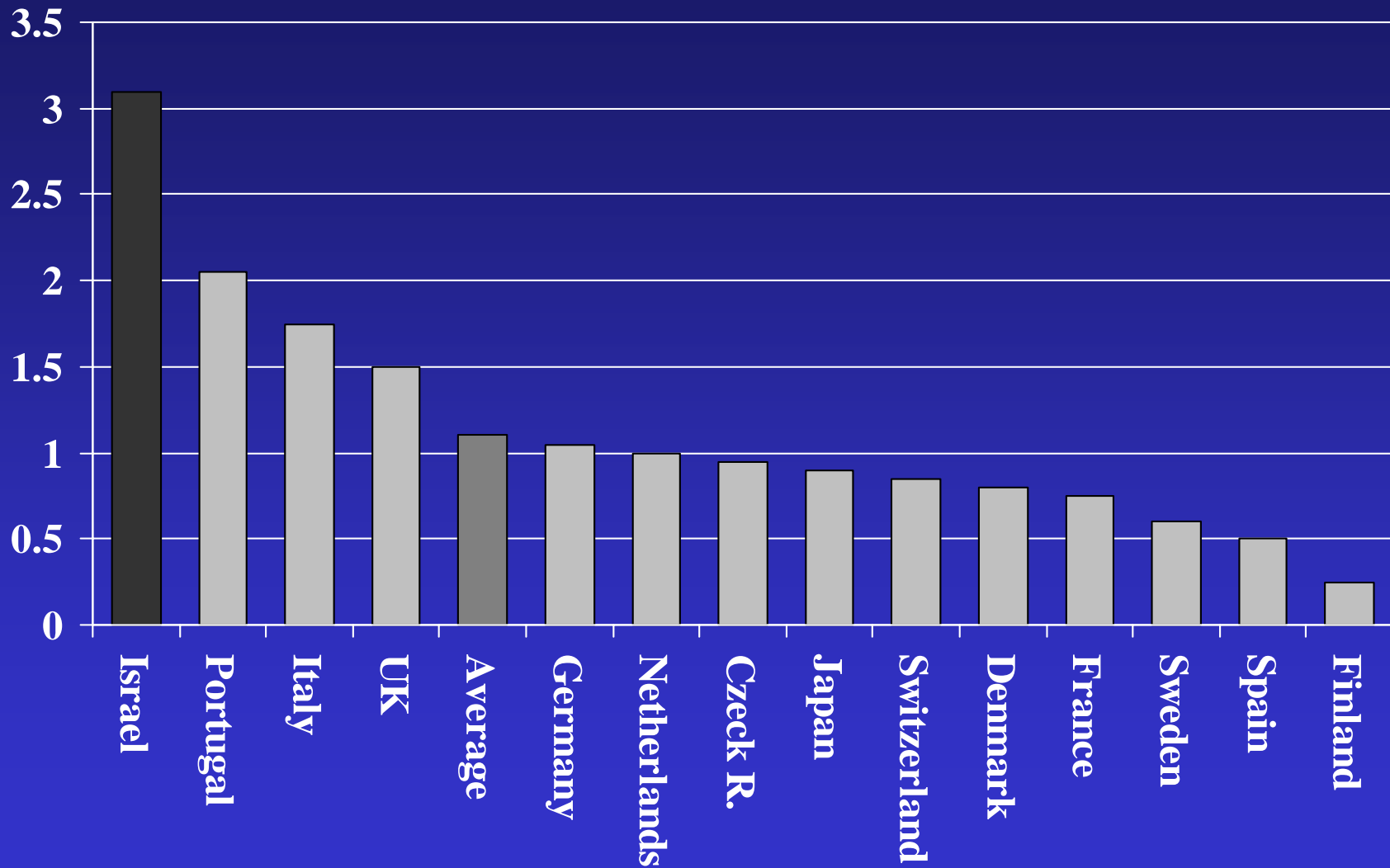
417.4 GDP in 1999 (in Billion of Shekels)

26.3 Accumulated investment gap in roads and rails in the 90s

Traffic Density over Time



Traffic Density Index*



* Adjusted number of kilometers traveled per one kilometer of road, 1996

- Perhaps, fiscal discipline should be examined in terms of public saving rather than in terms of the budget balance (public saving is public balance, minus public investment.)

Long-term public investment may be properly financed by debt. Such a practice may indeed increase the “gross” public debt, but such an increase is accompanied by an increase in the stock of public capital, so that “net” public debt does not rise. Furthermore, a shift from debt-financed to tax-financed public investments imposes an undue, heavy burden on the transition generation. This generation must pay taxes to finance both the debt-financed public investments carried out in the past and the new tax-financed public investments.