

# How Much Should We Rely on Fiscal Stimulus?

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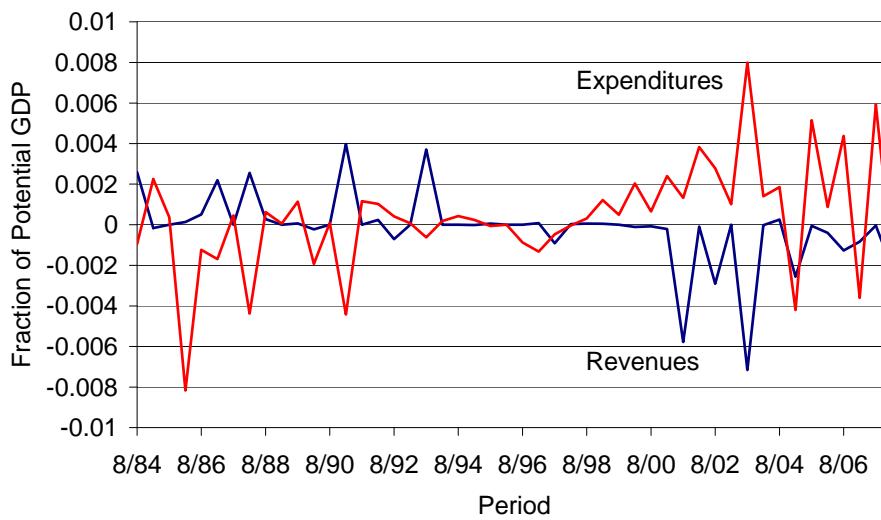
## Overview

- Historical perspective: how active has fiscal policy been?
- Related questions:
  - can policy actions be anticipated?
  - what are the implications?
- Is discretionary policy helpful at stabilization?
- What about automatic stabilizers?

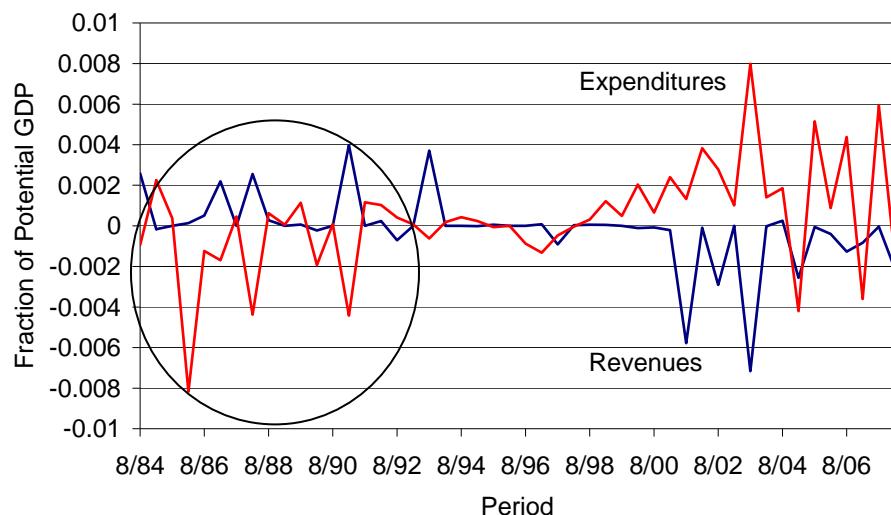
## How Active Has Policy Been?

- What is a policy *change*?
- Define policy changes as measured by CBO: policy-related changes in revenues and non-interest expenditures between forecasts
  - Use weighted sum of current and future fiscal years' policy changes, as estimated by CBO
  - Semi-annual frequency since 1984
  - Scaled by potential GDP

