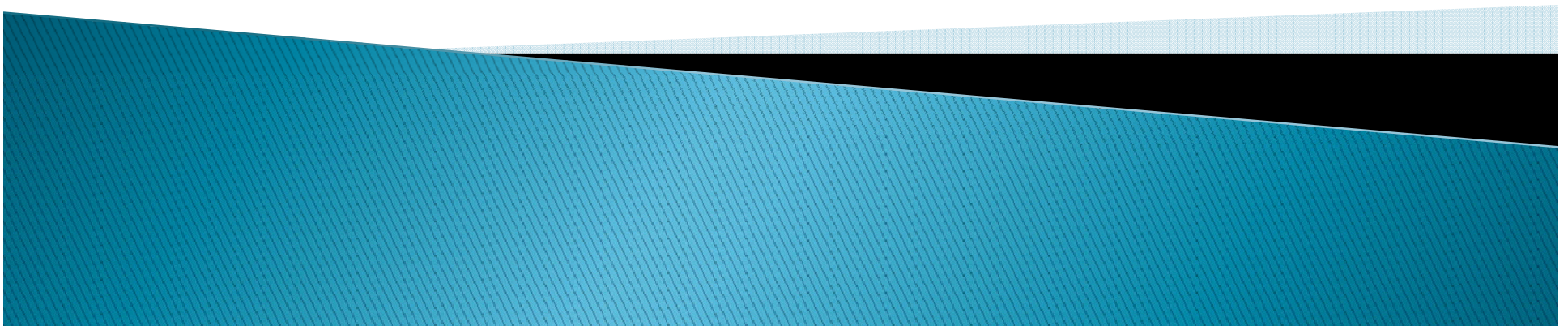
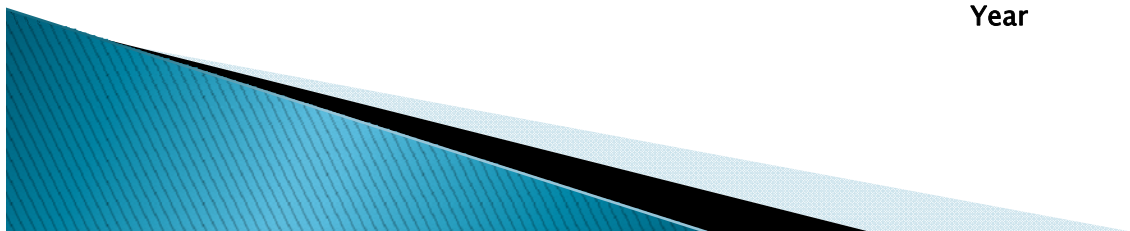
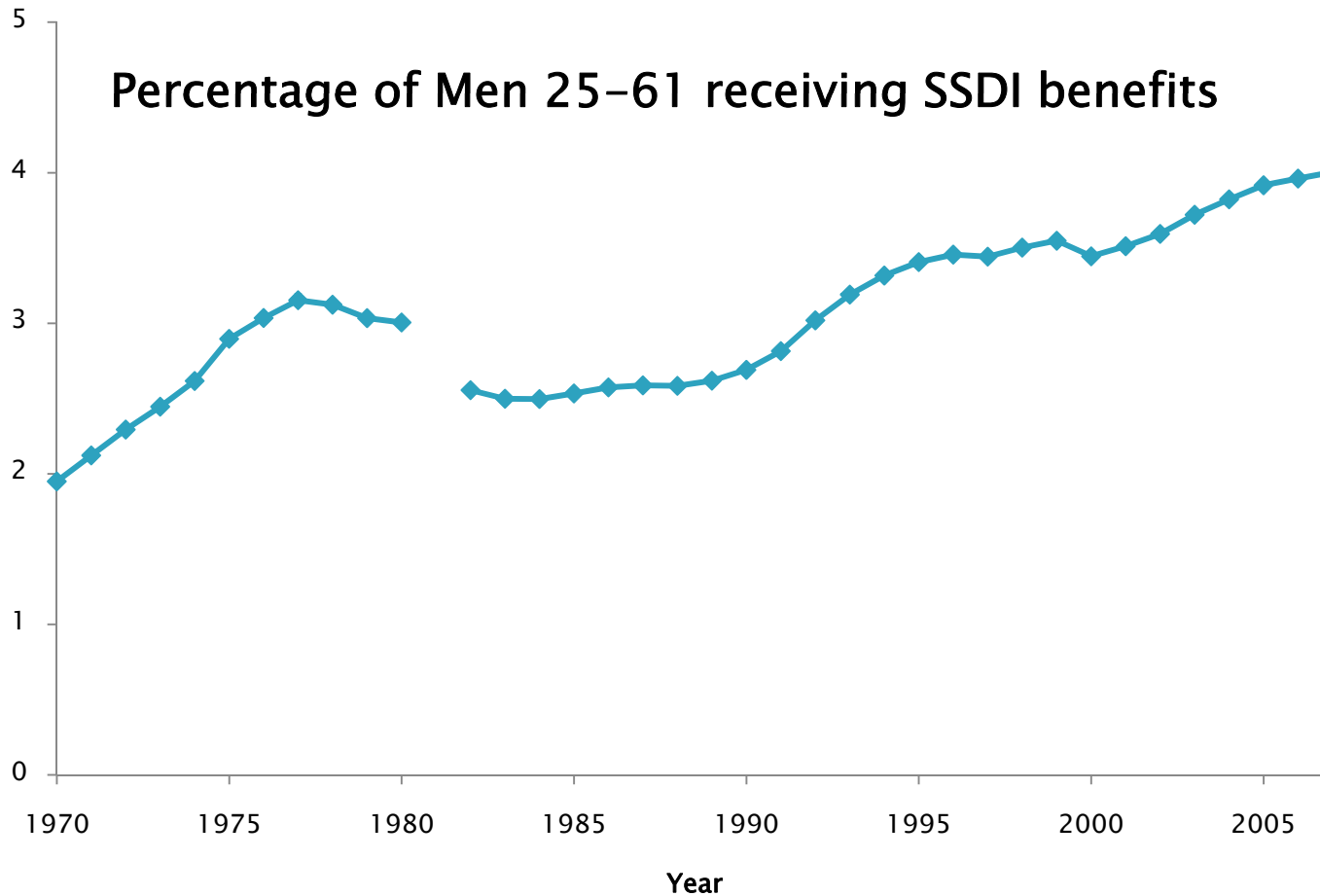


