Chapter 10. Policy as Social Insurance

UMSL

Max Gillman

Chapter 10: Policy as Social Insurance

- Karl Marx's & Charles Dicken's criticism of British 19th century working conditions
- Henry George & George Bernard Shaw's "*socialism*" based on property taxes.
- Advent of modern democracies with extensive *social insurance*
- British Winston Churchill & William Beverage and Beverage Report of 1942.
- American President F.D. Roosevelt 1930's & President Johnson 1960's

Johnson's "Great Society" University of Michigan speech

"For in your time we have the opportunity to move not only toward the rich society and the powerful society, but upward to the Great Society. The Great Society rests on abundance and liberty for all. It demands an end to poverty and racial injustice, to which we are totally committed in our time. But that is just the beginning. The Great Society is a place where every child can find knowledge to enrich his mind and to enlarge his talents. It is a place where leisure is a welcome chance to build and reflect, not a feared cause of boredom and restlessness. It is a place where the city of man serves not only the needs of the body and the demands of commerce but the desire for beauty and the hunger for community. It is a place where man can renew contact with nature. It is a place which honors creation for its own sake and for what it adds to the understanding of the race. It is a place where men are more concerned with the quality of their goals than the quantity of their goods. But most of all, the Great Society is not a safe harbor, a resting place, a final objective, a finished work. It is a challenge constantly renewed, beckoning us toward a destiny where the meaning of our lives matches the marvelous products of our labor."

Contrast

- US and UK government "welfare programs" provided a large encompassing role for government that was counterpointed by arguments for a much more limited role of government.
- Hayek's 1944 cautionary book *The Road to Serfdom*.
- "L*ibertarian*" perspective of M. Friedman, G. Stigler, G.Becker of U of Chic.
- Ayn Rand's 1936 *We the Living*, 1943 *The Fountainhead* & 1957 *Atlas Shrugged* a philosophical counterpoint to all-encompassing social entitlement
- George Stigler 1975 *The Citizen and the State: Essays on Regulation* : how government regulation acts perversely to protect industry from competition, rather than promoting healthy markets.

Economic Discussion of Income Inequality

- Economic presentation of philosophical, political economy, debate
- Focus on role of government:
- Keynes (1930,1936) versus Neoclassical basis
- of Keynes's student Frank Ramsey (1928).
- Consumption theories of each Keynes and Ramsey
- led to alternative ways to view the economic utility-maximizing goal
- of *consumption smoothing over time*.

Consumption Functions of Keynes vs Ramsey

- Keynes's consumption function based on Ernst Engel (1857),
  - Engel estimated the consumption of food, as become less important in consumption as income rises.
  - Keynes applied this function to all consumption.
  - Used to suggest more government involvement as based on income inequality
- Consumption function contained within Ramsey's economy,
  - was promulgated by Milton Friedman (1957)
  - 100 years after Engel, suggested goal of strengthening the consumer's permanent income.
- Smoothing consumption can be aided substantially by optimal social insurance policy.
  - Smoothing with social insurance different from redistributing with social insurance.
  - Difference in the two: Moral Hazard

Moral Hazard: its beginning and meaning

- James Meade of the United Kingdom won the Nobel Prize in 1977
- His 1936 textbook suggested : current, limited-time, unemployment insurance program could be modified.
- Rather than strict paying out insurance payments based on how much paid in, for each worker, for a limited period,
- expand program to give unlimited payouts as long as people were uninsured,
- regardless of what they paid into the *unemployment insurance fund*.
- Where is the problem?

Moral Hazard Distorts Incentives

- & Increases Probability of "Bad State" of nature.
- Meade's unemployment insurance expansion program simply justified by Meade.
- During an expansion, workers pay into insurance fund through taxes;
- during recession, workers would draw down these funds when unemployed.
- Idea was: aggregate system economic downturn's payouts would be balanced by economic upturn's payments into insurance fund.
- Therefore strict limits on individual payouts were not necessary.
- Ignores the disincentive to work resulting from paying people "not to work".

