

# Status and Outlook for Research Funding at U-M

90<sup>th</sup> Annual Research Report to the  
Regents

Steve Forrest, Vice President for Research  
January 19, 2012

# The Research Enterprise at U-M

3<sup>rd</sup> largest segment at U-M

- Health System: ~ \$2.4 B
- Education: ~ \$1.3 B
- Research: ~\$1.2 B

# Research and Education

*The University fulfills three basic, interlocking functions: to educate youth in the widest possible variety of intellectual disciplines; to collect, increase, and disseminate knowledge that bears on these disciplines; and to perform those services for society, both individually and collectively, which, consistent with its education and research functions, it is peculiarly qualified to perform.*

– Harlan Hatcher, 8<sup>th</sup> President of U-M in the 40<sup>th</sup> Annual Report on Sponsored Research, 1962

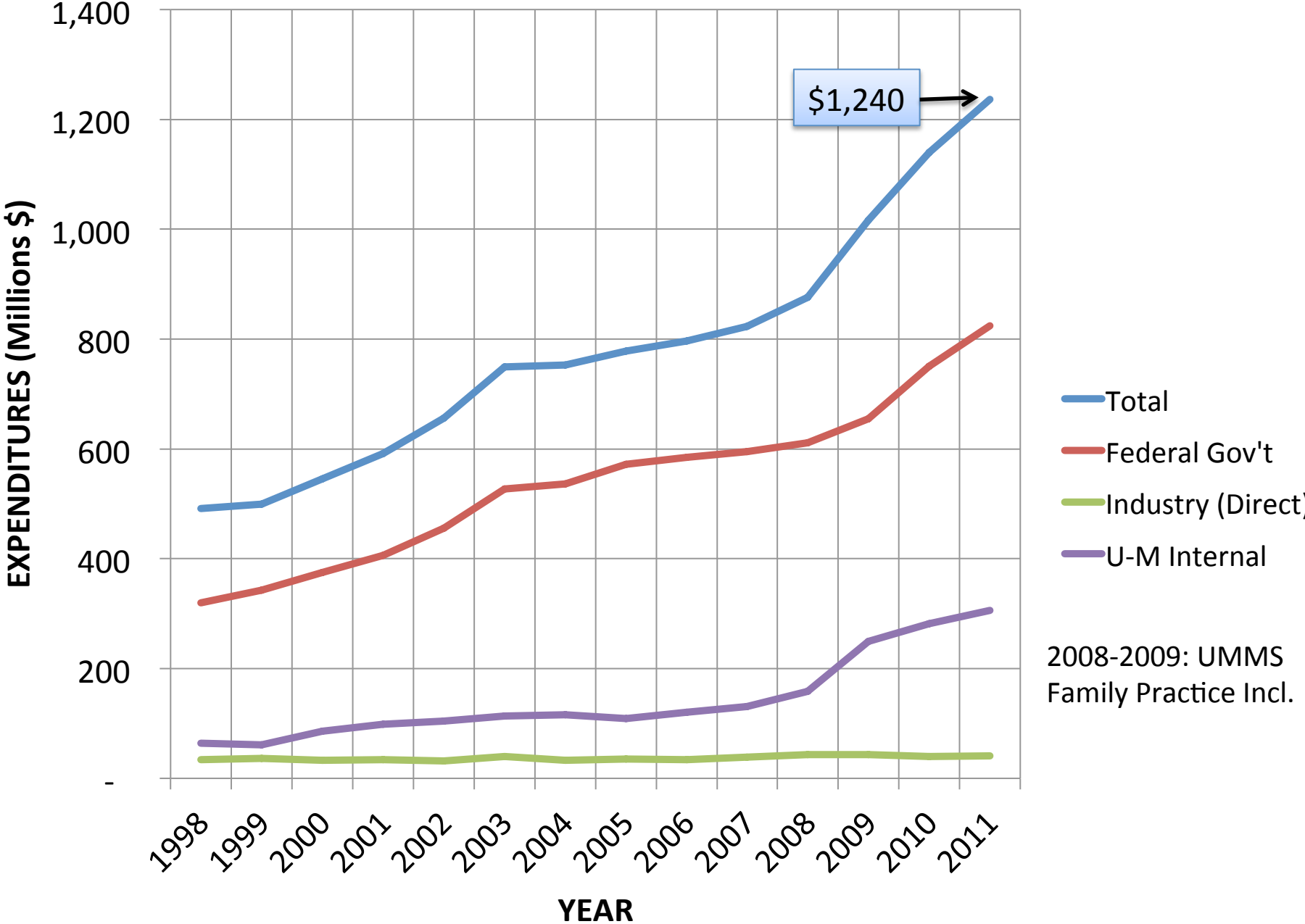
*Universities and colleges serve a dual role, as the main source of basic research in the United States and as the training ground for new researchers.*

