I. **(Intro)** Motivation & Theme:
   A. "...avoidance of inflation & maintenance of full employment can be most usefully regarded as conflicting class interests of the bourgeoisie & proletariat, respectively, the conflict being resolvable only by the test of relative political power in society & its resolution involving no reference to an overriding concept of the social welfare" (Harry G. Johnson).
   B. "This book deals with...connections between public opinion & electoral behavior, & macroeconomic policies & outcomes...macroeconomic policies & outcomes reflect the intersection of both economic & political forces. This interdependence is usefully thought of in terms of demand for & supply of economic outcomes" (p. 1).
      1. There may be no stable, long-run trade-off b/w inflation & unemployment (the standard Phillips Curve), but achieving low unemployment (& high growth) & stabilizing inflation are often conflicting goals:
      2. "Faced with demand shifts, supply shocks, labor-cost push, & other inflationary events, political administrations repeatedly have been forced to choose between accommodating inflationary pressures by pursuing expansive monetary & fiscal policies, thereby foregoing leverage on the pace of price rises in order to preserve aggregate demand & employment, & leaning against such pressures by tightening spending & the supply of money & credit, thereby slowing the inflation rate, at the cost of higher unemployment & lower growth" (p. 2).
   C. "The economic interests at stake during inflations & recessions, the ways in which class-related political constituencies perceive their interests & respond in the opinion polls & in the voting booth to macroeconomic fluctuations, & the ways in which economic interests, preferences, & priorities of political constituencies are transmitted to macroeconomic policies & outcomes observed under the parties are the main themes of this book" (p. 2).

II. Preview of the Book:
   A. Striking features of postwar American macroeconomic performance in historical perspective
      1. Three notable features
         a. Comparatively high real growth (absolutely & *per capita*)
         b. Comparatively stable macroeconomy—fluctuations quite muted compared to prewar eras
         c. Near-continuous inflation—price level rises steadily postwar whereas it was flat in the long-run prior to war
      2. Hibbs highlights institutional & policy changes following Great Depression as underlying sources of these changes:
         a. Enhanced macroeconomic stability & individual security (*via* Keynesian Welfare State activities)
         b. This altered expectations of private-sector actors (firms & workers esp.), increasing inflationary expectations & pressures.
      3. Understanding the electorate's reactions to these & other economic outcomes requires knowledge of their aggregate costs/benefits & the distribution thereof.
         a. The main losers from unemployment & recessions are those at the low end of the occupational & income hierarchies; this only partly mitigated by the tax-and-transfer (T&T) system.
         b. Inflation:
            (1) there's little evidence that inflation hurts aggregate output,
            (2) its distributional consequences are also generally small compared to those of unemployment,
            (3) if anything it hurts the very wealthy (as asset holders).
            (4) thus strong aversion to inflation evidenced by public must be due largely to psychological factors and/or confusion b/w nominal inflation & relative (real) price changes—possibly both abetted by policy-makers.
   B. Demand for & Supply of Economic Outcomes
      1. See & ponder figure I.1 (p. 4)
      2. Some questions addressed regarding the "demand side":
         a. How does support for president & her party depend on current, past, & perhaps anticipated future performance?
            (1) response of public (at polls & in booths) reveals information about its priorities & relative preferences
            (2) and constitutes voter's demand for economic outcomes
         b. How relative concern about INF & UE varies across electoral groups: Dem's, blue collar, lower income more UE-averse, less infl-averse than Rep's, white collar, & higher income; the relevant comparison is:
            [(UE aversion)/(INF aversion)]$_i$ relative to [(UE aversion)/(INF aversion)]$_j$
         c. A set of very precise questions regarding electorate's reaction to economic outcomes:
            (1) the rate at which past performance is discounted,
            (2) weight given to cumulative performance of party relative to that of discrete administrations & presidents,
            (3) relative weights on unemployment & inflation.
      3. Some questions addressed regarding the "supply side":
         a. Policy makers seek to...
            (1) ...maintain comfortable support level during term,
            (2) ...maximize votes at election time,

        (3) ...serve ideological & distributional goals of their core constituencies,

   b.   ...as constrained by institutions such as...

        (1) ...central bank autonomy,

        (2) ...executive-legislative relations,

        (3) ...federalism,

   c.   ...and by economic reality & conditions such as...

