Taxation of Transfers and Wealth

Wojciech Kopczuk

Department of Economics, Columbia University

December 8, 2011
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
- Optimal taxation
- Empirical evidence
  - Real responses
  - Avoidance
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
- Optimal taxation
- Empirical evidence
  - Real responses
  - Avoidance
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
  - Bequest motives
  - Optimal taxation
  - Empirical evidence
    - Real responses
    - Avoidance
  - Wojciech Kopczuk
  - Taxation of Transfers and Wealth
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
  - Optimal taxation
  - Empirical evidence
    - Real responses
    - Avoidance
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
- Optimal taxation
- Empirical evidence
  - Real responses
  - Avoidance
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
- Optimal taxation
- Empirical evidence
  - Real responses
  - Avoidance
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
- Optimal taxation
- Empirical evidence
  - Real responses
  - Avoidance
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
- Optimal taxation
- Empirical evidence
  - Real responses
  - Avoidance
What the chapter is about

- Taxation of bequests, inheritances and gifts; a little bit about wealth
- Overview of this type of taxation around the world and in the U.S.
- Reasons for this type of taxation
- Bequest motives
- Optimal taxation
- Empirical evidence
  - Real responses
  - Avoidance
Bequest motives

- Accidental
- Altruism
- Exchange
- Joy-of-giving
- “Capitalistic spirit,” wealth in utility
- “Behavioral” — inertia, denial of death
- Mix of some or all of the above
Bequest motives

- Accidental
- Altruism
  - Exchange
  - Joy-of-giving
  - “Capitalistic spirit,” wealth in utility
  - “Behavioral” — inertia, denial of death
  - Mix of some or all of the above
Bequest motives

- Accidental
- Altruism
- Exchange
  - Joy-of-giving
  - “Capitalistic spirit,” wealth in utility
  - “Behavioral” — inertia, denial of death
  - Mix of some or all of the above
Bequest motives

- Accidental
- Altruism
- Exchange
- Joy-of-giving
  - “Capitalistic spirit,” wealth in utility
  - “Behavioral” — inertia, denial of death
  - Mix of some or all of the above
Bequest motives

- Accidental
- Altruism
- Exchange
- Joy-of-giving
- “Capitalistic spirit,” wealth in utility
- “Behavioral” — inertia, denial of death
- Mix of some or all of the above
Bequest motives

- Accidental
- Altruism
- Exchange
- Joy-of-giving
- “Capitalistic spirit,” wealth in utility
- “Behavioral” — inertia, denial of death
- Mix of some or all of the above
Bequest motives

- Accidental
- Altruism
- Exchange
- Joy-of-giving
- "Capitalistic spirit," wealth in utility
- "Behavioral" — inertia, denial of death
- Mix of some or all of the above
Evidence — distribution

- Bequests an important source of wealth — see Davies and Shorrocks (2000) for survey

- Huge literature on modeling wealth distribution accounts for
  - uncertain lifespan
  - income risk, precautionary saving
  - interactions with taxation and social insurance programs
  - health and long-term care expenses

- Life-cycle model gets you far but starts failing toward the top (though not just at the very top, \( \approx 80\)th percentile?)

- Adding altruism gets you further but fails to explain concentration within top 1\% or so (Carroll, 2000; De Nardi, 2004 and others)

- So, you need something else — utility from bequests or wealth is usually assumed, \( u(C, B) \)
Evidence — distribution

- Bequests an important source of wealth — see Davies and Shorrocks (2000) for survey
- Huge literature on modeling wealth distribution accounts for
  - uncertain lifespan
  - income risk, precautionary saving
  - interactions with taxation and social insurance programs
  - health and long-term care expenses
- Life-cycle model gets you far but starts failing toward the top (though not just at the very top, ≈ 80th percentile?)
- Adding altruism gets you further but fails to explain concentration within top 1% or so (Carroll, 2000; De Nardi, 2004 and others)
- So, you need something else — utility from bequests or wealth is usually assumed, $u(C, B)$
Evidence — distribution

- Bequests an important source of wealth — see Davies and Shorrocks (2000) for survey
- Huge literature on modeling wealth distribution accounts for
  - uncertain lifespan
  - income risk, precautionary saving
  - interactions with taxation and social insurance programs
  - health and long-term care expenses
- Life-cycle model gets you far but starts failing toward the top (though not just at the very top, \( \approx 80\text{th percentile} \))
- Adding altruism gets you further but fails to explain concentration within top 1% or so (Carroll, 2000; De Nardi, 2004 and others)
- So, you need something else — utility from bequests or wealth is usually assumed, \( u(C, B) \)
Bequests an important source of wealth — see Davies and Shorrocks (2000) for survey

Huge literature on modeling wealth distribution accounts for
- uncertain lifespan
- income risk, precautionary saving
- interactions with taxation and social insurance programs
- health and long-term care expenses

Life-cycle model gets you far but starts failing toward the top (though not just at the very top, $\approx 80$th percentile?)