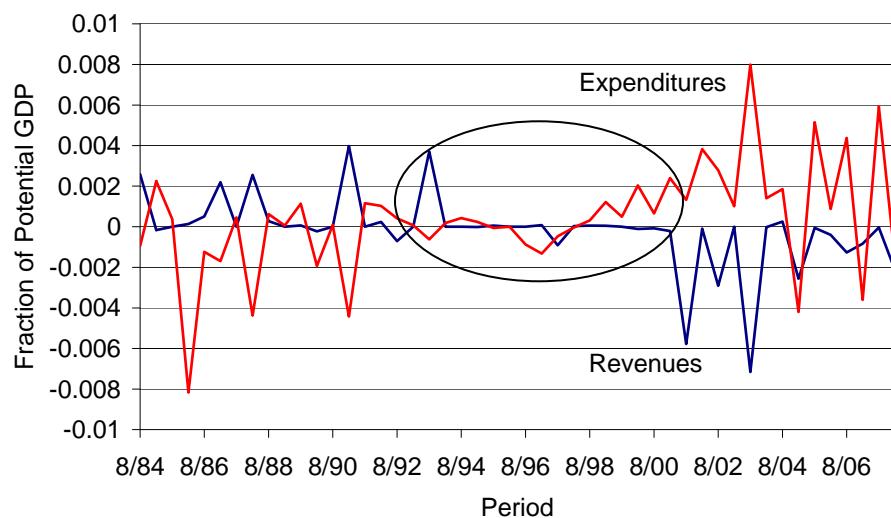
### Changes in Revenues and Spending



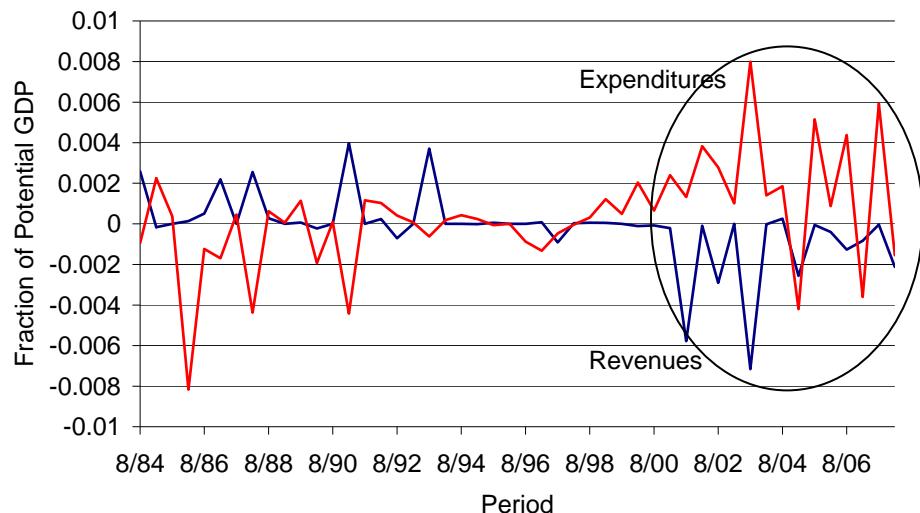
## Changes in Revenues and Spending



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## Policy Reaction Functions

(t-statistics in parentheses)

Dependent Variable:	Revenue Changes			Spending Changes			
	Sample Period:	Full Sample	Clinton	GWB	Full Sample	Clinton	GWB
Intercept		-0.001 (3.959)	-0.001 (1.191)	-0.002 (2.628)	0.002 (4.008)	0.001 (3.117)	0.002 (1.408)
Output Gap (-1)		-0.074 (3.273)	-0.068 (1.348)	-0.067 (0.851)	0.117 (3.464)	0.060 (1.729)	0.197 (1.648)
Projected Surpluses (-1)		-0.075 (4.628)	-0.069 (1.753)	-0.082 (1.805)	0.111 (4.595)	0.079 (2.925)	0.116 (1.708)
$R^2$		.294	.152	.103	.289	.606	.096
Observations		48	16	14	48	16	14

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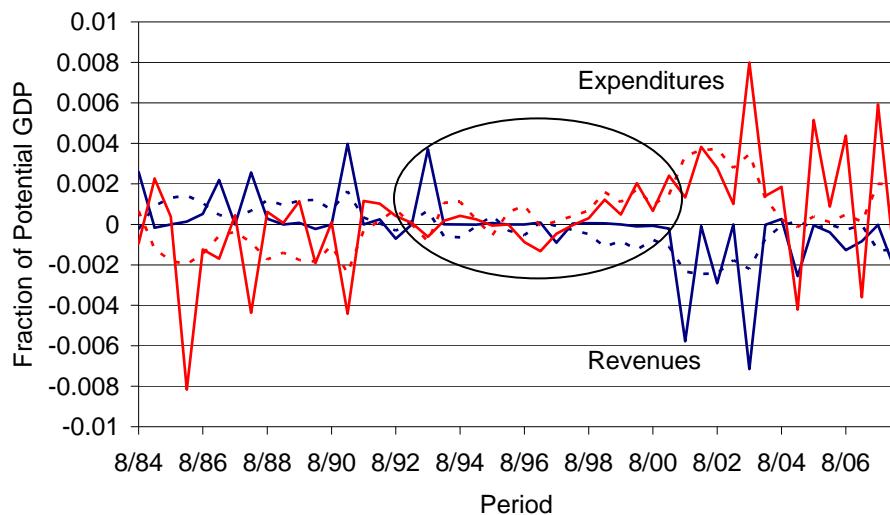
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## Changes in Revenues and Spending