Reconciling Findings on the Employment Effect of Disability Insurance

John Bound
Stephan Lindner
Timothy Waidmann

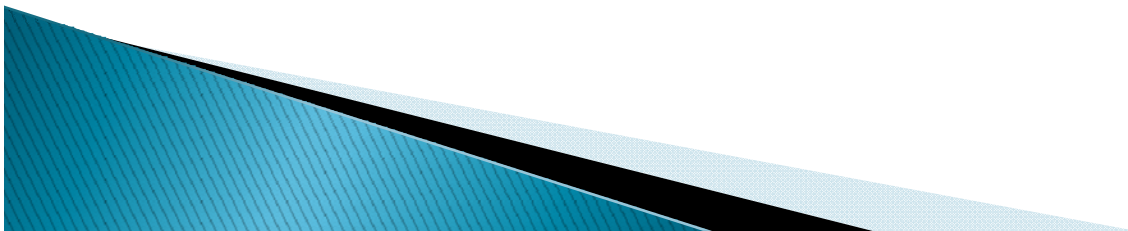


Dramatic Growth in SSDI program



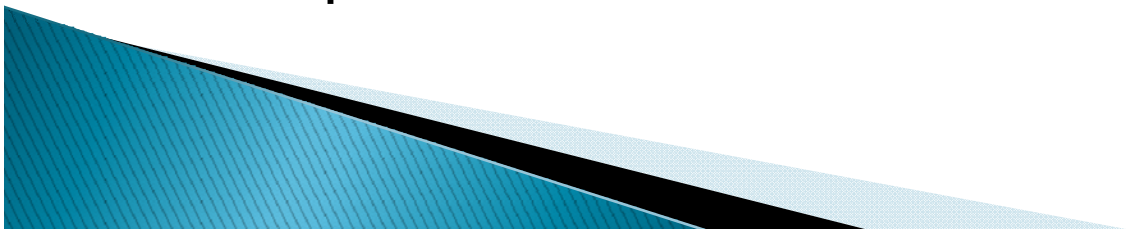
Long-standing target-efficiency concerns

- ▶ Rapid growth led to SSA and Congressional retrenchment in late 1970s
- ▶ Easing of these policies in 1984 led to renewed growth and renewed concerns about the enrollment of able-bodied workers
- ▶ Heightened by increasing employment deficit among persons with work limitations



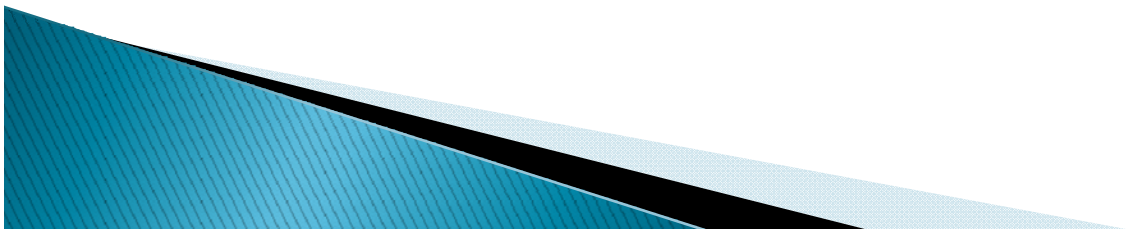
Has DI growth pulled workers from the labor force?

- ▶ Two sets of research – Two sets of answers
- ▶ Aggregate studies
 - Bound & Waidmann 2002; Autor & Duggan 2003
 - Program growth strongly correlated with employment declines – full drop explained
- ▶ Studies of denied applicants
 - Bound 1989; Chen & van der Klaauw 2008; vonWachter et al. 2009
 - Rejected applicants don't work in great numbers – so why would successful applicants? – less than half explained



Are these studies at odds?

- ▶ Asking different questions
 - Local Average Treatment Effect vs. Average Treatment Effect on the Treated
- ▶ Making different assumptions that might be questioned
 - Aggregate: Assume DI growth is exogenous
 - Denied Applicants: Application has no behavioral consequences
- ▶ Can we reconcile these findings?