Adding altruism gets you further but fails to explain concentration within top 1% or so (Carroll, 2000; De Nardi, 2004 and others)

So, you need something else — utility from bequests or wealth is usually assumed, $u(C, B)$
Evidence — distribution

- Bequests an important source of wealth — see Davies and Shorrocks (2000) for survey
- Huge literature on modeling wealth distribution accounts for
  - uncertain lifespan
  - income risk, precautionary saving
  - interactions with taxation and social insurance programs
  - health and long-term care expenses
- Life-cycle model gets you far but starts failing toward the top (though not just at the very top, ≈ 80th percentile?)
- Adding altruism gets you further but fails to explain concentration within top 1% or so (Carroll, 2000; De Nardi, 2004 and others)
- So, you need something else — utility from bequests or wealth is usually assumed, $u(C, B)$
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

Gifts

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
- Bernheim, Lemke, Scholz (2004) — real effects
- McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
- ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization.
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

**Gifts**

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
- Bernheim, Lemke, Scholz (2004) — real effects
- McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
- ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

Gifts

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
- Bernheim, Lemke, Scholz (2004) — real effects
- McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
- ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

Gifts

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
  - Bernheim, Lemke, Scholz (2004) — real effects
  - McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
- ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization
Gifts are responsive rate of 7% \( (p=0.07) \). Second, individual life expectancies are set at 20 years \( (n=20) \). Third, and in order to allow for consistent comparisons between gifts and bequests, donees are assumed to sell assets in period \( t+n \). Third, assets are assumed to appreciate at the donor's discount rate, i.e. \( p = d \), with share of accrued gains of \( b=0.5 \) (Auten and Wilson, 1999). Ninth, I assume that assets held by the wealthy are 30% cash, or equivalent, and 70% non-cash, which reflects the average portfolio reported on estate tax returns. This allocation is then applied to Eqs. (5) and (6) in constructing a weighted price for gifts. To account for the expiration of the US$2 million per donee exemption in 1989 under the GST tax introduced in 1986, I set a dichotomous variable equal to one in 1989. Ideally, the GST should be reflected in the gift price to grandchildren and similar or younger generations using Eqs. (1) and (2). Unfortunately, and given the aggregate nature of the data, we do not observe the size of generation-skipping transfers. This, and the temporary nature of the per donee exemption, makes it rather difficult to use a separate price measure for grandchildren. For presentational purposes, and to render the data somewhat comparable over time, I divide gift tax collections by the maximum effective gift tax rate, i.e. \( \text{Gifts} = \text{Tax} / [(1+sg)] \). Next, I deflate the adjusted data for inflation using CPI. The resulting trend, reported in Fig. 1, is quite interesting. Here, for instance, we observe that real gifts made in 1935, prior to the increase in tax rates in 1936, exceed the annual gifts made in much of the 1980s and the 1990s. Similarly, gifts made in 1976, in anticipation of the higher tax rates in effect in 1977, surpass those made in any other year since the enactment of the tax.

\[ \text{Fig. 1. Inter-vivo gifts, 1933–1998 (US$1982 millions).} \]

Following a tax minimization strategy, as in Balcer and Judd (1987), individuals may sell assets with high basis and hold those with low basis until death. Thus, \( b \) may very well be larger in the case of assets held at death. Note, however, that the estimates in column one (cash only) would be consistent with the view that capital gains taxes can be avoided painlessly.
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

Gifts

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
- Bernheim, Lemke, Scholz (2004) — real effects
- McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
- ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

Gifts

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
- Bernheim, Lemke, Scholz (2004) — real effects
- McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
- ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

Gifts

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
- Bernheim, Lemke, Scholz (2004) — real effects
- McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
  ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization
Evidence — mixed motives

- Same reason as previous slide: accidental and intentional bequests coexist
- Control vs tax minimization