– Chronicle of Higher Education, 2012

# The Challenge

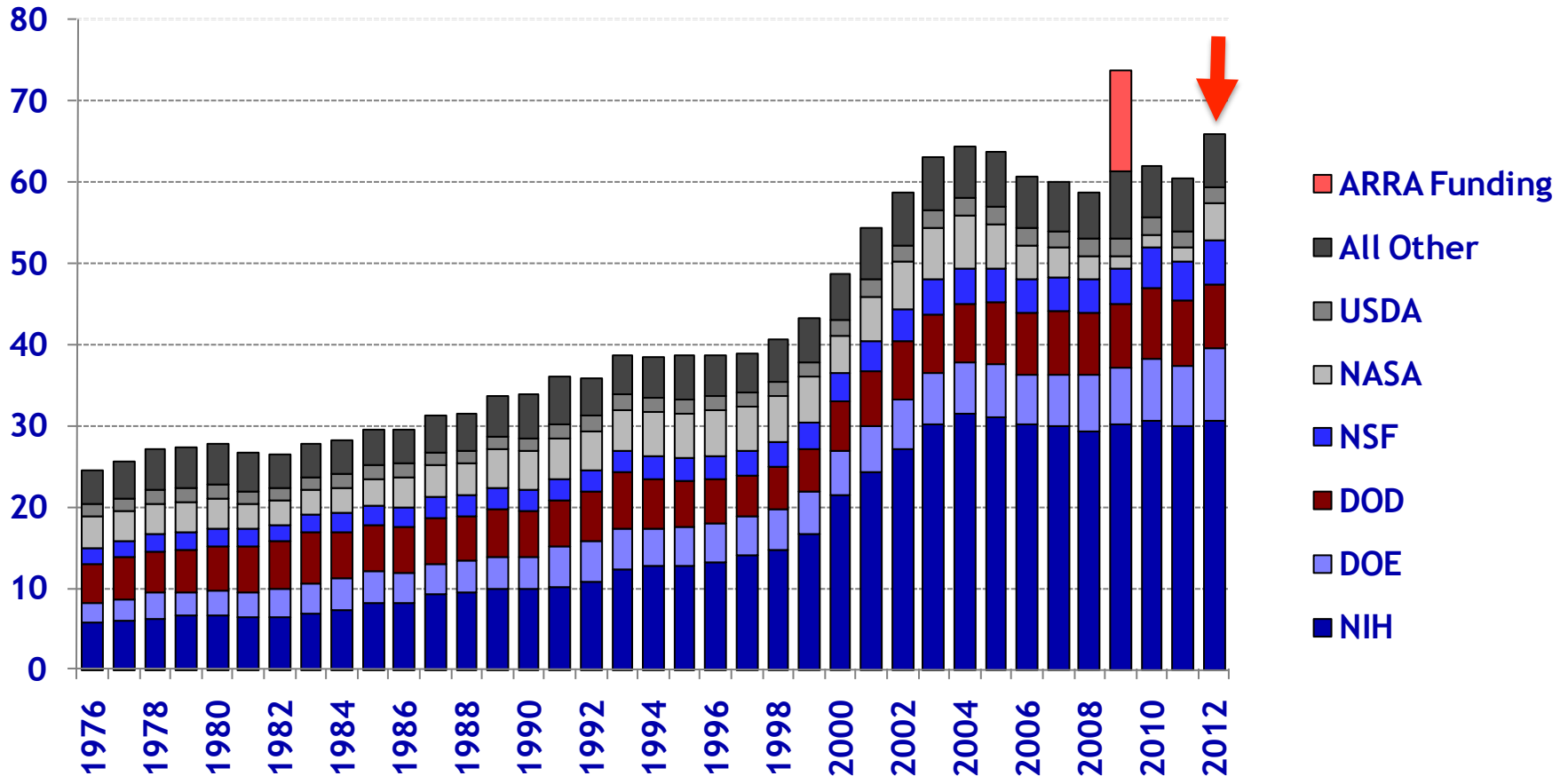
In a time of flat or declining federal funding for research, how does U-M's research enterprise continue to thrive and grow?