Decomposition of Employment Decline

- ▶ Into changes among three groups of people

- $\Delta E = \Delta W_b \cdot \bar{E}_b + \Delta W_d \cdot \bar{E}_d + \Delta W_n \cdot \bar{E}_n + \bar{W}_b \cdot \Delta E_b + \bar{W}_d \cdot \Delta E_d + \bar{W}_n \cdot \Delta E_n$

- ▶ Decomposition 1

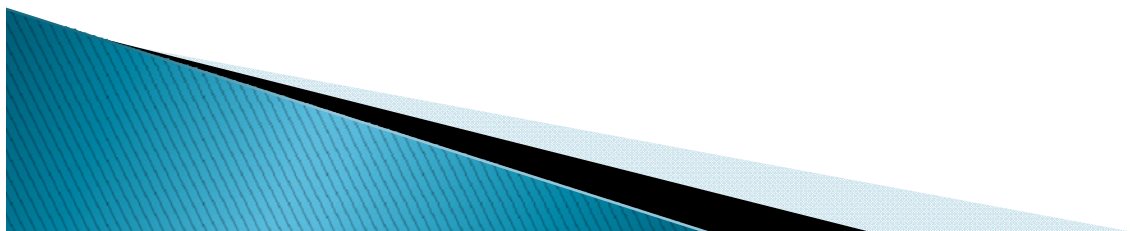
- $\Delta E = \Delta W_b \cdot (\bar{E}_b - \bar{E}_n) + \Delta W_d \cdot (\bar{E}_d - \bar{E}_n) + \bar{W}_b \cdot \Delta E_b + \bar{W}_d \cdot \Delta E_d + \bar{W}_n \cdot \Delta E_n$

- Assume new beneficiaries work like non-applicants, then first two terms are employment effect of DI expansion

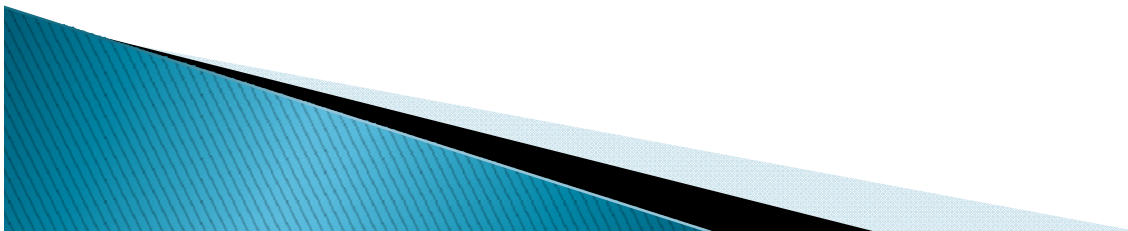
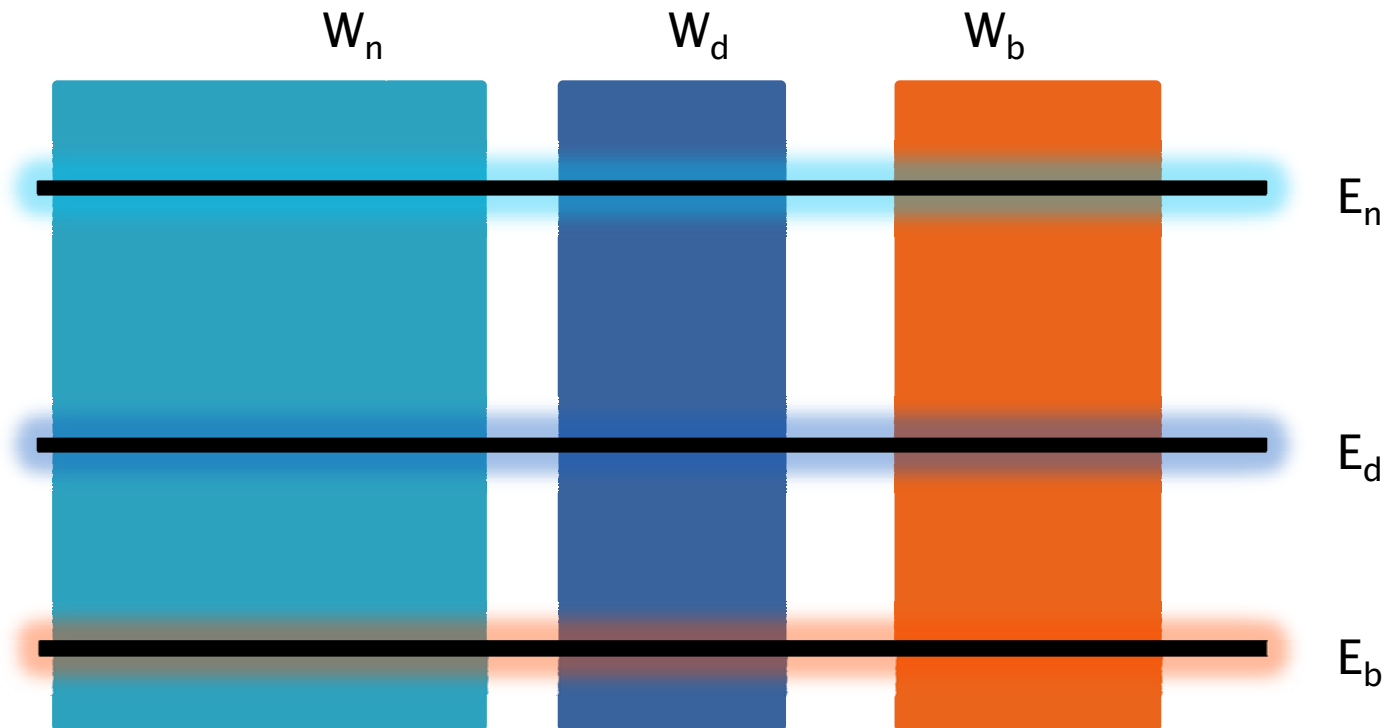
- ▶ Decomposition 2