Gifts

- Joulfaian (2004) and Ohlsson (2011), massive temporal responses
- Bernheim, Lemke, Scholz (2004) — real effects
- McGarry (2000) and Poterba (2001) — underutilization of simple tax avoidance that relies on gifts

- It of course fits very well with evidence we have on importance of precautionary saving
- ...except that as Joulfaian and McGarry (2004) document it also applies to the very high income individuals. The flow of gifts appears too small to be consistent with tax minimization
A bit more on control vs minimization

- Cooper (1979) — an estate tax is a voluntary tax
- Schmalbeck (2001) — yes, but you lose control over assets

### Deathbed planning

- Kopczuk (2007) looks at the (cross-section of) estate taxpayers from 1977
- Wealth robustly increases with age starting when people are in their 60s until the maximum age of 98 observed in the data — 1 to 2% per year
- However, those who died from a lasting terminal illness have estates that are nearly 20% lower. The effect is there even for illness lasting “days to months”
- Evidence of importance of tax avoidance (“lifetime gifts” schedule responds, cash falls) beyond other factors (e.g., loss of income or increased spending do not seem to explain much)
A bit more on control vs minimization

- Cooper (1979) — an estate tax is a voluntary tax
- Schmalbeck (2001) — yes, but you lose control over assets

**Deathbed planning**
- Kopczuk (2007) looks at the (cross-section of) estate taxpayers from 1977
- Wealth robustly increases with age starting when people are in their 60s until the maximum age of 98 observed in the data — 1 to 2% per year
- However, those who died from a lasting terminal illness have estates that are nearly 20% lower. The effect is there even for illness lasting “days to months”
- Evidence of importance of tax avoidance (“lifetime gifts” schedule responds, cash falls) beyond other factors (e.g., loss of income or increased spending do not seem to explain much)
A bit more on control vs minimization

- Cooper (1979) — an estate tax is a voluntary tax
- Schmalbeck (2001) — yes, but you lose control over assets

Deathbed planning

- Kopczuk (2007) looks at the (cross-section of) estate taxpayers from 1977
- Wealth robustly increases with age starting when people are in their 60s until the maximum age of 98 observed in the data — 1 to 2% per year
- However, those who died from a lasting terminal illness have estates that are nearly 20% lower. The effect is there even for illness lasting “days to months”
- Evidence of importance of tax avoidance (“lifetime gifts” schedule responds, cash falls) beyond other factors (e.g., loss of income or increased spending do not seem to explain much)
A bit more on control vs minimization

- Cooper (1979) — an estate tax is a voluntary tax
- Schmalbeck (2001) — yes, but you lose control over assets

Deathbed planning

- Kopczuk (2007) looks at the (cross-section of) estate taxpayers from 1977
  - Wealth robustly increases with age starting when people are in their 60s until the maximum age of 98 observed in the data — 1 to 2% per year
  - However, those who died from a lasting terminal illness have estates that are nearly 20% lower. The effect is there even for illness lasting “days to months”
  - Evidence of importance of tax avoidance (“lifetime gifts” schedule responds, cash falls) beyond other factors (e.g., loss of income or increased spending do not seem to explain much)
A bit more on control vs minimization

- Cooper (1979) — an estate tax is a voluntary tax
- Schmalbeck (2001) — yes, but you lose control over assets

Deathbed planning

- Kopczuk (2007) looks at the (cross-section of) estate taxpayers from 1977
- Wealth robustly increases with age starting when people are in their 60s until the maximum age of 98 observed in the data — 1 to 2% per year
  - However, those who died from a lasting terminal illness have estates that are nearly 20% lower. The effect is there even for illness lasting “days to months”
- Evidence of importance of tax avoidance (“lifetime gifts” schedule responds, cash falls) beyond other factors (eg., loss of income or increased spending do not seem to explain much)
A bit more on control vs minimization

- Cooper (1979) — an estate tax is a voluntary tax
- Schmalbeck (2001) — yes, but you lose control over assets

Deathbed planning

- Kopczuk (2007) looks at the (cross-section of) estate taxpayers from 1977
- Wealth robustly increases with age starting when people are in their 60s until the maximum age of 98 observed in the data — 1 to 2% per year
- However, those who died from a lasting terminal illness have estates that are nearly 20% lower. The effect is there even for illness lasting “days to months”
- Evidence of importance of tax avoidance (“lifetime gifts” schedule responds, cash falls) beyond other factors (e.g., loss of income or increased spending do not seem to explain much)
A bit more on control vs minimization

- Cooper (1979) — an estate tax is a voluntary tax
- Schmalbeck (2001) — yes, but you lose control over assets