# U-M Research Expenditures: Historical Trends



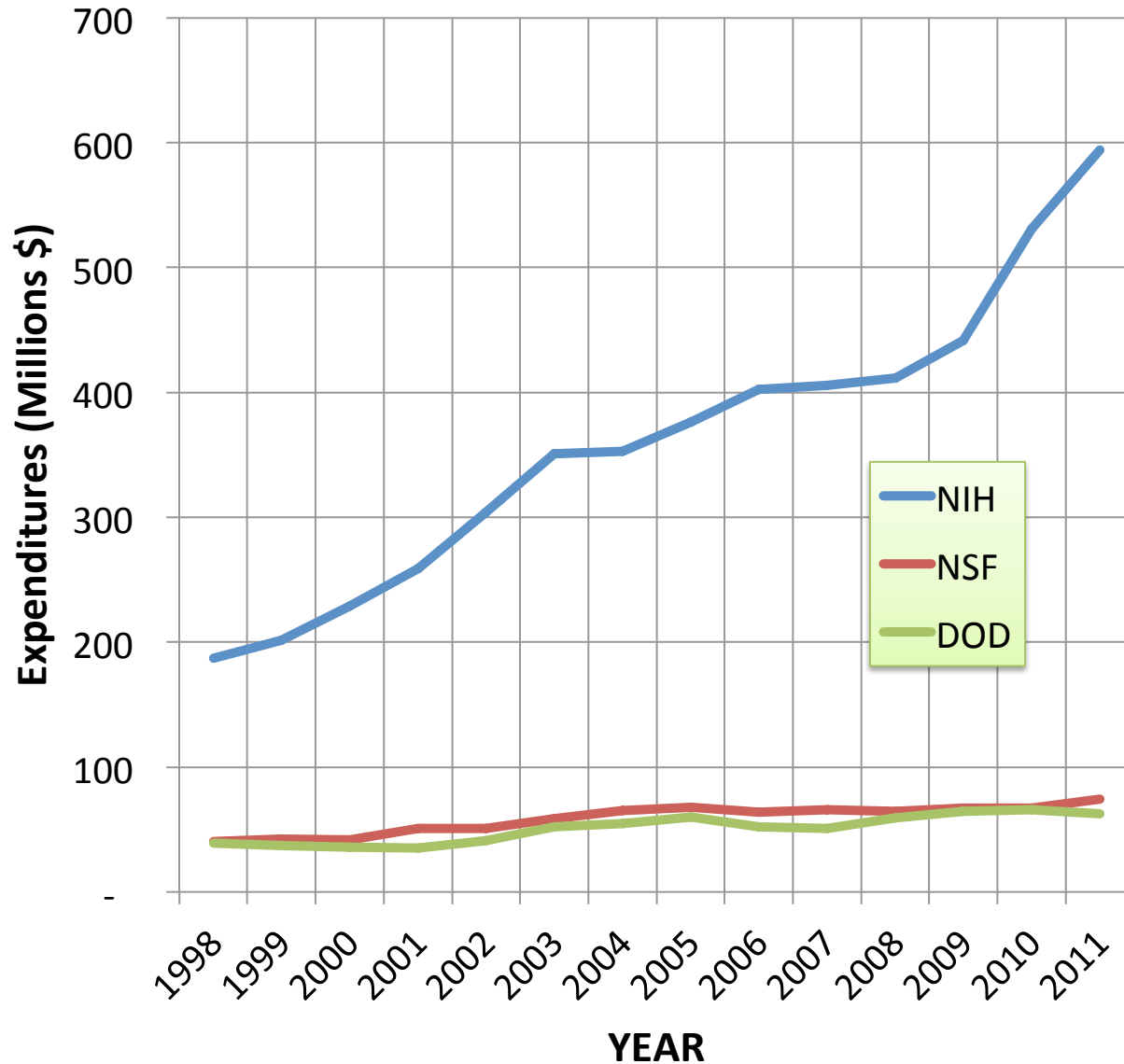
# Trends in Research by Agency

in billions of constant FY2011 dollars



Source: Up to 1994 - National Science Foundation / National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development;  
1995 to Present - *AAAS Report: Research and Development* series;  
FY 2011 and FY 2012 figures are latest estimates.  
Research includes basic research and applied research.