Winston Churchill asked commission to study the social insurance issues. Beverage report of 1942 recommended :

1. Broad social insurance system to stabilize the income of UK citizens over time and in adverse situations.
2. Income security part of policy for social progress
3. State and Individual need to cooperate.

> *"The second principle is that organisation of social insurance should be treated as one part only of a comprehensive policy of social progress. Social insurance fully developed may provide income security; it is an attack upon Want....The third principle is that social security must be achieved by co-operation between the State and the individual".*

UK Legislation and "Welfare State"

- National Insurance Act in 1945, an obligatory unemployment insurance system with unlimited-over-time benefits,
- Family Allowances Act for large families,
- Industrial Injuries Act of 1946 for work injuries,
- 1948 National Health Act for free universal health insurance,
- 1948 National Assistance Act for other aid
- and Education Act of 1944.

US Welfare State

- 1930's Pres FDR's New Deal: 1933 Social Security Act; 1933 Banking Act; others.
- 1960's Pres Johnson:
- Food Stamp Act of 1964, Economic Opportunity Act of 1964, Voting Rights Act of 1965,
    - Social Security Act of 1965, 67,
    - Elementary and Secondary Education Act of 1965 which established "Head Start",
    - Higher Education Act of 1965,
    - Immigration and Nationality Services Act of 1965,
    - National Foundation on the Arts and Humanities Act of 1965 and
    - Civil Rights Act of 1968.

Programs with Moral Hazard

- Unemployment Insurance
  - Reform: The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), also known as the "Welfare Reform Act".
  - This is the "Welfare-to-Work initiative"; revised in 2003 to give States more initiative.
- Bank Insurance: FDIC
  - Reform: As of 2006, all FDIC deposit insurance premiums are risk-based,

"Federal Deposit Insurance Reform Act of 2005 passed by Congress earlier this year to create a stronger and more stable insurance system. Among the final regulations is a new rule on the risk-based assessment system that will enable the FDIC to more closely tie each bank's premiums to the risk it poses to the deposit insurance fund. In addition, the FDIC has new flexibility to manage the deposit insurance fund's reserve ratio within a range, which in turn will help prevent sharp swings in assessment rates that were possible under the design of the former system."

Fringe Benefits and Tax Law

- "Statutorily established" as provisions of law.
- Congressional moratorium for over 10 years on what are non-statutory fringe benefits.
- Tax base continued to erode: the amount of taxable income shrunk as fringe benefits avoided taxes.
- Tax Reform Act of 1984: designated how the IRS should treat fringe benefits using marginal cost to company as basis of the true cost of the benefit (not market value).
- Redefined clearly the US income tax base:
- led directly into the Tax Reform Act of 1986 that lowered personal and corporate tax rates.

- $C = a + bY$.
- $\frac{C}{Y} = \frac{a+bY}{Y} = \frac{a}{Y} + b$.
- As $Y \to \infty$, $\frac{C}{Y} \to b$.
- Eg. $a = 0.10$ and $b = 0.67$.
- The graph shows that consumption is higher as a fraction of income
- the lower is the level of income.
- Suggests simply redistributing from High Income to Low Income People:
- Ignores Moral Hazard