**Deathbed planning**

- Kopczuk (2007) looks at the (cross-section of) estate taxpayers from 1977
- Wealth robustly increases with age starting when people are in their 60s until the maximum age of 98 observed in the data — 1 to 2% per year
- However, those who died from a lasting terminal illness have estates that are nearly 20% lower. The effect is there even for illness lasting “days to months”
- Evidence of importance of tax avoidance (“lifetime gifts” schedule responds, cash falls) beyond other factors (eg., loss of income or increased spending do not seem to explain much)
Heterogeneity

- Survey evidence: Laitner and Juster (1995), Light and McGarry (2004) — declared bequest intentions vary widely, somewhat but not very strongly correlated with things one would expect (like having kids)
- Charles and Hurst (2003) and others on importance of inherited tastes/habits in wealth accumulation
- Structural models of wealth accumulation — mixture of life cycle and bequest types, estimate % of each (Kopczuk and Lupton, 2007; Ameriks, Caplin, Laufer, van Nieuwerburgh, 2011)
Survey evidence: Laitner and Juster (1995), Light and McGarry (2004) — declared bequest intentions vary widely, somewhat but not very strongly correlated with things one would expect (like having kids)

Charles and Hurst (2003) and others on importance of inherited tastes/habits in wealth accumulation

Structural models of wealth accumulation — mixture of life cycle and bequest types, estimate % of each (Kopczuk and Lupton, 2007; Ameriks, Caplin, Laufer, van Nieuwerburgh, 2011)
Survey evidence: Laitner and Juster (1995), Light and McGarry (2004) — declared bequest intentions vary widely, somewhat but not very strongly correlated with things one would expect (like having kids)

Charles and Hurst (2003) and others on importance of inherited tastes/habits in wealth accumulation

Structural models of wealth accumulation — mixture of life cycle and bequest types, estimate % of each (Kopczuk and Lupton, 2007; Ameriks, Caplin, Laufer, van Nieuwerburgh, 2011)
Evidence on bequest motives is inconclusive in many ways.
Main things to remember — bequest motives

However, we know that

- Understanding large wealth holding requires going beyond accidental motives, altruism and exchange
- Multiple motives are present at the same time, wealth plays dual role
- There is a trade off between control and bequests (or tax minimization)
- Heterogeneity is important
Main things to remember — bequest motives

However, we know that

- Understanding large wealth holding requires going beyond accidental motives, altruism and exchange
- Multiple motives are present at the same time, wealth plays dual role
- There is a trade off between control and bequests (or tax minimization)
- Heterogeneity is important
Main things to remember — bequest motives

However, we know that

- Understanding large wealth holding requires going beyond accidental motives, altruism and exchange
- **Multiple motives are present at the same time, wealth plays dual role**
- There is a trade off between control and bequests (or tax minimization)
- Heterogeneity is important
However, we know that

- Understanding large wealth holding requires going beyond accidental motives, altruism and exchange.
- Multiple motives are present at the same time, wealth plays dual role.
- There is a trade off between control and bequests (or tax minimization).
- Heterogeneity is important.
Main things to remember — bequest motives

However, we know that

- Understanding large wealth holding requires going beyond accidental motives, altruism and exchange
- Multiple motives are present at the same time, wealth plays dual role
- There is a trade off between control and bequests (or tax minimization)
- Heterogeneity is important
Models of capital taxation apply

Redistribution is key, Atkinson-Stiglitz is the workhorse model (Kaplow, 2001). Bequests are a good like others as the first pass

What is special? How generations are linked — bequest motives

- Parent: \( u(C_P) + \rho u(C^K) \)
- Kid: \( u(C^K) \)

Social planner:

\[
u(C_P) + \rho u(C^K) \quad \text{or} \quad u(c_P) + \rho u(c^K) + \nu u(C^K)\]

- If the latter — externality, and corrective taxation applies
- Recent paper by Farhi and Werning (2010)
Optimal taxation

- Models of capital taxation apply
- Redistribution is key, Atkinson-Stiglitz is the workhorse model (Kaplow, 2001). Bequests are a good like others as the first pass
- What is special? How generations are linked — bequest motives
  - Parent: \( u(C^P) + \rho u(C^K) \)  
  - Kid: \( u(C^K) \)

Social planner:

\[ u(C^P) + \rho u(C^K) \quad \text{or} \quad u(c^P) + \rho u(c^K) + \nu u(C^K) \]