## Investment Incentives

- A quiet period from 1987-2001
- Since then, bonus depreciation
  - introduced (at 30%) in 2002
  - expanded (to 50%) in 2003
  - expired at the end of 2004
  - reintroduced in 2008 (for 2008 only) as part of stimulus package

## Investment Incentives

- Note that virtually all changes in incentives have been tied to investment, rather than to income (e.g., via tax rates)
- These two approaches have very different announcement effects
  - Expected investment incentives *discourage* investment
- How predictable have the changes been?
  - Consider annual data since 1962

## Changes in Investment Incentives

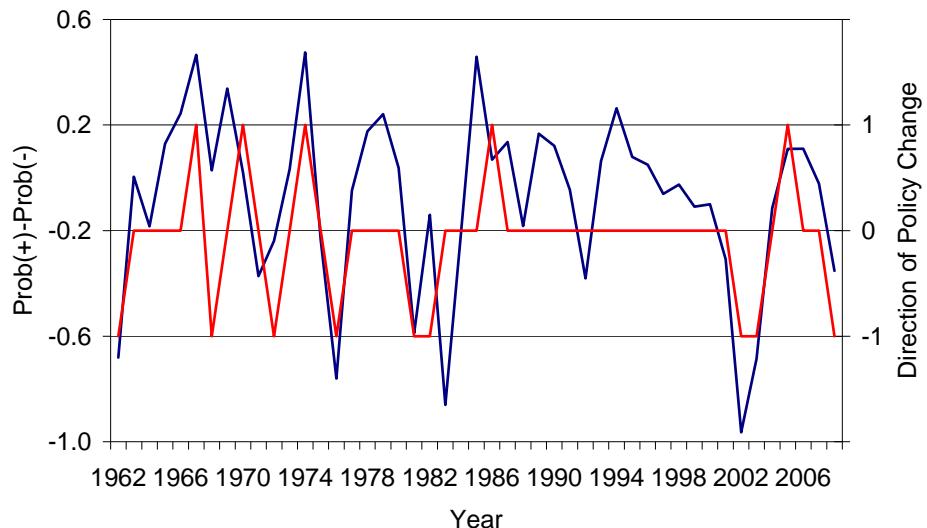
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### Ordered Probit Analysis

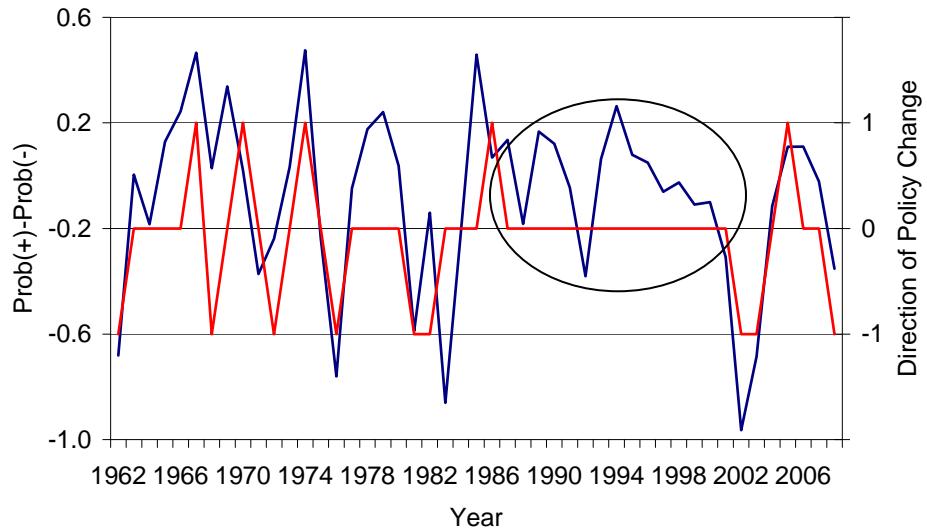
Dependent Variable:  
Increase/ Decrease in User Cost  
by at least 0.5 percentage points

