

ON THE SUSTAINABILITY OF THE PUBLIC RESEARCH UNIVERSITY

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PUBLIC (LAND-GRANT) UNIVERSITY 3-LEGGED STOOL

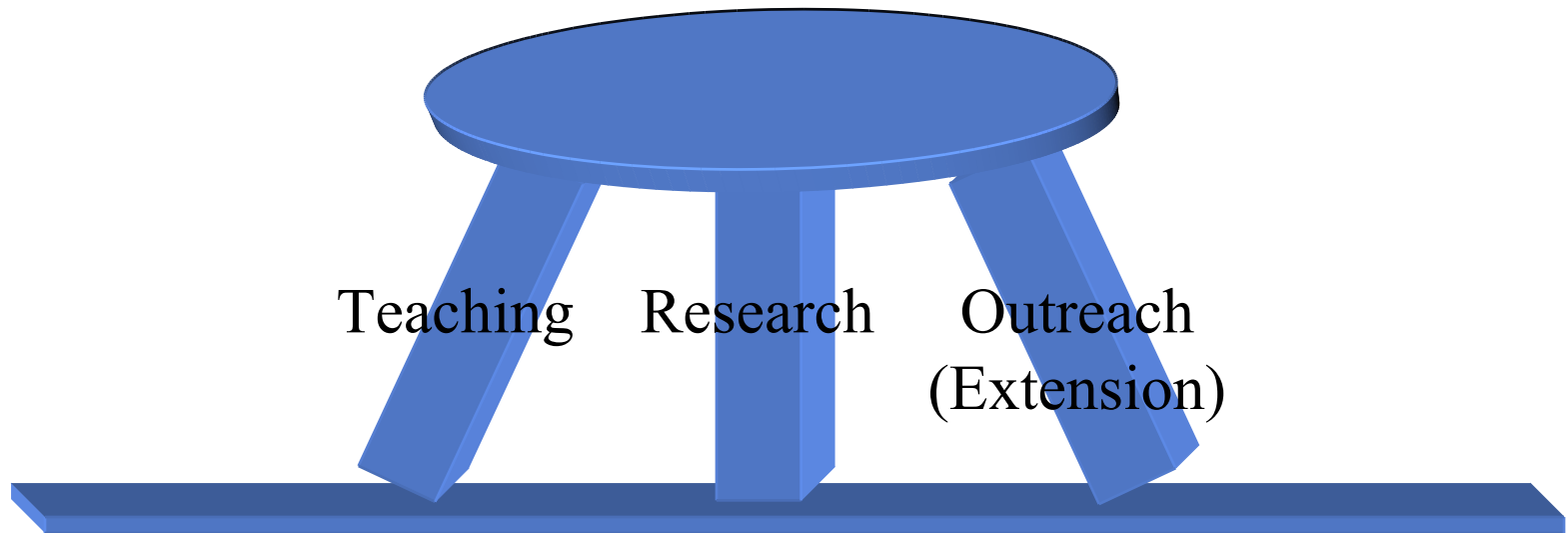