        (1) ...*e.g.*, the shape of the Phillips curve *etc.*,

        (2) ...international influences.

4.   Policy options, economic theory, & policy effectiveness

   a.   Four basic options: monetary policy, fiscal policy, direct controls, rhetoric & persuasion

   b.   Monetarism: most economists now concur that sustained inflations cannot occur without an accompanying expansion of money supply (there remains some debate over whether money is always & everywhere <u>the</u> *cause* of inflation & whether inflation may occur for "unsustained" periods without accompanying monetary growth.

        (1) Monetarism version 1 (this is version to which Hibbs refers): many economists skeptical that discretionary tax & spending manipulations can influence real economy much without a cooperative monetary policy.

        (2) Monetarism version 2: some economists now seriously doubt whether even money has much if any effect on real economy—so-called classical divide: nothing nominal, or at least certainly nothing expected & nominal, affects anything real & *vice versa*

        (3) Either way, the Keynesian activist position that govt can & should stabilize the macroeconomy at the very least is seen from this view to rely heavily on supportive monetary policy

   c.   Keynesianism:

        (1) Old Keynesianism: large influence of fiscal policy on real economy; monetary-policy role is primarily to provide liquidity (*i.e.*, keep money-supply growth at least fast enough to keep prices constant: see below).

           (a) Government can & should work to stabilize the economy by adjusting the budget counter-cyclically.

           (b) Little or no distinction between short run & long run—not a much analyzed question.

        (2) New Keynesianism: both fiscal & monetary policy can & do have sizable short-run impacts, though it's doubtful the government can do much about long-run conditions (except *via* public investment, esp. in education *etc.*). New-Keynesian-type results can be supported by economic models which contain the following features (as opposed to neoclassical models):

           (a) Multiple non-competitive markets—*i.e.* monopoly power in markets: monopoly by itself won't do it, but certain combinations of monopoly power might, *e.g.* non-competitive labor & product markets.

           (b) Nominal contracts ("sticky" wages and/or prices) or other nominal rigidities—debate about how important these are, how short the short run, *etc.*

           (c) Limited rationality of actors

   d.   Neoclassical Economics

        (1) Ricardian Equivalence: debt, if sustainable—& if everyone rational & foresighted it must be—is virtually irrelevant

        (2) Rational Expectations & Rational Intertemporal Optimization ==> foreseeable counter-cyclical policies are at best powerless & at worst counterproductive

        (3) There is some optimum level of government activity (centered in public-goods production & public investment)—policy should be fixed at those levels

   e.   [The modern political economist faces a formidable dilemma: we must be economists as well as political scientists—quite difficult to get very far relying on the economic consensus because, if there ever was one, there's not much of one now. I'll offer a suggested intro-level set of macroeconomic understandings with which we might operate in a moment.]

5.   Working on a roughly New Keynesian basis, one of Hibbs' central arguments in the text will be:

   a.   The two most important political influences on macroeconomic policy are partisanship & electoral incentives

        (1) Democrats seek lower unemployment, higher growth, & will accept higher inflation to get them

        (2) Republicans seek lower inflation & will accept somewhat lower growth & will tolerate higher unemployment to get them

        (3) Also, democrats will exhibit greater efforts at equalization & Republicans less

   b.   [I remind you that we will prefer to think in terms of "parties of the left will..." & "parties of the right will..." Republicans & Democrats are only the American examples. This is a book about the American example, but hopefully its insights will be of more general worth.]

   c.   Finally, Hibbs argues that partisan influences are decidedly more potent, at least in the American context, than electoral ones.

   d.   [Question to keep in mind: how much of this difference with Tufte is due to the changes that had occurred from

when Tufte was writing to when Hibbs was? This is important because if we can think of some reasons why the emphasis may have shifted from Tufte's time to ours, we are on our way to a more general theory encompassing both of the "most important political influences on macroeconomic policy"]