Graphed Average Engle-Keynesian Consumption

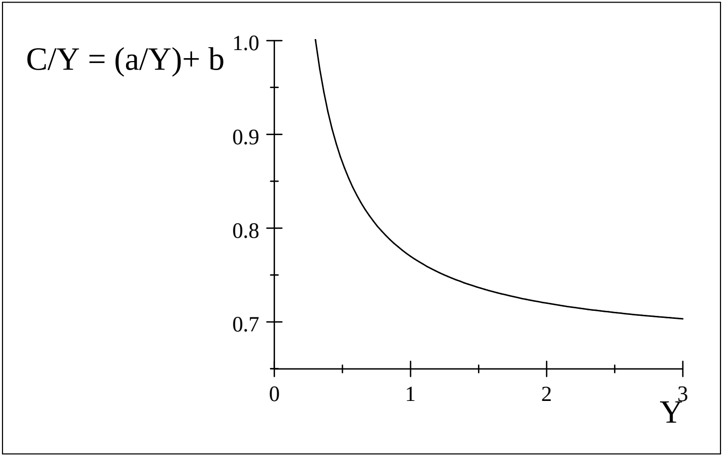

Figure: Consumption as a Fraction of Income: in the Keynesian Theory of Consumption $C = a + bY$.

Permanent Income Hypothesis of Consumption

- From Milton Friedman (1957).
- $c = a\left(y_{permanent}\right);$
- a is fraction such as two-thirds in Ramsey World.
- $c = a \cdot (rk + whT)$, where rk is income flow from capital stock,
- and $w \cdot h \cdot T$ is flow of income from Human capital stock.
- Together, income is flow from physical/financial capital and human capital.
- Perfect consumption smoothing over time is
- heart of Friedman's *permanent income hypothesis* of consumption.

Consumption Graph of PIH

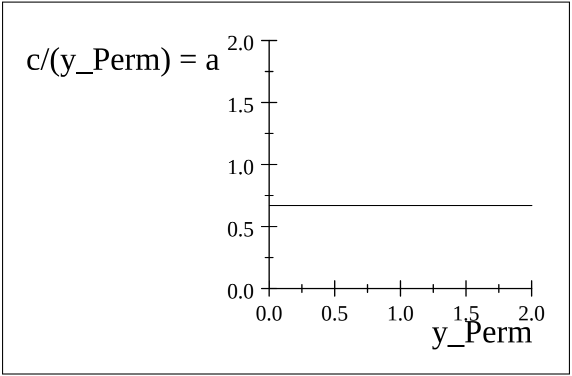

Figure: Consumption as a Fraction of Permanent Income: Ramsey-Friedman Theory

Policy in Friedman-Ramsey Consumption Function

- Increase capital stock, human and physical; education, infrastructure government funding.
- Ramsey's Keynesian Cross: Increase in Productivity parameter: shifts up Cross point.
- $c = a' + b'w$; but now $b' = aTh$ and $a' = ark$.
- So when k increases: so does a' increase and shift up consumption function.
- Also $c = wT$ in Ramsey World:

Graph of Ramsey World Consumption: with Productivity increase

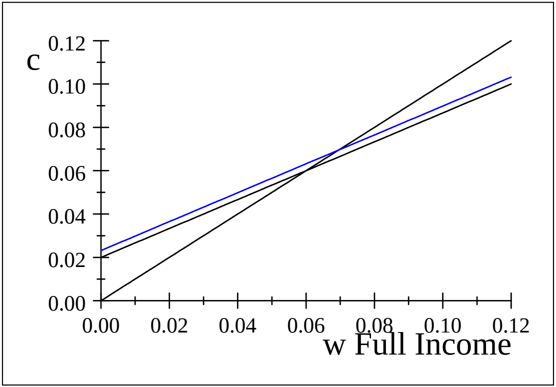

Figure: Ramsey Consumption Theory and Busines Cycles: Change in A.

Income Transfers Financed Through Taxes in Ramsey World

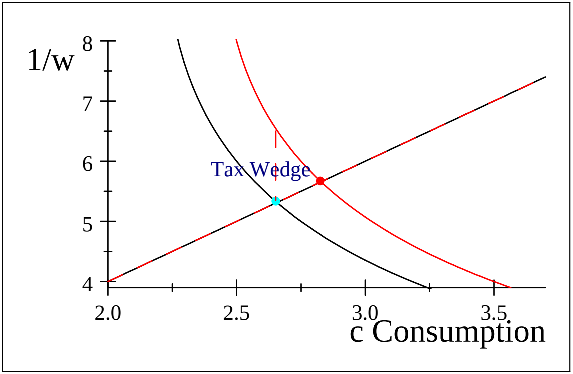

Figure: Ramsey World Goods Market: 20% Tax on Goods with Income Transfer.