- If the latter — externality, and corrective taxation applies
- Recent paper by Farhi and Werning (2010)
Optimal taxation

- Models of capital taxation apply
- Redistribution is key, Atkinson-Stiglitz is the workhorse model (Kaplow, 2001). Bequests are a good like others as the first pass
- What is special? How generations are linked — bequest motives
  - Parent: $u(C^P) + \rho u(C^K)$  
  - Kid: $u(C^K)$

Social planner:

- $u(C^P) + \rho u(C^K)$ or $u(c^P) + \rho u(c^K) + \nu u(C^K)$

- If the latter — externality, and corrective taxation applies
- Recent paper by Farhi and Werning (2010)
Optimal taxation

- Models of capital taxation apply
- Redistribution is key, Atkinson-Stiglitz is the workhorse model (Kaplow, 2001). Bequests are a good like others as the first pass
- What is special? How generations are linked — bequest motives
  - Parent: \( u(C^P) + \rho u(C^K) \)  
    Kid: \( u(C^K) \)

Social planner:

\[
u(C^P) + \rho u(C^K) \quad \text{or} \quad u(c^P) + \rho u(c^K) + \nu u(C^K)\]

- If the latter — externality, and corrective taxation applies
- Recent paper by Farhi and Werning (2010)
Optimal taxation

- Models of capital taxation apply
- Redistribution is key, Atkinson-Stiglitz is the workhorse model (Kaplow, 2001). Bequests are a good like others as the first pass
- What is special? How generations are linked — bequest motives
  - Parent: $u(C^P) + \rho u(C^K)$
  - Kid: $u(C^K)$

**Social planner:**

\[
\begin{align*}
  u(C^P) + \rho u(C^K) & \quad \text{or} \quad u(c^P) + \rho u(c^K) + \nu u(C^K)
\end{align*}
\]

- If the latter — externality, and corrective taxation applies
- Recent paper by Farhi and Werning (2010)
Optimal taxation

- Models of capital taxation apply
- Redistribution is key, Atkinson-Stiglitz is the workhorse model (Kaplow, 2001). Bequests are a good like others as the first pass
- What is special? How generations are linked — bequest motives
  - Parent: $u(C^P) + \rho u(C^K)$  
  - Kid: $u(C^K)$

Social planner:

$$u(C^P) + \rho u(C^K) \quad \text{or} \quad u(c^P) + \rho u(c^K) + \nu u(C^K)$$

- If the latter — externality, and corrective taxation applies
- Recent paper by Farhi and Werning (2010)
Models of capital taxation apply

Redistribution is key, Atkinson-Stiglitz is the workhorse model (Kaplow, 2001). Bequests are a good like others as the first pass

What is special? How generations are linked — bequest motives

- Parent: \( u(C^P) + \rho u(C^K) \)    Kid: \( u(C^K) \)

Social planner:

\[
\begin{align*}
&u(C^P) + \rho u(C^K) \quad \text{or} \quad u(c^P) + \rho u(c^K) + \nu u(C^K)
\end{align*}
\]

- If the latter — externality, and corrective taxation applies
- Recent paper by Farhi and Werning (2010)
Correcting externality from giving

- Pigouvian subsidy — first best: \( t^P = -\nu \frac{u'(C^K)}{u'(CP)} \)

- Pigouvian subsidy — second best: correct price by \( t^S = -\nu \frac{u'(C^K)}{\mu} \), where \( \mu \) is the multiplier on the revenue constraint (principle of targeting: Sandmo, 1975, Kopczuk 2003, Micheletto, 2008)

- Alternatively: \( t^S = \frac{1}{MCF} t^P \) where \( MCF=\frac{\mu}{\lambda} \) is the marginal cost of funds

- With many people — many externalities. Correct each one separately if you can — nonlinear subsidy to bequests.

- ...but the corrective tax is a function of \( u'(C^K) \) — it goes to zero as \( c^K \to \infty \)

- Correcting externality from giving by the very wealthy is not important
Correcting externality from giving

- Pigouvian subsidy — first best:  \( t^P = -\nu \frac{u'(C^K)}{u'(C^P)} \)

- Pigouvian subsidy — second best: correct price by  
  \[ t^S = -\nu \frac{u'(C^K)}{\mu} \]
  where \( \mu \) is the multiplier on the revenue constraint (principle of targeting: Sandmo, 1975, Kopczuk 2003, Micheletto, 2008)

- Alternatively:  
  \[ t^S = \frac{1}{MCF} t^P \]
  where \( MCF = \frac{\mu}{\lambda} \) is the marginal cost of funds

- With many people — many externalities. Correct each one separately if you can — nonlinear subsidy to bequests.