- $\Delta E = \Delta W_b \cdot (\bar{E}_b - \bar{E}_d) + \Delta W_n \cdot (\bar{E}_n - \bar{E}_d) + \bar{W}_b \cdot \Delta E_b + \bar{W}_d \cdot \Delta E_d + \bar{W}_n \cdot \Delta E_n$

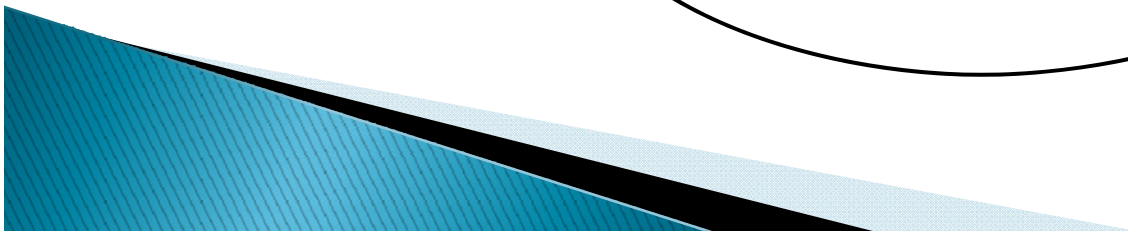
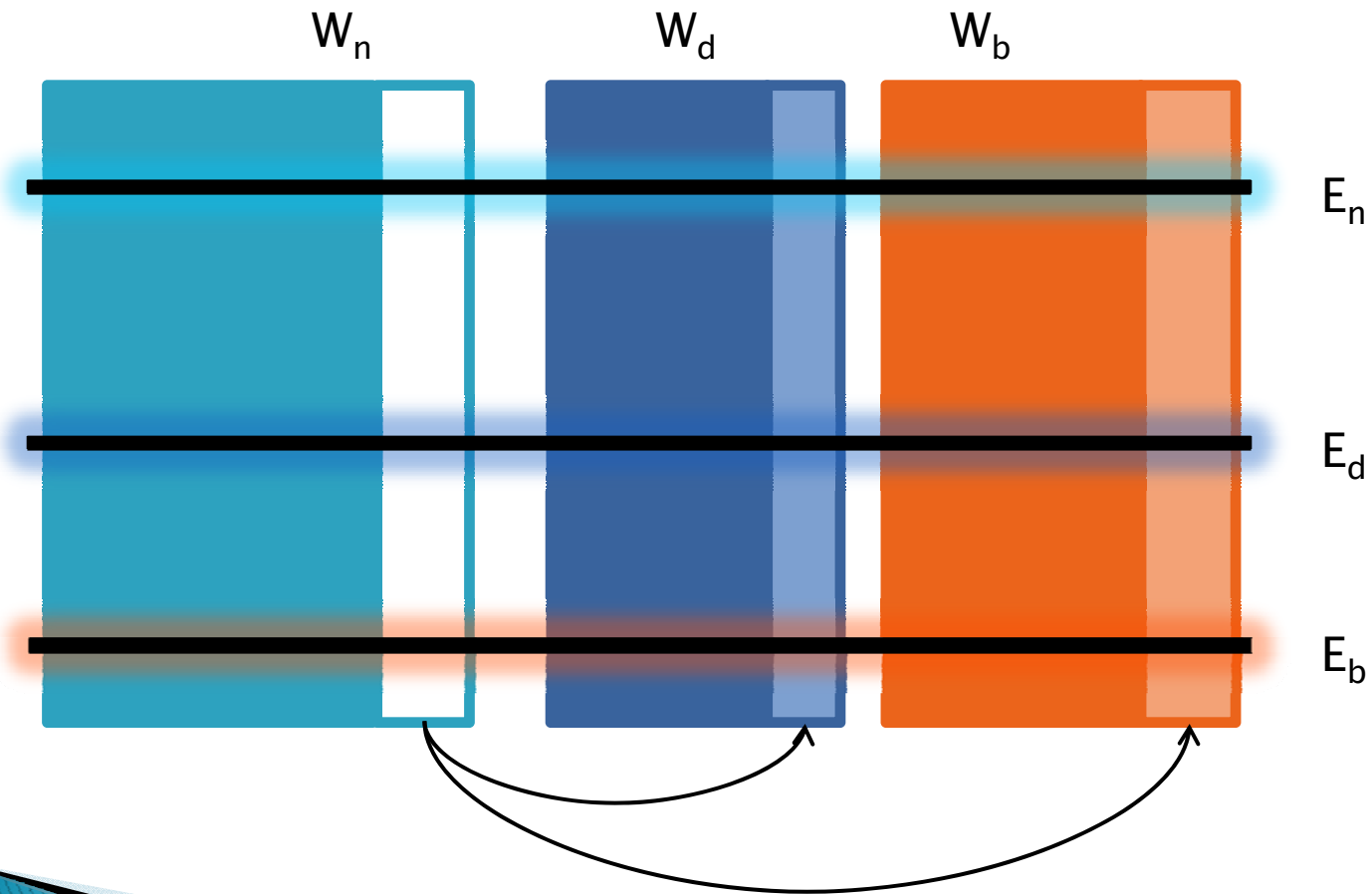
- Assume new beneficiaries work like denied applicants, then first term is employment effect