Tax Wedge in Labor Market

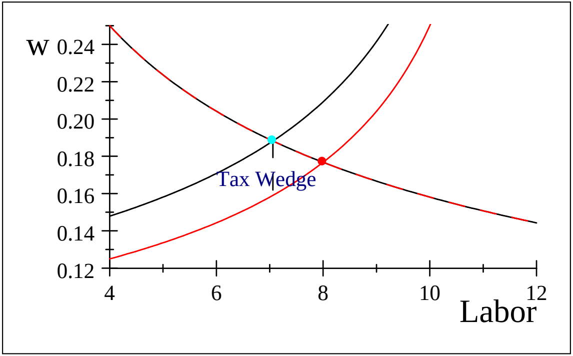

Figure: Ramsey Labor Market: Goods Tax of 20% with Income Transfer.

Ricardian Equivalence, Taxes & Moral Hazard

- Ricardian equivalence and Government Wealth constraint: have to pay for spending eventually.
- More Social Insurance Examples
- Monetary Policy as Social Insurance
- Macroprudential Policy
- Most government policy can be viewed as social insurance: police,
  - military and laws for insurance against property and wealth theft or loss.
  - Federal disaster insurance, bank insurance, & health insurance.
  - State-based programs: unemployment insurance, insurance company insurance funds that exist in all fifty US States, and State-based health insurance (Medicaid).
  - Federally funded roads, ports, rail, air and other transportation infrastructure supplement
  - States and public-private projects that may prove unable to supply the cycles of demand for normal service and for emergency times.
- Fiscal and monetary policy of government is designed to try to smooth out income streams of citizens across time.

Application: FDIC Post-2010 Dodd-Frank

- FDIC "independent" US government agency by the Banking Act of 1933;
- manages Deposit Insurance Fund (DIF) with Board of five Governors selected by US President, and approved by the Senate, with no more than 3 from one political party.
- Eg of director Thomas M. Hoenig, an Economics PhD and former head of the Federal Reserve Bank of Kansas City.
- Insures up to $250,000 across an array of different bank type funds.
- Banks have to be members of the FDIC, pay a *deposit insurance premium* per unit of deposit covered.
- Idea: expected payouts for insured deposits of failed banks by the FDIC
- equal the expected premium payments from member banks into the FDIC.
- Making the deposit insurance system have a zero expected profit aim of such a government run insurance system.
- Difficult task of reasonable expectations about future bank failures.

2010 Dodd-Frank banking act

"From the beginning of the FDIC until 2010, a bank's assessment base was about equal to its total domestic deposits. As required by the Dodd-Frank Act, however, the FDIC amended its regulations effective April 2011 to define a bank's assessment base as its average consolidated total assets minus its average tangible equity."

- Assets net of equity are equal to a bank's net liabilities.
- So assessment base is exactly this, the net liabilities of the bank.
- Revision to previous historical basis of amount of insured deposits.

FDIC Deposit Insurance Fund

- Current reserves in FDIC *Deposit Insurance Fund* (DIF) are around 1.15,
- scheduled to rise to 1.30 by 2020 according Dodd-Frank Act

"Congress in the Dodd-Frank Wall Street Reform and Consumer Protection Act increased the minimum for the DIF reserve ratio, the ratio of the amount in the fund to insured deposits, from 1.15 percent to 1.35 percent and required that the ratio reach that level by September 30, 2020. Further, the Dodd-Frank Act also made banks with $10 billion or more in total assets responsible for the increase from 1.15 percent to 1.35 percent."

Graph of DIF Ratio or Reserves to Insured Liabilities.