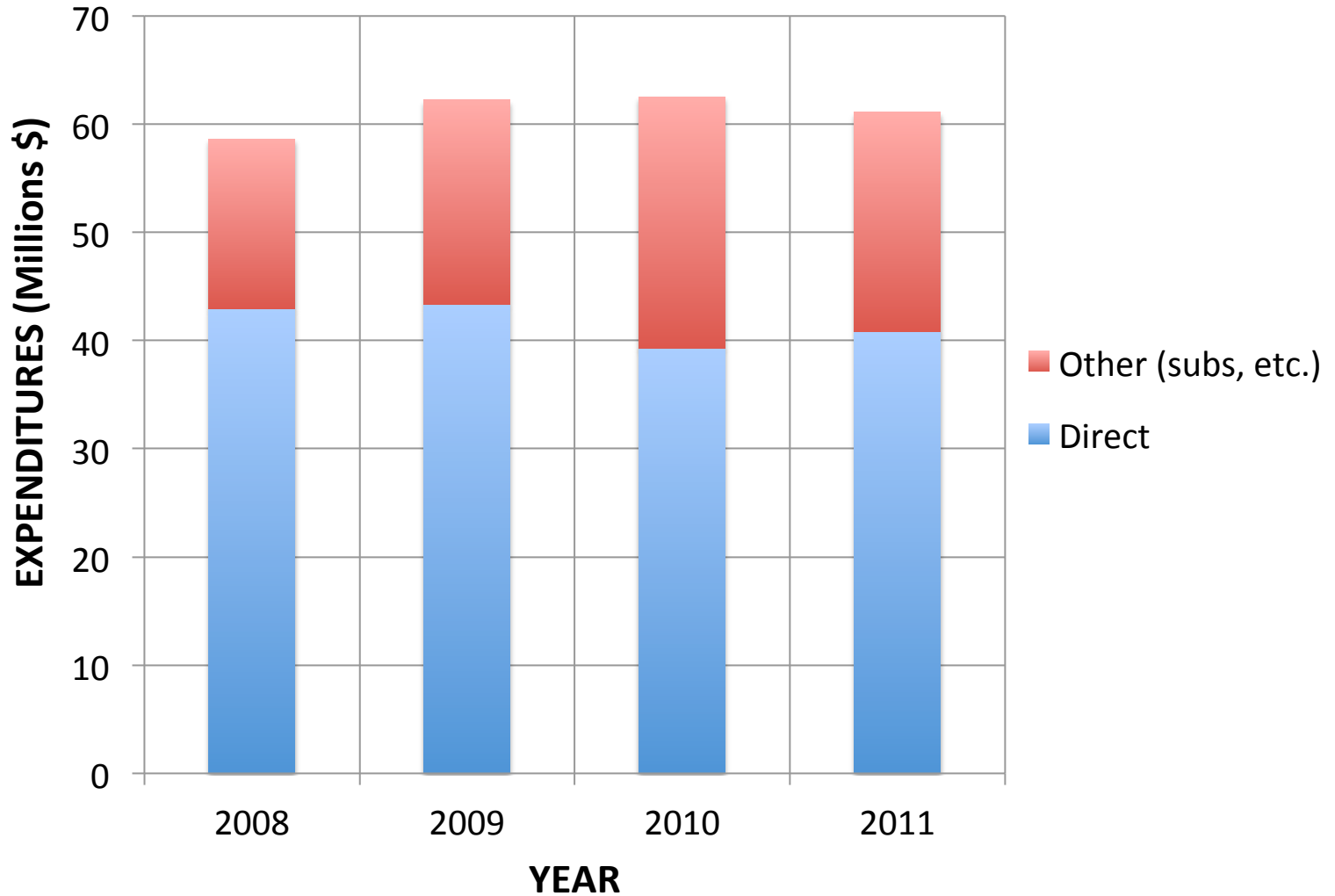
# U-M Research Expenditures by Agency



## Notable Growth: 2011

- NIH: +12.6%
- NSF: +10.3%
- DOD: -4.9%
- Energy: +44%
- NASA: -6.5%

# The Role of Industry

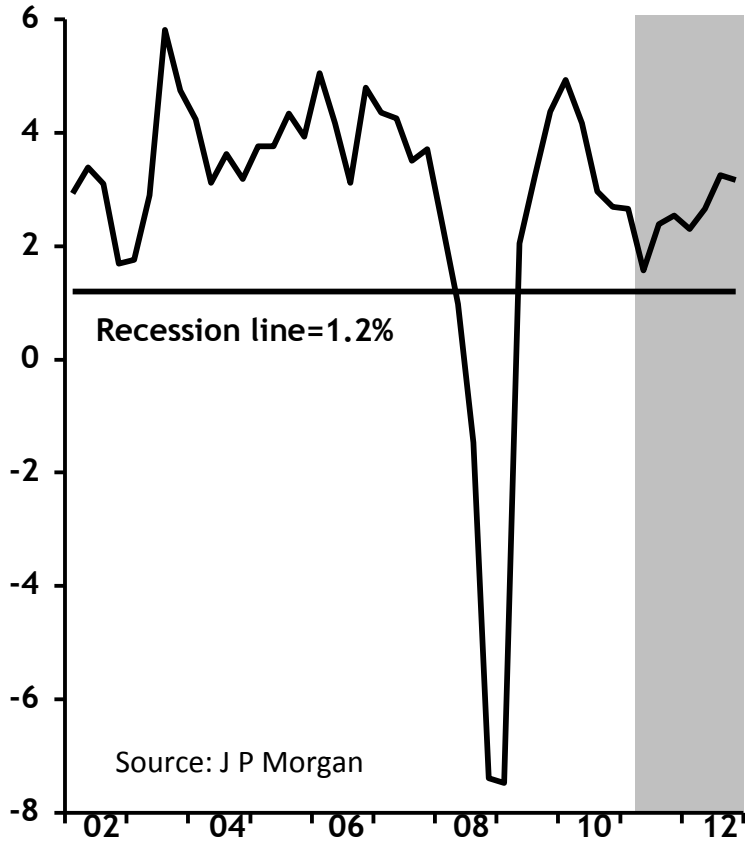


A small, but important segment: **A catalyst**

# A worrisome growth forecast

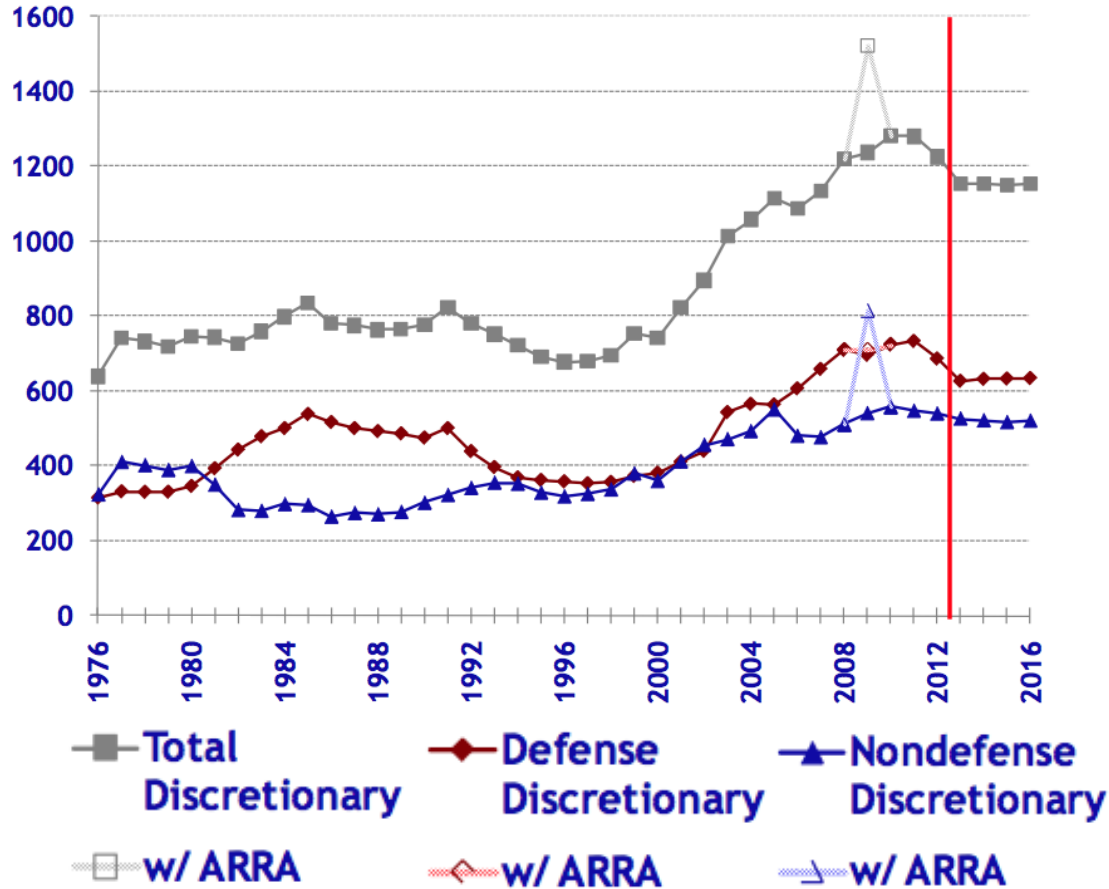
## Global GDP

%q/q, saar



## Trends in Discretionary Spending

Budget authority in billions of constant FY11 dollars