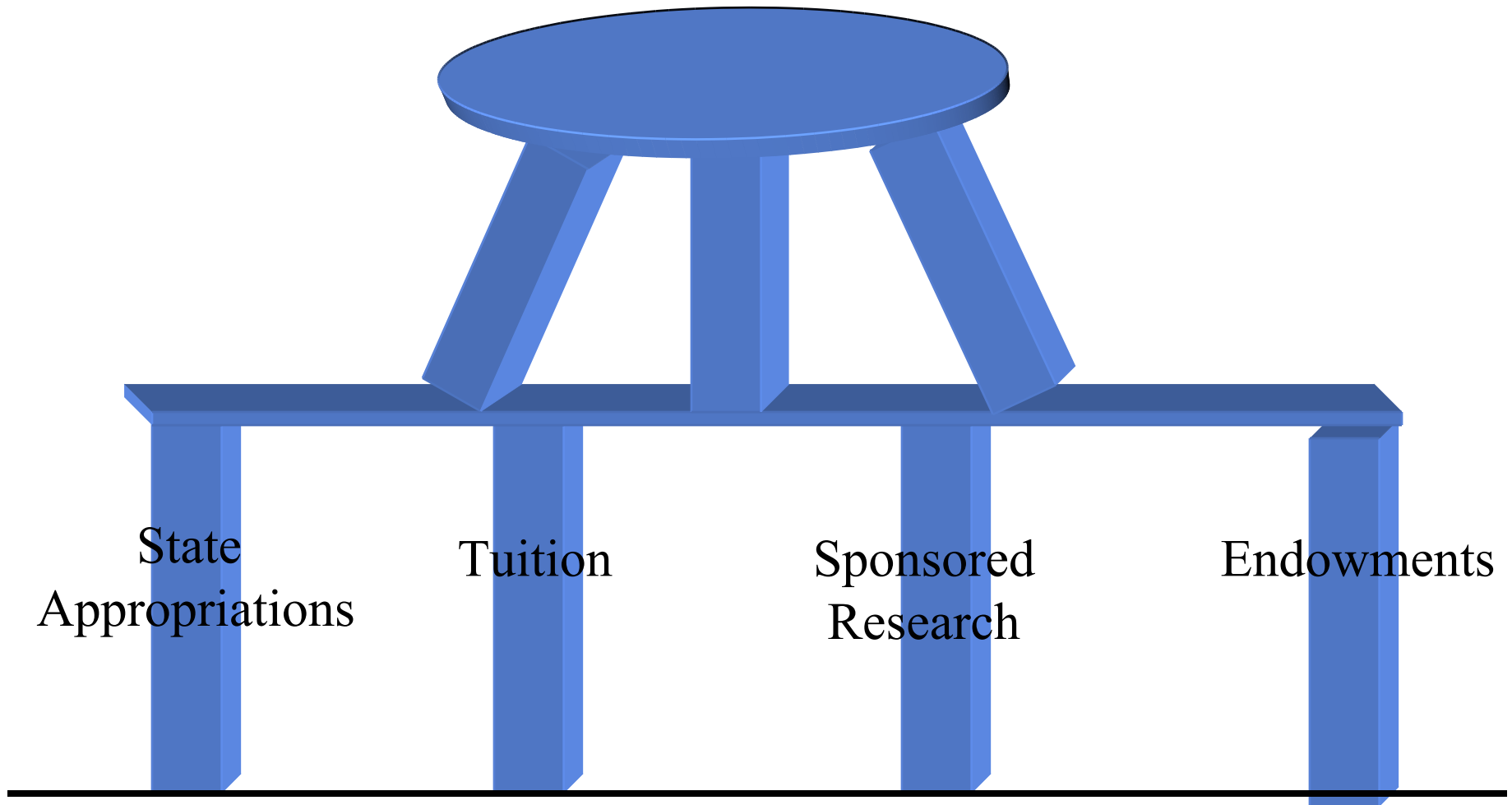
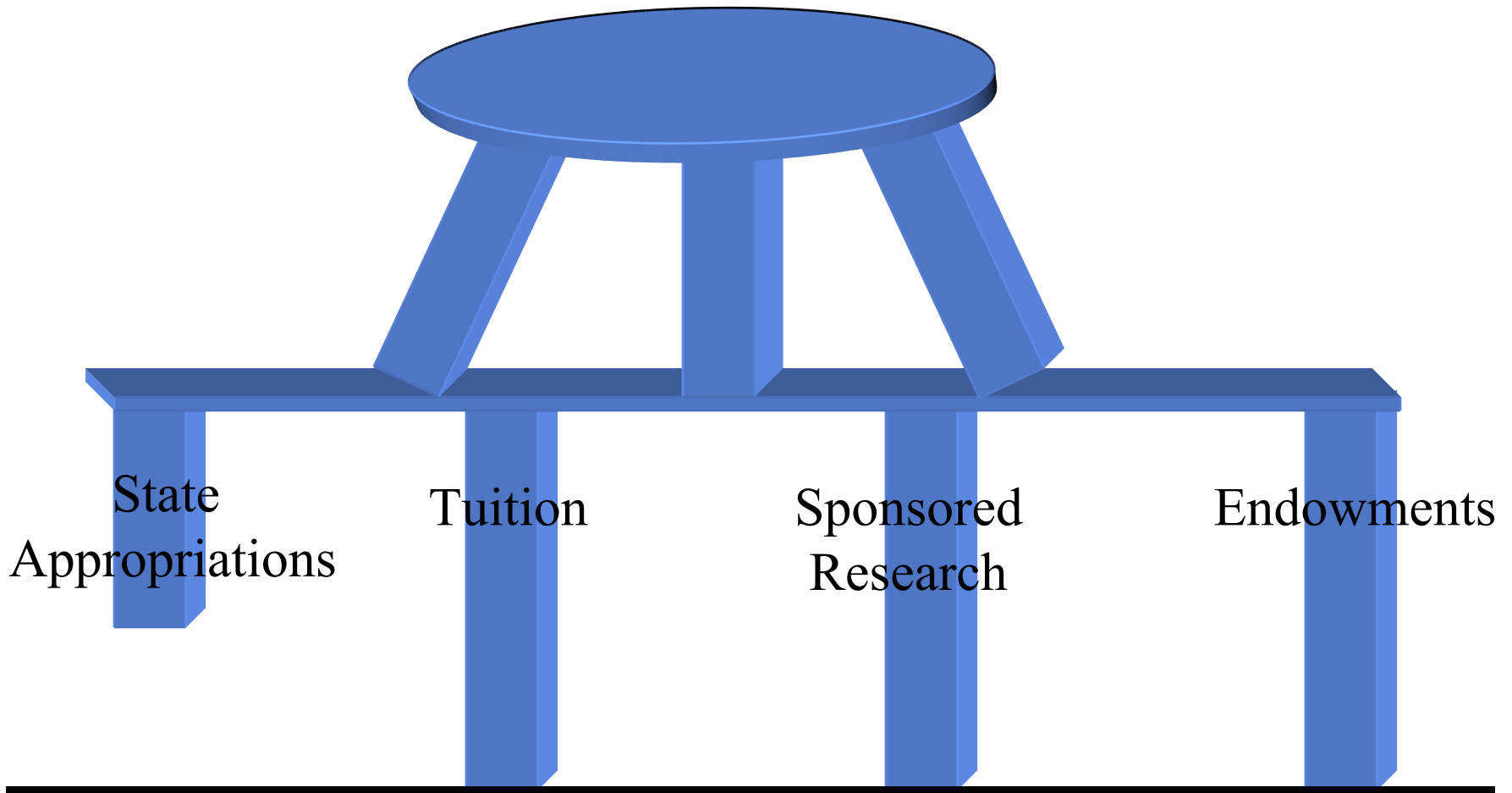