- ...but the corrective tax is a function of \( u'(C^K) \) — it goes to zero as \( c^K \to \infty \)

- Correcting externality from giving by the very wealthy is not important
Correcting externality from giving

- Pigouvian subsidy — first best: $t^P = -\nu \frac{u'(C^K)}{u'(C_P)}$
- Pigouvian subsidy — second best: correct price by $t^S = -\nu \frac{u'(C^K)}{\mu}$, where $\mu$ is the multiplier on the revenue constraint (principle of targeting: Sandmo, 1975, Kopczuk 2003, Micheletto, 2008)
- Alternatively: $t^S = \frac{1}{\text{MCF}} t^P$ where $\text{MCF} = \frac{\mu}{\lambda}$ is the marginal cost of funds
  - With many people — many externalities. Correct each one separately if you can — nonlinear subsidy to bequests.
  - ...but the corrective tax is a function of $u'(C^K)$ — it goes to zero as $c^K \to \infty$
  - Correcting externality from giving by the very wealthy is not important
Correcting externality from giving

- Pigouvian subsidy — first best: \( t^P = -\nu \frac{u'(C^K)}{u'(C^P)} \)

- Pigouvian subsidy — second best: correct price by \( t^S = -\nu \frac{u'(C^K)}{\mu} \), where \( \mu \) is the multiplier on the revenue constraint (principle of targeting: Sandmo, 1975, Kopczuk 2003, Micheletto, 2008)

- Alternatively: \( t^S = \frac{1}{MCF} t^P \) where \( MCF = \frac{\mu}{\lambda} \) is the marginal cost of funds

- With many people — many externalities. Correct each one separately if you can — nonlinear subsidy to bequests.

- ...but the corrective tax is a function of \( u'(C^K) \) — it goes to zero as \( c^K \to \infty \)

- Correcting externality from giving by the very wealthy is not important
Correcting externality from giving

- Pigouvian subsidy — first best: \( t^P = -\nu \frac{u'(c^K)}{u'(c^P)} \)

- Pigouvian subsidy — second best: correct price by \( t^S = -\nu \frac{u'(c^K)}{\mu} \), where \( \mu \) is the multiplier on the revenue constraint (principle of targeting: Sandmo, 1975, Kopczuk 2003, Micheletto, 2008)

- Alternatively: \( t^S = \frac{1}{MCF} t^P \) where \( MCF = \frac{\mu}{\lambda} \) is the marginal cost of funds

- With many people — many externalities. Correct each one separately if you can — nonlinear subsidy to bequests.

- ...but the corrective tax is a function of \( u'(c^K) \) — it goes to zero as \( c^K \rightarrow \infty \)

- Correcting externality from giving by the very wealthy is not important
Correcting externality from giving

- Pigouvian subsidy — first best: \( t^P = -v \frac{u'(C^K)}{u'(C^P)} \)

- Pigouvian subsidy — second best: correct price by \( t^S = -v \frac{u'(C^K)}{\mu} \), where \( \mu \) is the multiplier on the revenue constraint (principle of targeting: Sandmo, 1975, Kopczuk 2003, Micheletto, 2008)

- Alternatively: \( t^S = \frac{1}{MCF} t^P \) where \( MCF = \frac{\mu}{\lambda} \) is the marginal cost of funds

- With many people — many externalities. Correct each one separately if you can — nonlinear subsidy to bequests.

- ...but the corrective tax is a function of \( u'(C^K) \) — it goes to zero as \( c^K \rightarrow \infty \)

- Correcting externality from giving by the very wealthy is not important
Externality from giving in the long run

- Externality from giving was assumed separable from consumption and bequests are a consumption good here, not income.
- Consider instead identical parents and children

\[ u(C + X) + \nu(L) + g(B) \]

subject to

\[ C + B = \omega L \]

where \( X \) is inheritance received, \( C \) is consumption minus inheritance, \( B = X \) in the steady state.

- Externality imposed on yourself, not separable from consumption, it interacts with incentive constraints and leads to positive tax on bequests (I think, unpublished chapter of my 2001 dissertation).
- Alternatively, as Piketty and Saez (2011) recently do — add more heterogeneity.
Externality from giving was assumed separable from consumption and bequests are a consumption good here, not income.