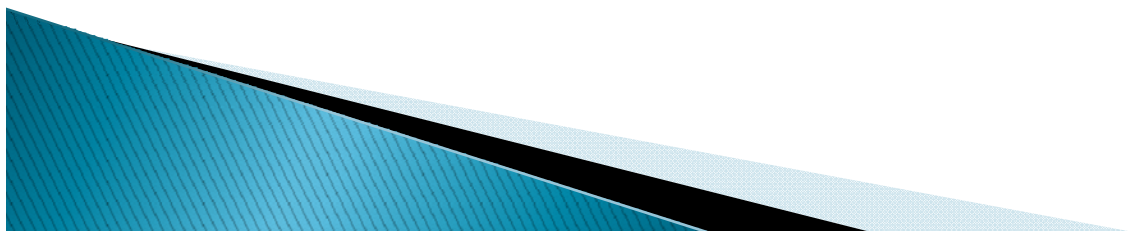
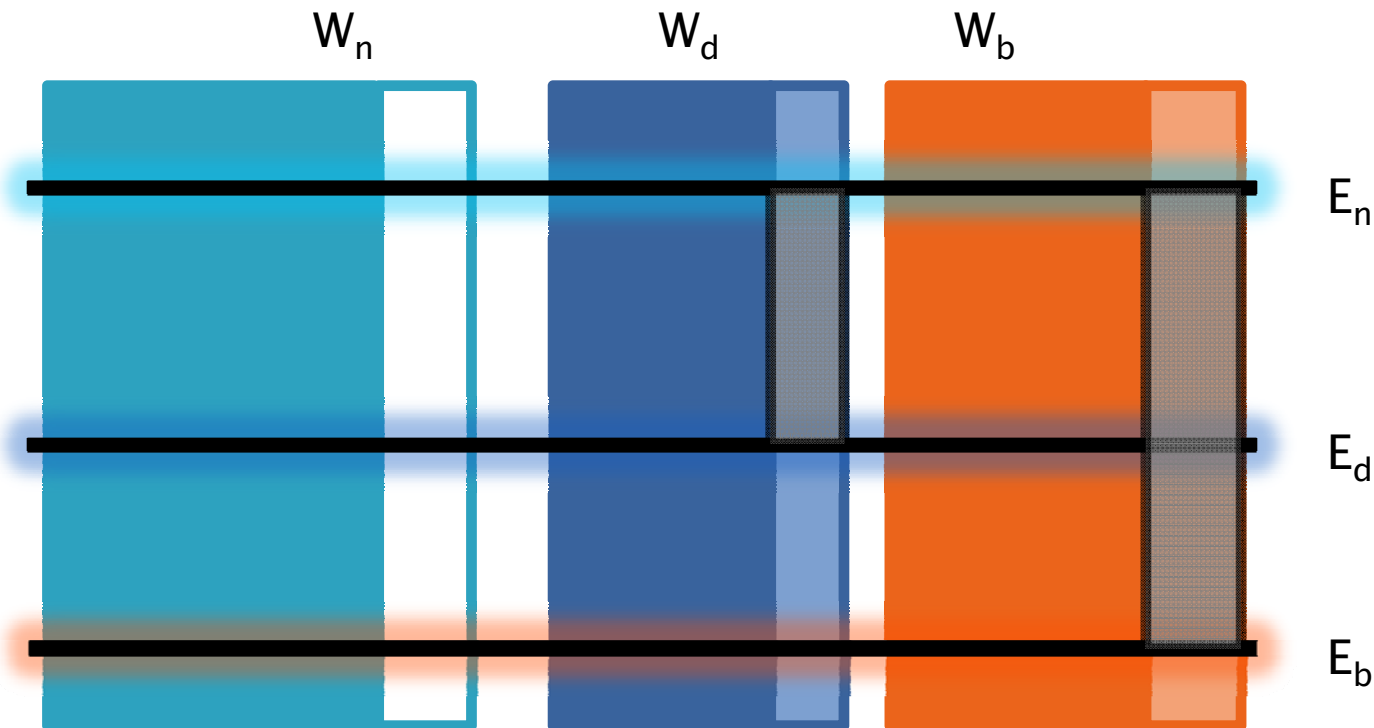
A visual decomposition