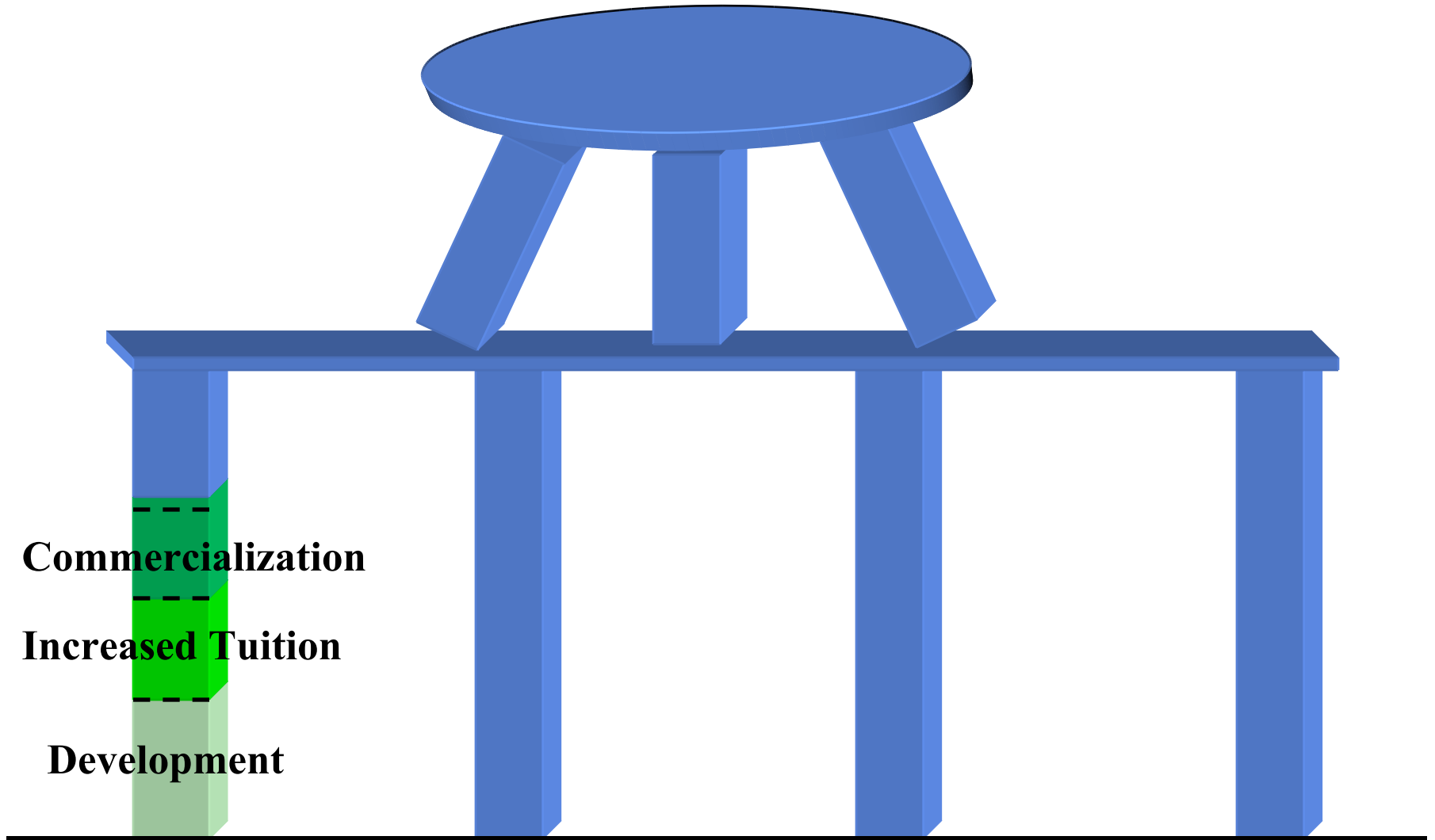
TABLE OF SUPPORT



WOBBLY STRUCTURE



PRIVATIZATION STRATEGY



Share of State Tax Revenues Allocated to Higher Education, U.S. Total, Selected Years, 1980-2000

Year	State Tax Revenue (\$M)	State Allocations to Higher Education (\$ thousands)	Percentage of State Tax Revenue Allocated to Higher Education (%)
1980	194,622	191,012,817	9.82
1985	308,023	28,409,534	9.22
1990	468,650	39,109,108	8.35
1995	625,525	42,973,194	6.87
2000	815,776	5,659,115	6.94

STATE APPROPRIATIONS/GENERAL FUND BUDGET: PENN STATE

- 1970-71 62%
- 1976-77 54%
- 1983-83 46 %
- 1996-97 35%
- 2001-02 31%
- 2003-04 25%

THE NEW REALITY

Fateful Choices-the Future of the American
Academic Research Enterprise (1992)

Privatization of Public Higher Education (2004)