Consider instead identical parents and children

\[ u(C + X) + v(L) + g(B) \]

subject to

\[ C + B = wL \]

where \( X \) is inheritance received, \( C \) is consumption minus inheritance, \( B = X \) in the steady state.

Externality imposed on yourself, not separable from consumption, it interacts with incentive constraints and leads to positive tax on bequests (I think, unpublished chapter of my 2001 dissertation).

Alternatively, as Piketty and Saez (2011) recently do — add more heterogeneity.
Externality from giving was assumed separable from consumption and bequests are a consumption good here, not income.

Consider instead identical parents and children

$$u(C + X) + v(L) + g(B)$$

subject to

$$C + B = wL$$

where $X$ is inheritance received, $C$ is consumption minus inheritance, $B = X$ in the steady state.

Externality imposed on yourself, not separable from consumption, it interacts with incentive constraints and leads to positive tax on bequests (I think, unpublished chapter of my 2001 dissertation).

Alternatively, as Piketty and Saez (2011) recently do — add more heterogeneity.
Externality from giving in the long run

- Externality from giving was assumed separable from consumption and bequests are a consumption good here, not income.
- Consider instead identical parents and children

\[ u(C + X) + \nu(L) + g(B) \]

subject to

\[ C + B = wL \]

where \( X \) is inheritance received, \( C \) is consumption minus inheritance, \( B = X \) in the steady state.

- Externality imposed on yourself, not separable from consumption, it interacts with incentive constraints and leads to positive tax on bequests (I think, unpublished chapter of my 2001 dissertation).
- Alternatively, as Piketty and Saez (2011) recently do — add more heterogeneity.
The nature of the bequest motive is important for optimal tax conclusions.

However,

- This is because it corresponds to normative assumptions about the externality from giving.
- Given lack of consensus about the nature of bequest motives, relying on this type of externality is premature.
- Externality from giving becomes irrelevant at the top of the distribution, which is where transfer taxes apply in practice.
The nature of the bequest motive is important for optimal tax conclusions.

However,

- This is because it corresponds to *normative* assumptions about the externality from giving.
- Given lack of consensus about the nature of bequest motives, relying on this type of externality is premature.
- Externality from giving becomes irrelevant at the top of the distribution, which is where transfer taxes apply in practice.
The nature of the bequest motive is important for optimal tax conclusions.

However,

- This is because it corresponds to *normative* assumptions about the externality from giving.
- Given lack of consensus about the nature of bequest motives, relying on this type of externality is premature.
- Externality from giving becomes irrelevant at the top of the distribution, which is where transfer taxes apply in practice.
The nature of the bequest motive is important for optimal tax conclusions.

However,

- This is because it corresponds to *normative* assumptions about the externality from giving.
- Given lack of consensus about the nature of bequest motives, relying on this type of externality is premature.
- Externality from giving becomes irrelevant at the top of the distribution, which is where transfer taxes apply in practice.
Main things to remember — optimal tax policy

The nature of the bequest motive is important for optimal tax conclusions

However,

- This is because it corresponds to *normative* assumptions about the externality from giving
- Given lack of consensus about the nature of bequest motives, relying on this type of externality is premature
- Externality from giving becomes irrelevant at the top of the distribution, which is where transfer taxes apply in practice
Things to remember — normative analysis

Normative analysis should try to be either:

- agnostic about bequest motive
- or model mixed motives, heterogeneity and wealth distribution

On the other hand, important pieces are missing

- Implications of inherited wealth are poorly understood
- Implications of externalities from wealth concentration or accumulation are not yet incorporated
Things to remember — normative analysis

Normative analysis should try to be either:

- agnostic about bequest motive
- or model mixed motives, heterogeneity and wealth distribution

On the other hand, important pieces are missing

- Implications of inherited wealth are poorly understood
- Implications of externalities from wealth concentration or accumulation are not yet incorporated
Things to remember — normative analysis

Normative analysis should try to be either:
- agnostic about bequest motive
- or model mixed motives, heterogeneity and wealth distribution

On the other hand, important pieces are missing
- Implications of inherited wealth are poorly understood
- Implications of externalities from wealth concentration or accumulation are not yet incorporated
Normative analysis should try to be either:

- agnostic about bequest motive
- or model mixed motives, heterogeneity and wealth distribution

On the other hand, important pieces are missing

- Implications of inherited wealth are poorly understood
- Implications of externalities from wealth concentration or accumulation are not yet incorporated
Things to remember — normative analysis

Normative analysis should try to be either:
- agnostic about bequest motive
- or model mixed motives, heterogeneity and wealth distribution