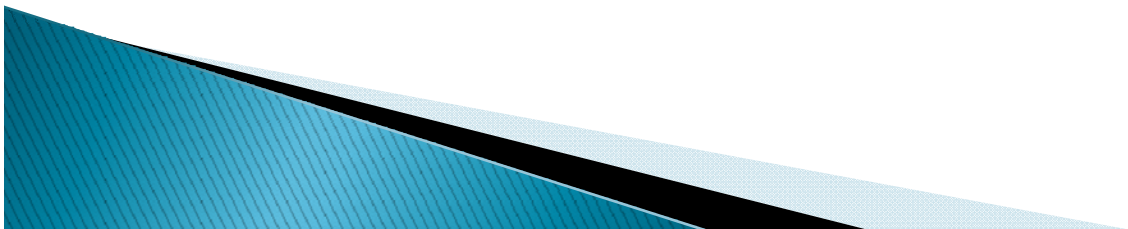
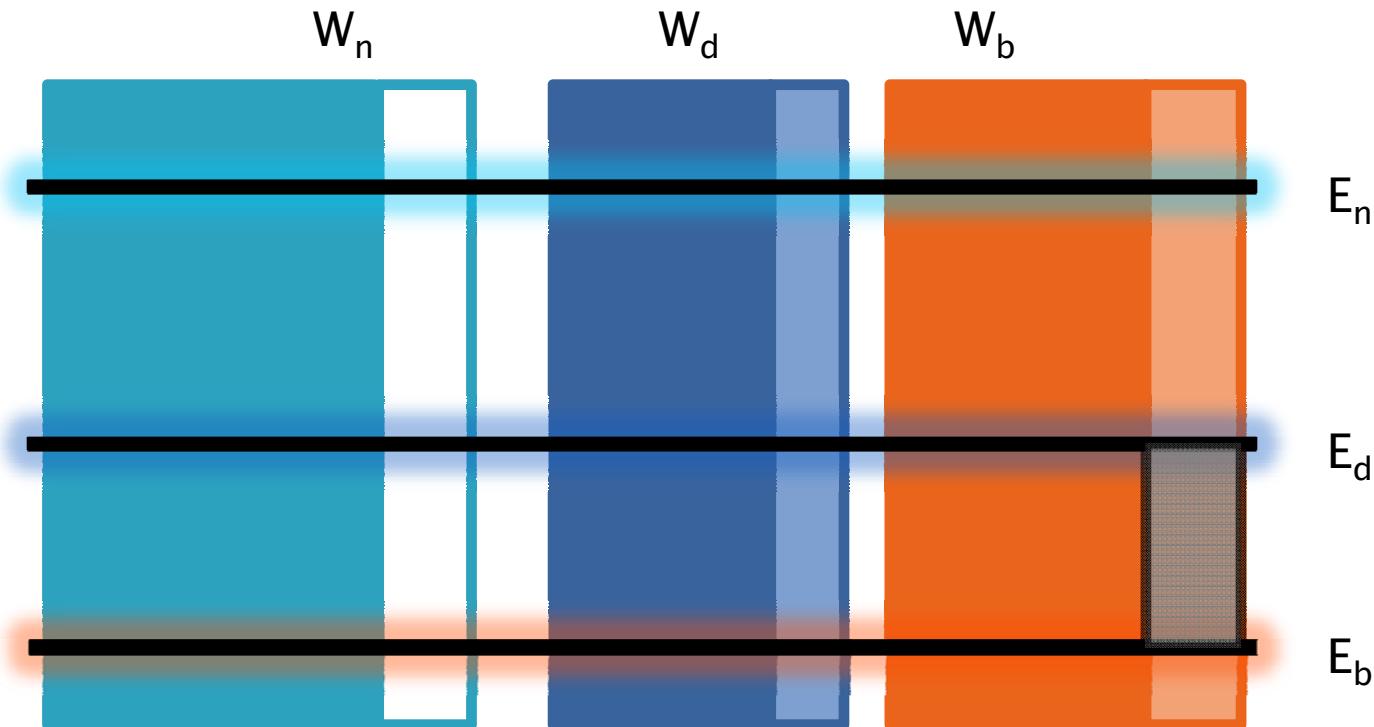
DI expansion reduces non-applicant population



If marginal applicant would have worked like non-applicants

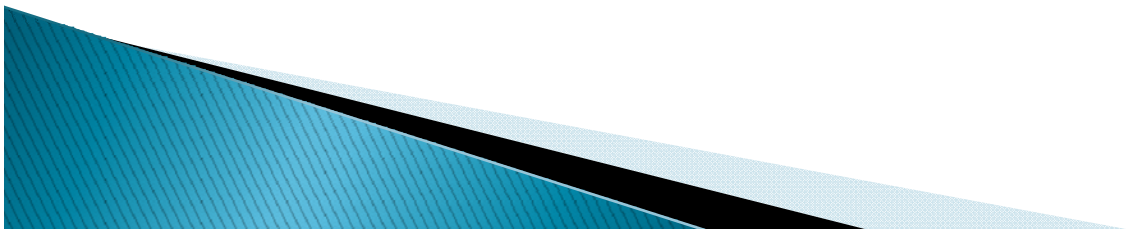


If they would have worked like denied applicants



Method

- ▶ Aggregate studies assume the former
- ▶ Studies of denied beneficiaries find that they don't work as much as non-applicants
 - So perhaps a more plausible assumption is that beneficiaries wouldn't either
- ▶ Our strategy is use the alternative decompositions on the same data, with well-identified groups to calculate employment effect under both assumptions