Intercept	0.654 (1.783)
Surplus (-1)	-31.800 (2.090)
Output Gap (-1)	-27.073 (2.395)
Change in Equipment Investment (-1)	182.978 (2.981)
Scaled R <sup>2</sup>	.423
Observations	47

Investment Policy Changes: Actual and Predicted



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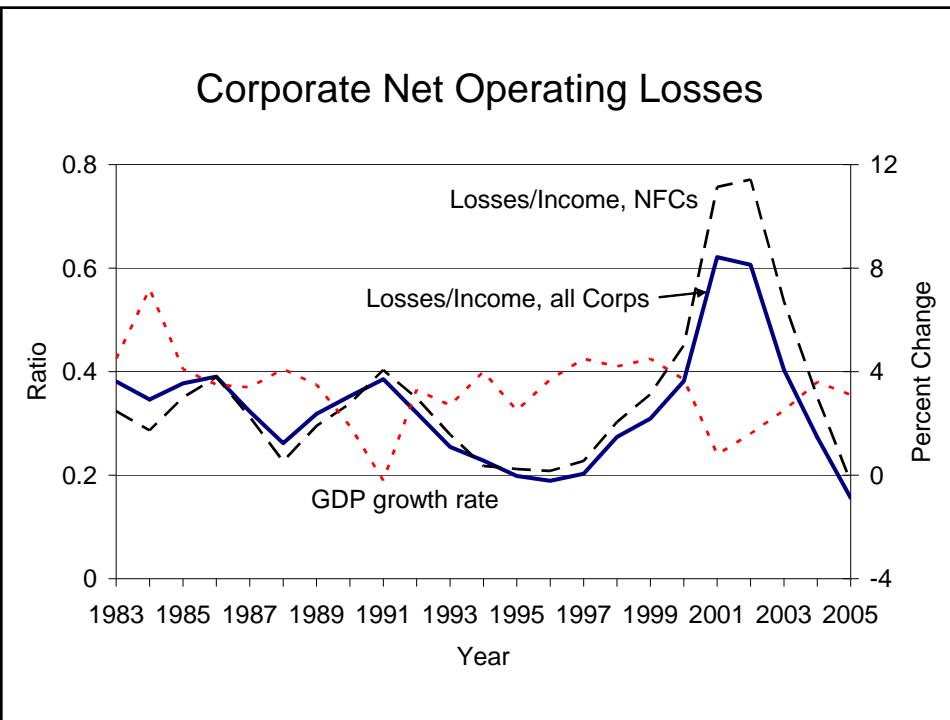


## Stabilization?

- Hard to estimate
- Auerbach and Hassett (1992):
  - Estimated upper and lower bound impacts of changes in tax policy on the variance of investment-capital ratio
  - Found that changes in tax policy have increased the variance of the investment-capital ratio – entire range  $> 0$

## Another Issue

- Investment incentives depend on having taxable income, since they aren't refundable
- Having taxable income is procyclical, so this may undercut investment incentives
- The cyclical nature may have changed over time



**Table 4. Regressions by Tax Status, 2003 and 2004**  
 (Dependent Variable I/K surprise)

	2003		2004	
	Taxable	No Tax	Taxable	No Tax
<b>Mature</b>				
CK	-0.249 [0.157]	-0.165 [0.301]	-0.113 [0.090]	1.065 [0.290]**
<b>Immature</b>				
CK	-0.587 [0.407]	-0.628 [0.534]	-0.395 [0.285]	-0.195 [0.424]