On the other hand, important pieces are missing
- Implications of inherited wealth are poorly understood
- Implications of externalities from wealth concentration or accumulation are not yet incorporated
Things to remember — normative analysis

Normative analysis should try to be either:
- agnostic about bequest motive
- or model mixed motives, heterogeneity and wealth distribution

On the other hand, important pieces are missing
- Implications of inherited wealth are poorly understood
- Implications of externalities from wealth concentration or accumulation are not yet incorporated
Things to remember — empirical evidence

- Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects
- Effect on inter vivo gifts complicated
- Avoidance important but not free — tax minimization vs control
- Capital gains realizations, charity, migration
- Effect of inheritance on the recipient side
  - disincentives to work possibly important
  - entrepreneurship and ownership of firms affected
  - inheritance of control seems to reduce performance
Things to remember — empirical evidence

- Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects
- Effect on inter vivo gifts complicated
- Avoidance important but not free — tax minimization vs control
- Capital gains realizations, charity, migration
- Effect of inheritance on the recipient side
  - disincentives to work possibly important
  - entrepreneurship and ownership of firms affected
  - inheritance of control seems to reduce performance
Things to remember — empirical evidence

- Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects
- Effect on inter vivo gifts complicated
- Avoidance important but not free — tax minimization vs control
- Capital gains realizations, charity, migration
- Effect of inheritance on the recipient side
  - disincentives to work possibly important
  - entrepreneurship and ownership of firms affected
  - inheritance of control seems to reduce performance
Things to remember — empirical evidence

- Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects
- Effect on inter vivo gifts complicated
- Avoidance important but not free — tax minimization vs control
- Capital gains realizations, charity, migration
  - Effect of inheritance on the recipient side
    - disincentives to work possibly important
    - entrepreneurship and ownership of firms affected
    - inheritance of control seems to reduce performance
Things to remember — empirical evidence

- Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects
- Effect on inter vivo gifts complicated
- Avoidance important but not free — tax minimization vs control
- Capital gains realizations, charity, migration
- Effect of inheritance on the recipient side
  - disincentives to work possibly important
  - entrepreneurship and ownership of firms affected
  - inheritance of control seems to reduce performance
Things to remember — empirical evidence

Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects

Effect on inter vivo gifts complicated

Avoidance important but not free — tax minimization vs control

Capital gains realizations, charity, migration

Effect of inheritance on the recipient side
  - disincentives to work possibly important
  - entrepreneurship and ownership of firms affected
  - inheritance of control seems to reduce performance
Things to remember — empirical evidence

- Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects
- Effect on inter vivo gifts complicated
- Avoidance important but not free — tax minimization vs control
- Capital gains realizations, charity, migration
- Effect of inheritance on the recipient side
  - disincentives to work possibly important
  - entrepreneurship and ownership of firms affected
  - inheritance of control seems to reduce performance
Things to remember — empirical evidence

- Direct effect on wealth accumulation hard to estimate, best (but not good) evidence suggests negative effects
- Effect on inter vivo gifts complicated
- Avoidance important but not free — tax minimization vs control
- Capital gains realizations, charity, migration
- Effect of inheritance on the recipient side
  - disincentives to work possibly important
  - entrepreneurship and ownership of firms affected
  - inheritance of control seems to reduce performance
An important type of taxation in practice that just does not seem to want to die

- We still lack solid empirical evidence about some first order effects — impact on wealth accumulation or long-term effect on wealth concentration for example
- We also do not have a good framework for thinking about wealth accumulation of the wealthy though some pieces are there
- So, much to be done...
Conclusion

- An important type of taxation in practice that just does not seem to want to die
- We still lack solid empirical evidence about some first order effects — impact on wealth accumulation or long-term effect on wealth concentration for example
- We also do not have a good framework for thinking about wealth accumulation of the wealthy though some pieces are there
- So, much to be done...
An important type of taxation in practice that just does not seem to want to die

We still lack solid empirical evidence about some first order effects — impact on wealth accumulation or long-term effect on wealth concentration for example

We also do not have a good framework for thinking about wealth accumulation of the wealthy though some pieces are there

So, much to be done...
Conclusion

- An important type of taxation in practice that just does not seem to want to die
- We still lack solid empirical evidence about some first order effects — impact on wealth accumulation or long-term effect on wealth concentration for example
- We also do not have a good framework for thinking about wealth accumulation of the wealthy though some pieces are there
- So, much to be done...