SCIENCE AND TECHNOLOGY POLICY ISSUES

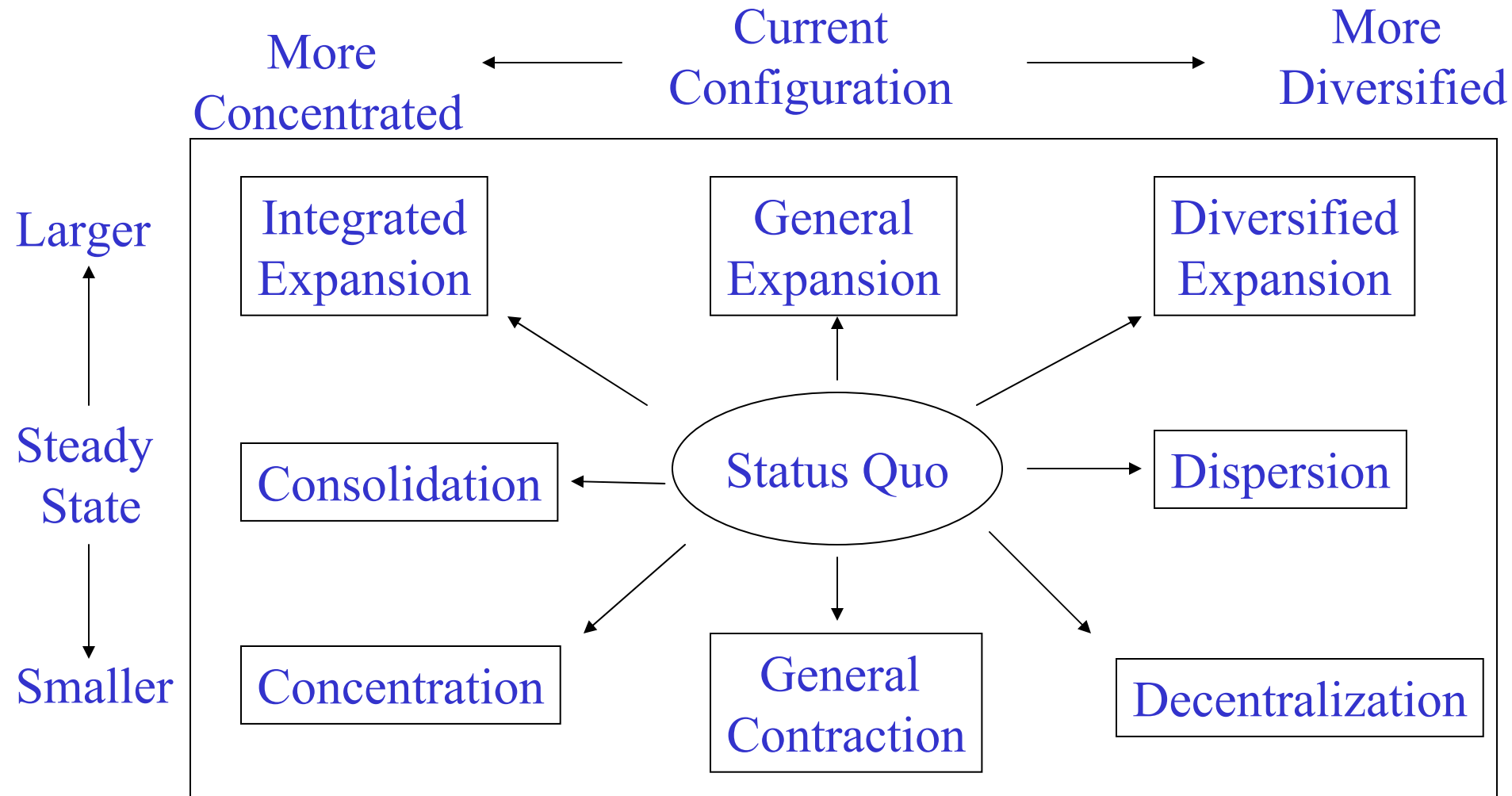
- Structure of the U.S. academic research enterprise—private and public universities
- Feasibility of privatization strategies and their consequences on open science and open education
- Dichotomization of state support of higher education and high-tech economic development programs
- Federalization of competitive dynamics among universities/states
 - Earmarking
 - “EPSCORism”
- Access, equity, and the national supply of trained S&E personnel