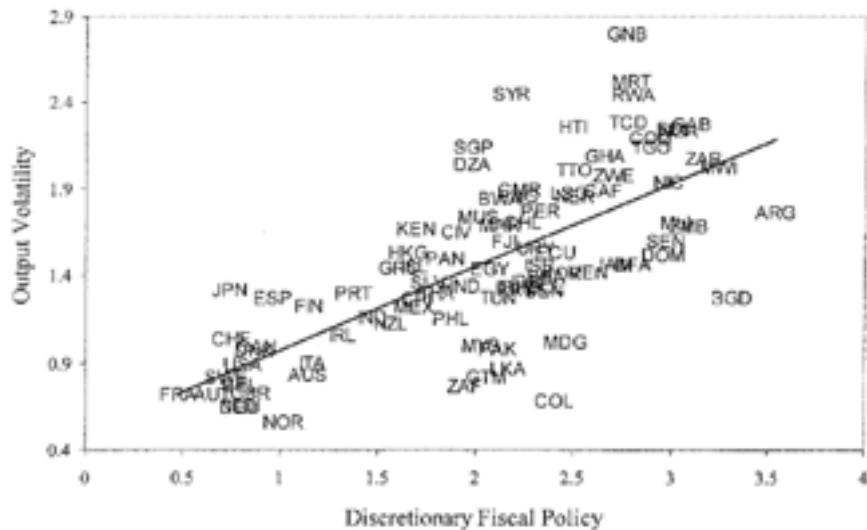
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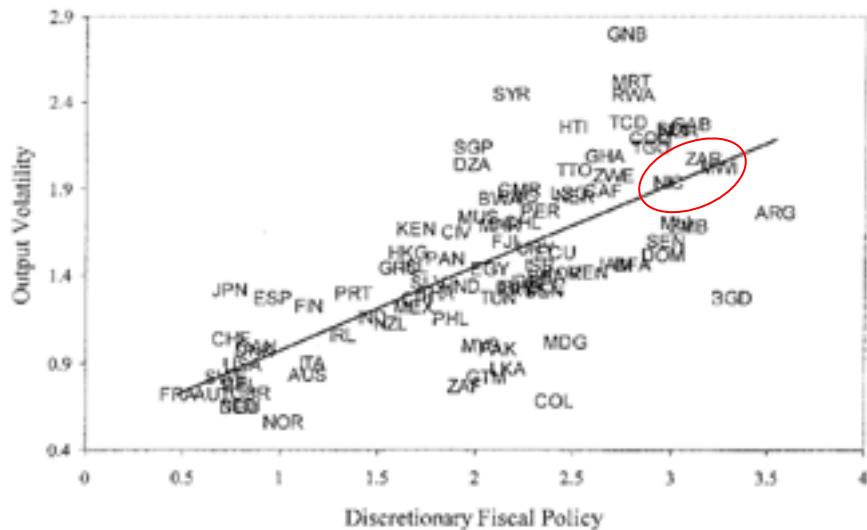
## Is Fiscal Policy Activism Good?

- Hard to tell, because hard to identify separate effects of fiscal policy activism
- Cross-country comparisons suggest the answer is no

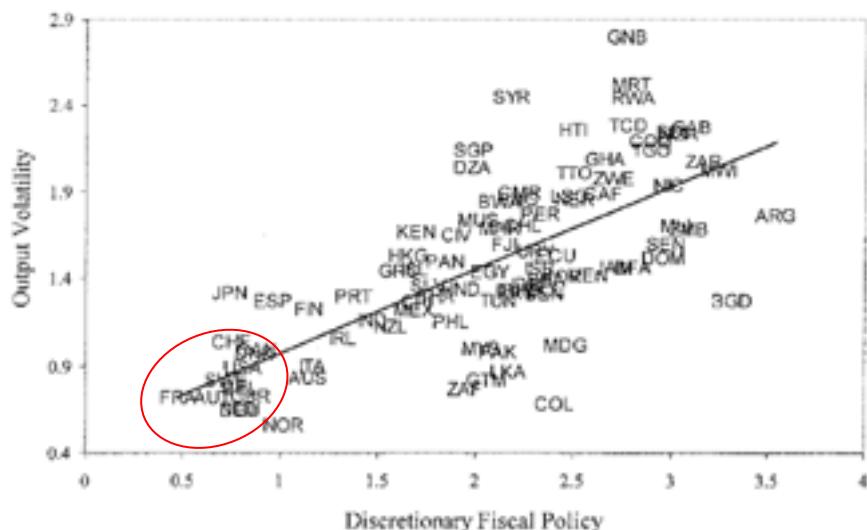
## Policy Variability and Output Variability