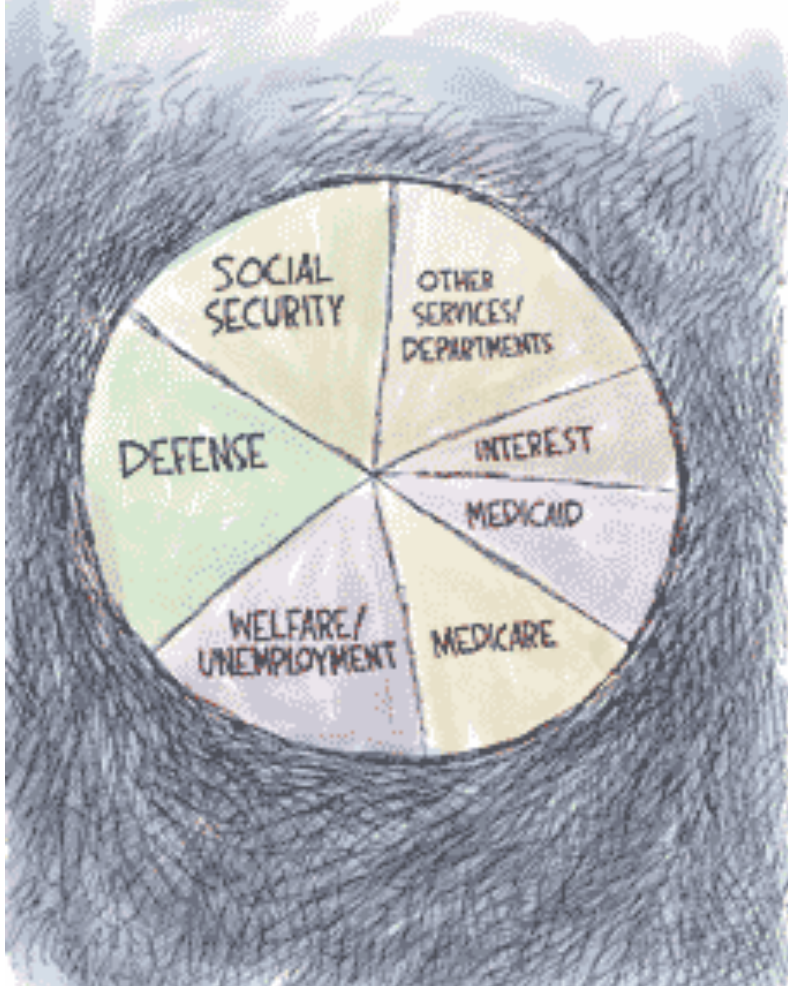


Source: Budget of the U.S. Government, FY 2012

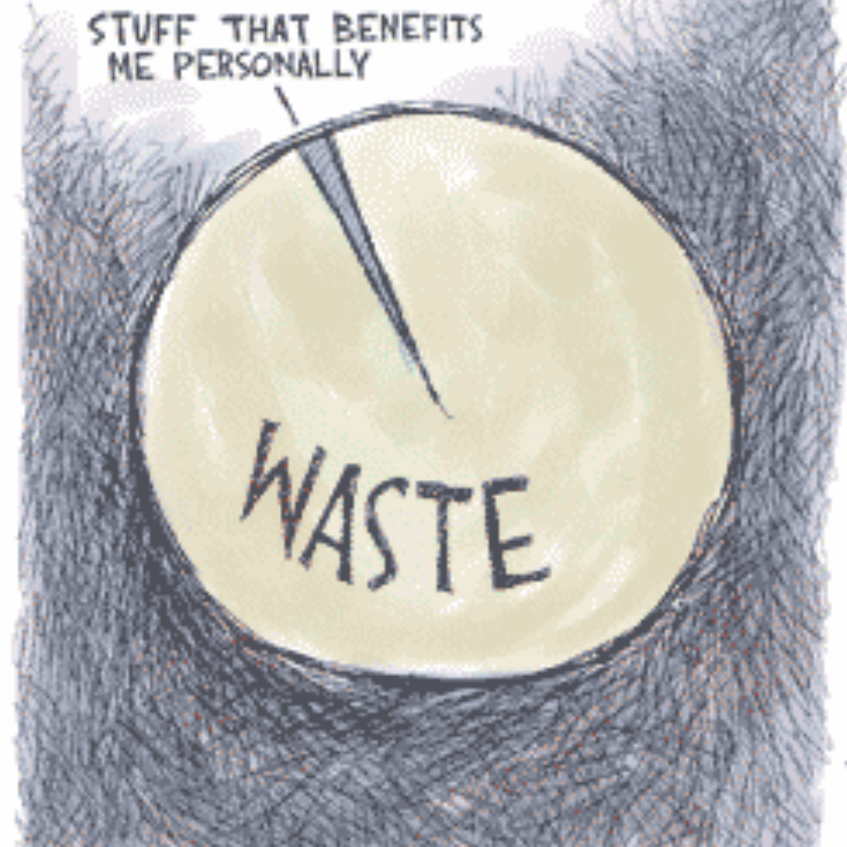
© 2011 AAAS

# Understanding Washington DC

## FEDERAL SPENDING



## FEDERAL SPENDING *as Viewed by the* AVERAGE AMERICAN



NICK ANDERSON 2-15-11  
HOUSTON CHRONICLE

# Future Perspective

- We anticipate significant budget cuts across all agencies
- Near term relief should not be mistaken for long term situation
- Trends likely to persist over time (~5 years)

# Staying Above the Storm

**First: Focus on our strengths that are priorities for the federal government and industry, including**

- Health
- Energy
- Intelligent Vehicle Systems
- Manufacturing
- Sustainability

# Staying Above the Storm

## Second: Build on the U-M culture/environment

- Our reputation for excellence
- Strengths across disciplines
- Interdisciplinary cooperation
- Use-inspired research
- Ties to industry
- International relationships
- NCRC

# Staying Above the Storm

## Third: Streamline our administrative processes

- Improve proposal competitiveness
- Improve research administration
- Reduce barriers to working with industry

**M** UNIVERSITY OF MICHIGAN

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Office of the Vice President for Research