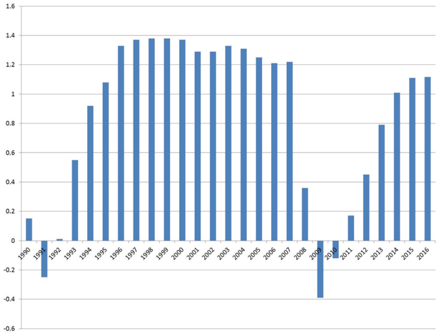

Figure: FDIC Ratio of Reserves to Insured Deposits, 1990 to 2016 (year to date, August), in percent.

Bagehot and More Bank Equity for Stability?

- Walter Bagehot 1873 book
  - *Lombard Street: A Description of the Money Market*
  - capital reserves need only be kept in the central bank,
  - at some minimum ratio of the liabilities of the total banking system.
  - Bagehot argued Bank of England held reserves for system
  - allowing individual banks to hold minimal to no reserves,
  - making London financial center of the world.
- Today, on fiat money standard (unbacked currency) rather than the gold system, FDIC performs related reserve task.
  - But insurance fund excludes huge portions of the financial intermediation system of *"non-bank" banks* and other financial intermediaries.
- Thomas Hoenig of FDIC argues against Bagehot Lombard Street
  - saying banks should hold more reserves for safety.

Investment Banks Still Outside FDIC

> *"Increasingly, institutions are also offering consumers a broad array of investment products that are not deposits, such as mutual funds, annuities, life insurance policies, stocks and bonds. Unlike the traditional checking or savings account, however, these non-deposit investment products are not insured by the FDIC."*

In September 2008, the US Treasury summarizes that all of the following occurred:

1. Fannie Mae/Freddie Mac conservatorship
2. Lehman Brothers bankruptcy
3. AIG stabilization effort.

WSJ 9-16-08:

> *"the Fed will lend up to $85 billion to AIG, and the U.S. government will effectively get a 79.9% equity stake in the insurer in the form of warrants called equity participation notes."*

Risk Management in Financial Intermediaries

- OECD: same risk management across financial intermediary sector.

  "Risk management has stayed at the above-cited fore-front of the pension industry. The perfect pension storm [of 2008] set the stage for the risk management revolution to reach the doorsteps of pension funds. Modern risk management tools analogous to those which are used in other sectors of the financial industry such as securities firms and banks are increasingly applied by pension funds. Nowadays, pension funds in many jurisdictions calculate Value-at-Risk (VaR), apply risk budgeting concepts and analyse fat tails. Asset-Liability-Management (ALM) is routinely applied as strategic risk management tool, albeit the quality of the models and the rigour in its application still vary. But it is questionable if the risk management approaches now being applied by Defined Benefit [annuities] pension funds are in all cases well suited to their needs. More fundamentally, the perception of risk appears to be currently in a state of flux. Unlike securities firms, banks or insurance companies, there is no consensus between pension funds, their sponsors, regulators and accountants on the significance of the different risk factors facing pension funds. "

FDIC Across All Financial Intermediaries?

- Risk-based deposit insurance across pensions, investment banks, insurance companies, normal banks.
- Spread internationally.
- Shore up international deposit insurance system of global finance network.
- Safeguard against international financial collapse.

Questions

1. How did the modern "welfare state" begin in the United Kingdom?
2. How did the modern "welfare state" begin in the United States?
3. Describe how moral hazard can arise in the implementation of programs designed to supply a "social security net" to low income households.
4. How does the Keynesian consumption function imply that income redistribution may be beneficial?
5. How can an analogue to the Keynesian Cross be constructed in the Ramsey World?
6. What shifts the consumption function in the Ramsey World analogue of the Keynesian Cross diagram?
7. How does the Ramsey consumption function imply that the effect of income redistribution depends on how the program for this is run?
8. Explain how "Ricardian equivalence" implies limits on the effects of government redistributions of income.
9. In what sense are certain examples of government policy in effect the same as social insurance schemes?