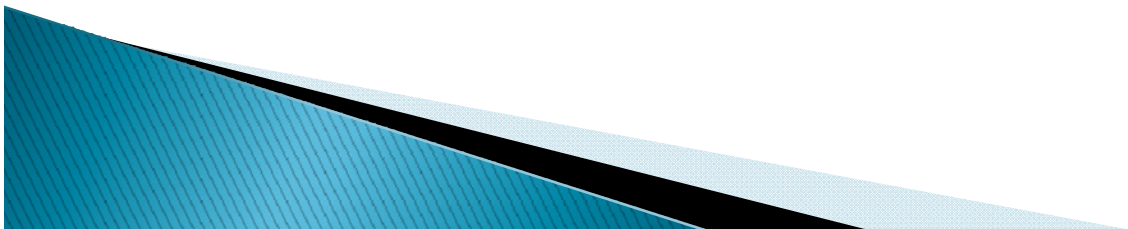
Data

- ▶ Survey of Income and Program Participation, 1990–2004
 - Linked SSA administrative records on beneficiaries (MBR) and on DI applicants (“831”) allow us to identify both denied applicants and non-applicants
- ▶ Examine periods of DI growth
 - 1990–1996
 - 1996–2004
- ▶ Examine only men, since the increasing labor market participation of women dominates and complicates the measurement of disemployment effects



Results

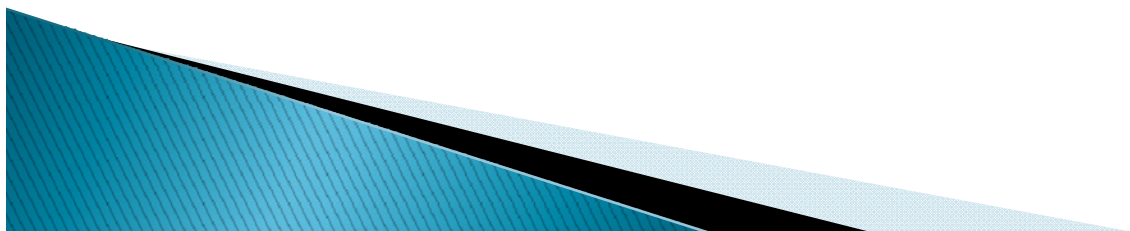
Employment Change among Men with Self-reported Work Limitations			
1990-1996	Total Change in Employment	Employment Effect of DI Expansion if marginal beneficiaries work like:	
		Non-applicants	Denied applicants
Men, 25-44	-4.79	-4.81	-2.47
Men, 45-54	-7.26	-6.61	-3.39
Men, 55-61	0.84	-6.65	-1.49
1996-2004			
Men, 25-44	-11.46	-2.10	-0.46
Men, 45-54	-4.29	-1.49	-0.44
Men, 55-61	-2.27	-0.96	-0.31