CHARACTERISTICS OF ACADEMIC RESEARCH ENTERPRISE

NUMBER OF INSTITUTIONS, BY CARNEGIE CLASSIFICATION

	1970			1994		
	Total	Public	Private	Total	Public	Private
Doctorate-granting Institutions	173	109	64	236	151	85
Research Universities I	52	30	22	88	59	29
Research Universities II	40	27	13	37	26	11
Doctorate-granting Institutions I	28	18	10	51	28	23
Doctorate-granting Institutions II	28	18	10	60	38	22
Comprehensive universities and colleges	456	309	147	529	275	245

STRUCTURE OF ACADEMIC ENTERPRISE



**TOP RANKED BASKETBALL
TEAMS, 2004
(PRE-MARCH MADNESS)**

Duke

Stanford

St. Joseph's

Gonzoga

INCREASING COMPETITIVE EDGE OF PRIVATE UNIVERSITIES

Widening salary differentials

Larger endowments

Greater flexibility

Private universities held 7 of the top 10 and 12
of the top 22 spots

Top American Research Universities (2002)

UC BERKELEY FIGHTING TO RETAIN TOP PHYSICISTS

“Although still a powerhouse, the (physics) department over the last 4 years has lost 6 of about 50 tenured professors-all rising or established stars. They have headed mostly to top-notch private universities”

Centre Daily Times, April 4, 2003

FEASIBILITY OF COMMERCIALIZATION STRATEGIES

Intellectual property income—how much,
how reliable, and at what financial and
institutional cost?

AUTM DATA (2002)

- Gross license income: 228 institutions -- \$1.3B
- Highly skewed, by institution and patent
- Penn State -- \$1.3M
- Michigan -- \$5.3M
- L.S.U. (Agricultural Center) -- \$1.4M

PENN STATE APPROPRIATION REQUEST, 2004-05

“The university is requesting an increase of \$28.4M to restore the appropriation to the level provided by the commonwealth three years ago, before a series of cuts in our appropriations”

DECLINE OF PUBLIC INTEREST SCIENCE

Erosion of the public university's role as a
source of disinterested scientific expertise

DICHOTOMIZATION OF STATE ECONOMIC DEVELOPMENT AND HIGHER EDUCATION STRATEGIES

- Overemphasis on strategic targeted initiatives
- Narrow reading of history and economics of university-based contributions to technological innovations
- Marginal and volatile programs
- Inattention to distributional impacts
- Inconsistent with state aspirations for increased number of nationally ranked universities

TEXAS UNIVERSITIES FACING STEEP CLIMB TO THE TOP TIER

“It would require an elusive consensus among the state’s political leaders, as well as stout financial support for 2 or 3 decades, for even one of these (6) institutions to become a player on the national stage, education leaders agree”

Austin American-Statesman, April 5, 2004

FEDERALIZATION OF UNIVERSITY/STATE COMPETITIONS

Neither public nor private universities have demonstrated a willingness to accept a market driven triage, including that being caused by reductions in state support of public research universities

CHALLENGES TO PRECEPTS OF COMPETITIVELY BASED, MERIT REVIEW

- Increase in academic earmarks (FY2003--\$2.0B) and number of institutions receiving earmarks (716)
- Increase in federal expenditures for EPSCOR-like programs and number of states seeking EPSCOR status (5 → 23 →?)

AFFORDABILITY AND ACCESS

S.F. State May Drop Engineers School

“The move would leave few options for low-income students in and around San Francisco who plan to major in engineering”

San Francisco Chronicle, April 6, 2004