III. **(Chapter 1)** Postwar Macroeconomic Performance in Comparative Perspective:
    A. In Historical Perspective: Figures 1.1-1.6 tell the tale
        1. Figures 1.1 & 1.2: Real Growth
            a. Relatively greater postwar growth is obvious (Figure 1.1)
            b. So is relatively greater stability of postwar growth rates (Figure 1.2 & Table below it)
        2. Figures 1.3 & 1.4: Unemployment
            a. Postwar unemployment is a bit lower than pre-depression, but not so dramatically (Figure 1.3)
            b. Postwar stability: unemployment is dramatically more stable (Table below Figure 1.3, & Figure 1.4)
        3. Figures 1.5 & 1.6: Inflation
            a. Postwar steady upward trend in price level obvious in contrast to flat prices from Civil War to WWI; background: prices stable in peace times, rise during wars, & return, though a little higher, back well before Civil War by all accounts (Figure 1.5)
            b. Postwar stability of the inflation rates relative to inflation & deflation rates not at all obvious from the figures but there (Figure 1.6 & Table below it)
    B. In International Perspective:
        1. ==> there is very little of the US postwar experience that is unique
        2. ==> we should consider whether the arguments Hibbs offers are persuasive considering that the effects being explained are not unique to the US—are they general enough to have accounted for similar occurrences elsewhere?
    C. Some interesting notes about these comparisons:
        1. The postwar era is one of historically high regulation, controls, cyclical intervention, taxes, & spending. It is also one of historically high growth & stability though continuous inflation.
        2. Almost a decade of "stagflation" in '70s, though, may have strengthened the hand of those calling for reversal of the trend of increasing government intervention. Era's worst recession, Volker/Reagan deflation of '82, slammed stagflation to a halt, though at considerable macroeconomic cost. (Much debate still on how avoidable the costs.)
    D. How does Hibbs explain these prominent facts?

IV. First we need to understand some background macroeconomics. Here's a brief introduction:
    A. $MV \equiv PQ$ (money supply times the velocity of money equals the price level times the quantity of output)
        1. An accounting identity—this is true by definition.
        2. Economic theory comes in only when we decide which of these things are endogenous & which exogenous, *e.g.*:
            a. strict Friedman-esque monetarism & much neoclassical: Q & V exogenous ==> $(dM)V=(dP)Q$.
            b. Old Keynesian & much New: V exogenous, P adjusts slowly ==> $(dM)V = (dP)Q+P(dQ)$.
    B. $Y \equiv C + I + (G\text{-}T) + (X\text{-}M)$ (aggregate demand=consumption+investment+ net government spending+net exports)
        1. Again, this is an identity; as written here it is true by definition (n.b. I said Y=agg. demand, not necessarily supply)
        2. The theory comes in when we decide how/if demand is equated to supply &, in particular, what we decide regarding the incurrence of debt (G-T)>0 or accumulation of public assets (G-T)<0.
            a. Neoclassical: Supply exogenous to these factors ==> manipulation of G-T only adjusts the temporal allocation of government-revenue generation. C & possibly I & X-M adjust to counter movements in G-T, leaving real economy unaffected. The exogenous supply is the limiting agent if you will.
            b. New Keynesian: for any or all of various reasons (like those listed above) G-T is only partially if at all offset by adjustments in the other variables; supply endogenous.
    C. We will need these basic building blocks periodically through this book.

V. A longer introduction including Hibbs' explanation for the three prominent facts about postwar macroeconomic experience:
    A. Hibbs notes three striking facts about the postwar American macroeconomy compared to its prewar history:
        1. Postwar: high & sustained real income growth; relatively stable macroeconomy & higher individual security; sustained inflation
        2. Prewar: growth was lower; the economy was far more unstable, experiencing far more severe depressions & more erratic booms; & prices were almost perfectly stable in the long-run--inflation & deflation averaged quite nearly zero over decades. All of these are different now, why?
    B. First important macroeconomic identity:
        1. MV=PQ
            a. This is an accounting identity (that is, it's true by definition) which says that the amount of money in circulation times the velocity with which that money circulates through the economy equals the price level of goods in the economy times the quantity of goods produced & exchanged.
            b. This simple equation holds much of what we need to know. It becomes a theory (e.g., the 'quantity theory of

money') when we add to it certain assumptions about which elements in the equation are fixed exogenously (given outside the equation) & which are endogenously determined (within the equation).