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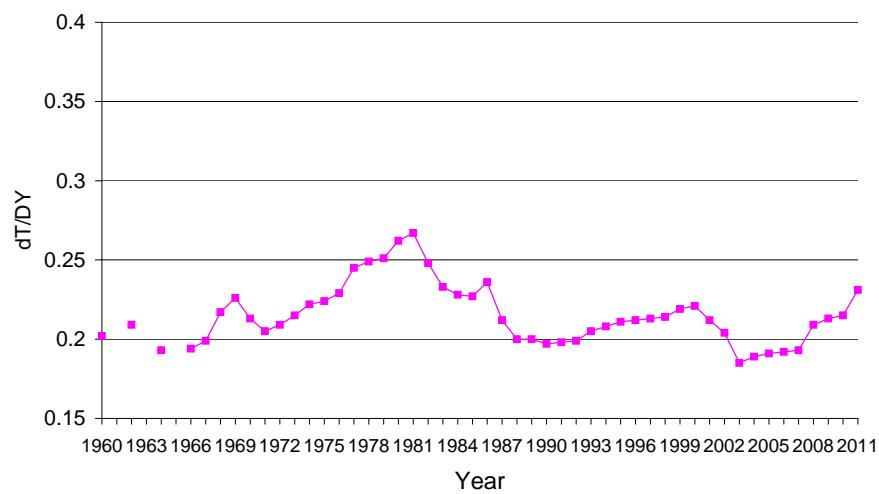
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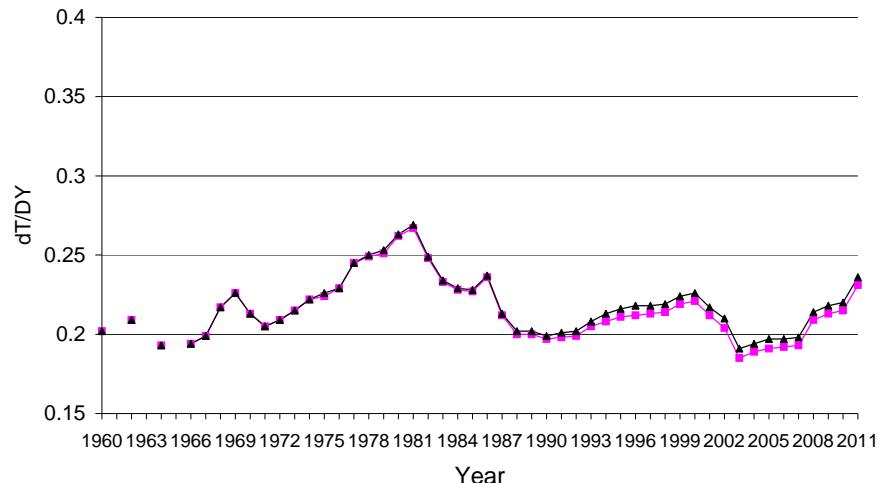
## Automatic Stabilizers

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- But how much can they do?