Results

Employment Change among Men with Self-reported Work Limitations

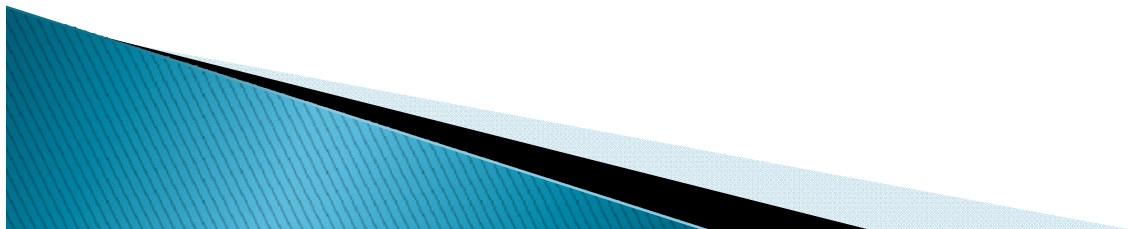
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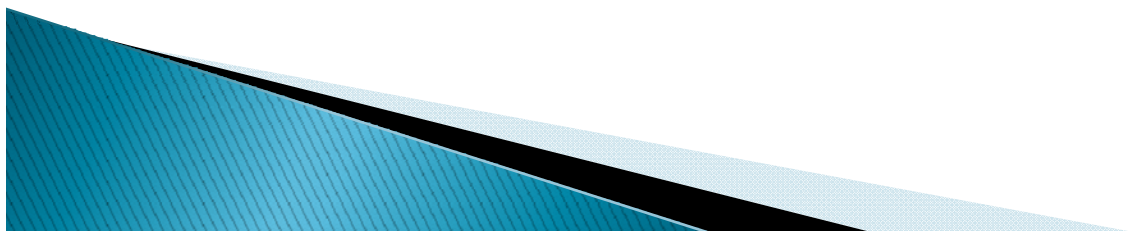
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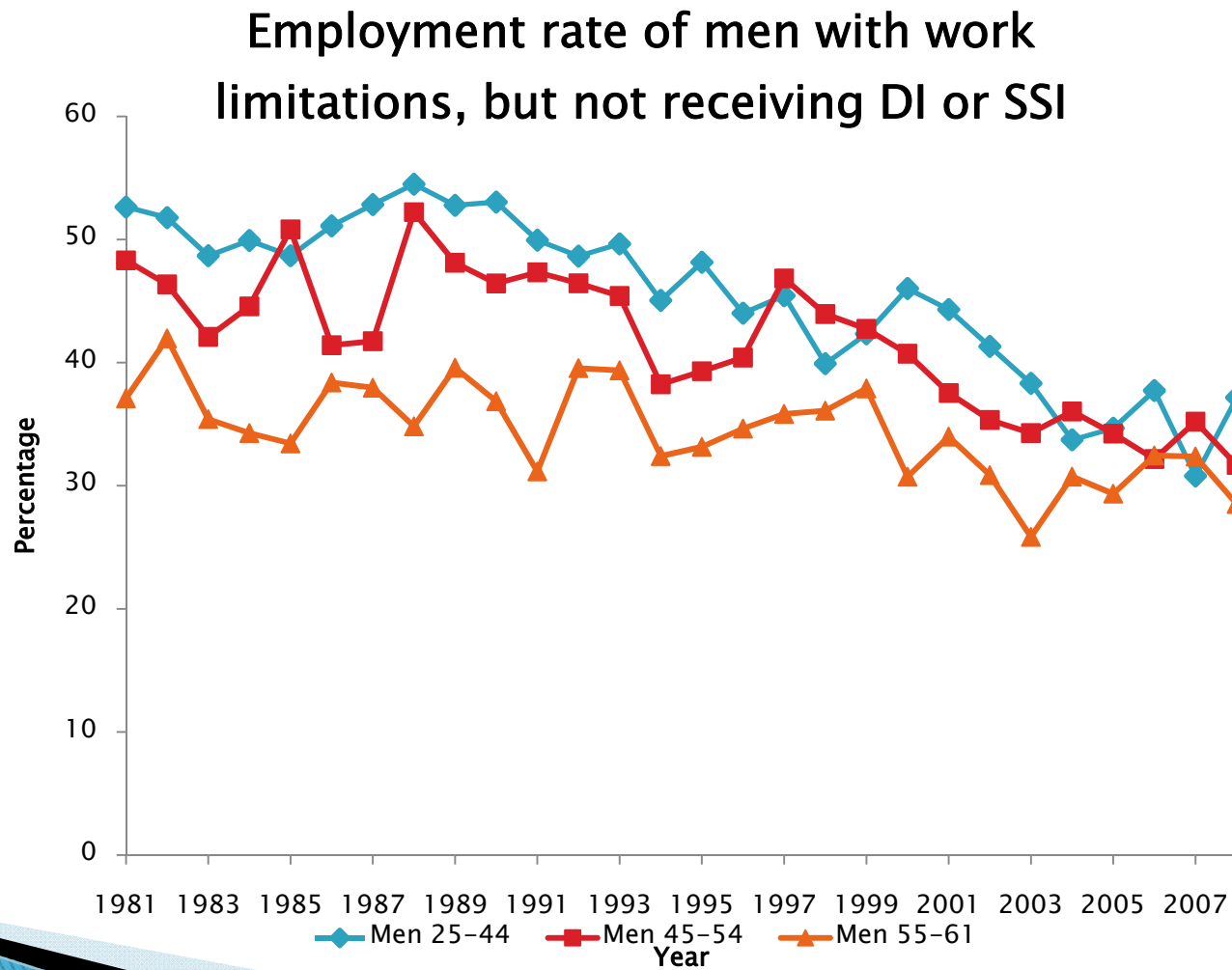
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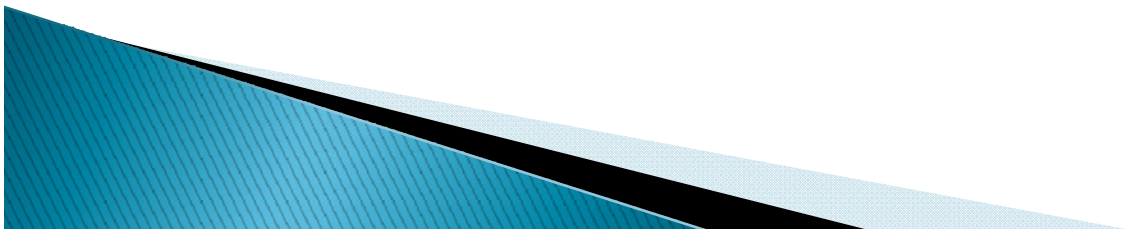


What might be other factors?



Conclusions

- ▶ Aggregate studies probably overstate the magnitude of the employment effect
- ▶ Factors other than just the expanded availability of DI benefits must have contributed importantly to the decline in employment among men with limitations



Policy Implications

- ▶ Fears that the growth of DI during the last 25 years have been largely responsible the employment declines of men with work limitations seem exaggerated.
- ▶ Declining earnings of men without a high school education and men with work limitations suggests a declining demand for such workers.
 - In such an environment, policies aimed at encouraging work among people with disabilities are less likely to be effective.