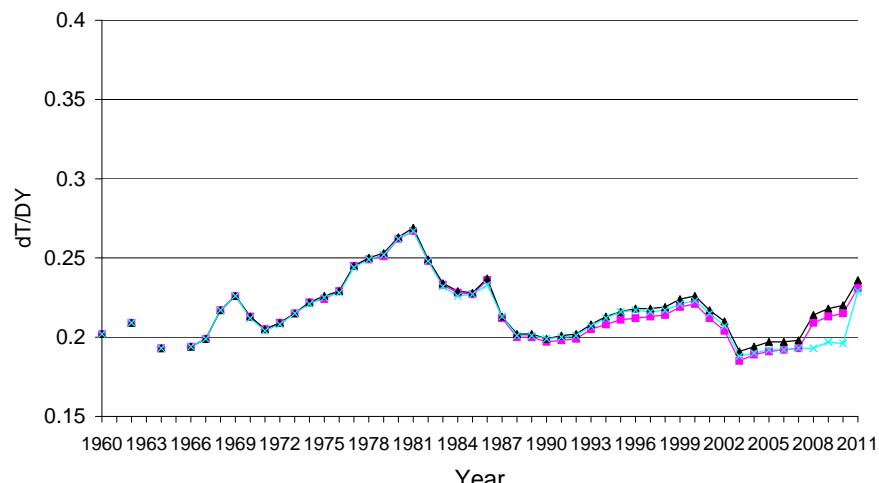
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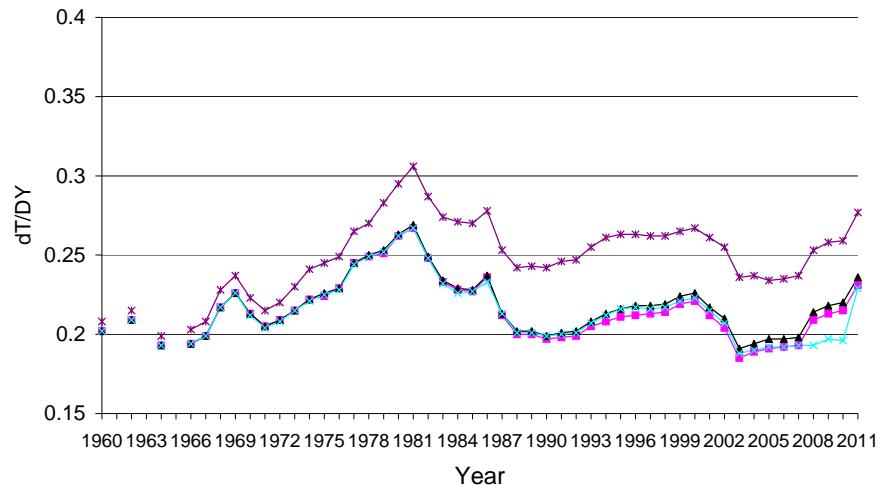
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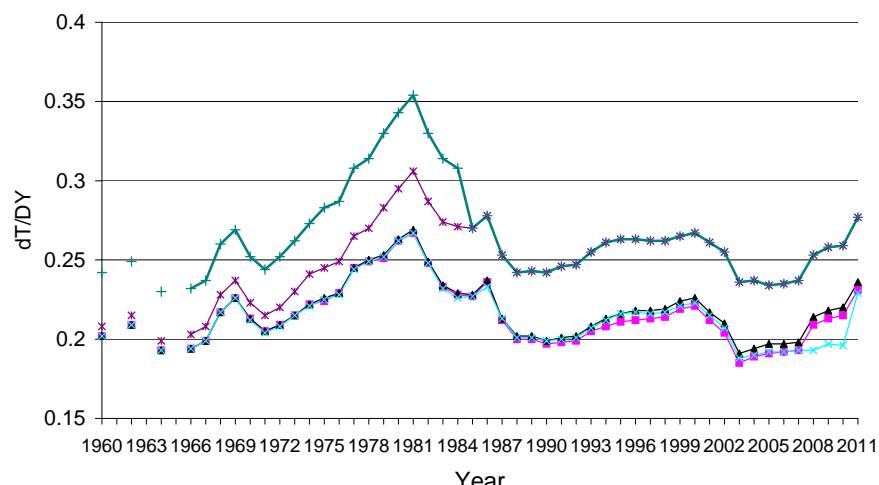
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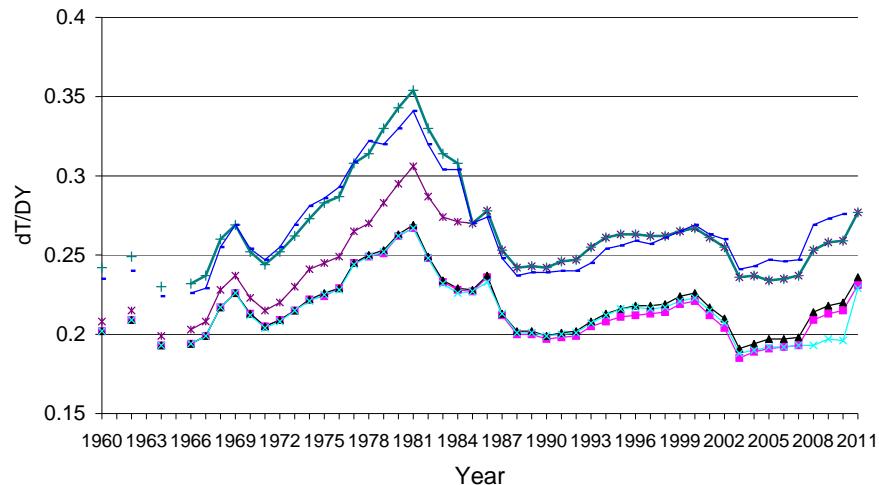
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## Automatic Stabilizers

- On safer ground
- But how much can they do?
- Probably will rise in importance, but will still be less significant than in past

## Summary

- Fiscal policy activism is on the rise, but at least in part because of economic conditions
- Predictable policy responses can be destabilizing, especially with respect to investment
- Automatic stabilizers are at historically low levels, but are likely to increase