2. For example, a simple (Milton) Friedman-esque **new monetarism or a new classical theory** argues that velocity (V) is determined by outside technological changes (like ATM machines, the introduction of checking accounts, credit cards, *etc.*). The real quantity of output (q) is also determined outside the system by real factors like the existent supply of labor & capital, the relative preference of people for labor & leisure, *etc.* Since V & Q are exogenous, then, the growth rate of the money supply directly determines the growth of prices (inflation):
   a. $(dM)V = (dP)Q$
   b. From this standpoint, nothing nominal (money, prices) affects anything real (velocity, quantity); this is the so-called *classical divide*. Money determines inflation, end of story.

3. **Old Keynesianism & old monetarism**, contrarily, were a bit less sanguine about how quickly prices & wages (P) might adjust to monetary movements. They would agree that velocity is rather exogenous, but prices do not necessarily adjust smoothly & quickly to monetary changes they would argue, so:
   a. $(dM)V = (dP)Q+P(dQ)$
   b. I.e., money growth is partly met by price increases (inflation) & partly by quantity increases (real growth). So, money has some real effect, at least in the short run. (The early theorists had little to say about the long run, largely because they didn't think we ever got there. Keynes himself quipped: "In the long run, we're all dead.")

4. **New Keynesianism** remains convinced that, for one reason or another, prices and/or wages do not adjust fluidly <u>in the short run</u>, so money growth can have short run effects on real output. In the long-run, prices may well adjust completely returning real output to some "natural" level.

5. There is **general agreement**, though, that inflation cannot be sustained without accommodating money growth. If prices continue to trend upward & money does not follow suit, looking back at equation (1) we see that output must continue to fall. This is unsustainable. So, the first part of the puzzle regarding inflation must be sought there.
   a. A key factor is the removing of the gold standard.
      (1) Under the gold standard, the money supply is fixed to the amount of gold. Thus, money cannot grow to keep paces any more than the amount of gold can be increased. This can be done only by mining *etc.* of course, so money growth was slow at best. Thus, prices were kept in tight line.
      (2) Once the gold standard was removed, the opportunity for steady inflation was present.
   b. The new classical story stops there & indicates that we should look for some incentives for money to grow continuously in the post-gold period. (We may say more about that at a later date or if you're interested enough to raise questions about it.)

C. Hibbs' (and the new Keynesian) story is a bit more revealing. We introduce **a second important identity**:
   1. $Y=C+I+(G-T)+(X-M)$
      a. This says that aggregate demand (Y) equals private consumption (C) plus investment (I) plus net government spending (G-T) plus next exports (X-M, exports minus imports).
      b. Once again, this is an identity—it becomes a theory when we start specifying how the various quantities in the equation are determined.
   2. Let's start with a simple Keynesian model, ignoring government & ignoring the international economy. (This is a crude picture of what was roughly true for the 1st half of 20th C: very small government by modern standards & high protection so little or no trade.): $Y=C+I$
      a. Now, the Keynesian parts of the theory are that:
         (1) the economy might very easily be stuck in a position where demand is insufficient & so output (supply) could be higher if demand was boosted; and
         (2) that the consumption behavior of individuals is relatively exogenous, being determined by "rule of thumb" savings & consumption rates: e.g., 80% of income is spent & 20% is "put away" or saved. (Incidentally, consumption rates have been fairly constant at around 80% in the US pre & postwar.)
      b. These imply two things:
         (1) in equilibrium, Y=aggregate demand = output = income; and
         (2) $C=cY$ where c is the "marginal propensity to consume" out of income, say 80%, then:
      c. $Y=cY+I$ [substituting 2b(2) into 2a(1)]
         (1) $\Longrightarrow Y-cY=I$
         (2) $\Longrightarrow (1-c)Y=I$
         (3) $\Longrightarrow Y=[1/(1-c)]I$
      d. $[1/(1-c)]$ here is the so-called Keynesian multiplier. *E.g.*, if c=.8, then $dY = 5*(dI)$. Or, in other words, some exogenous movement in investment creates a 5 times larger movement in output & income. Exogenous (outside) movements in anything from equation C.1 above (such as investment) are multiplied 5 times in their

total effect on output.

3. Now, returning to the three startling facts, what could have caused #2—that the postwar economy is so much more stable than the prewar economy was?

   a. Government now taxes & spends a whole lot more than it used to, & does so largely in a manner tied automatically to the income of individuals.

     (1) *E.g.*, the income tax & income-related transfers create a net income-tax rate of t. Say 20% or .2.

     (2) This changes 2b(2) above because now individuals can only consume out of their disposable (after-tax) income. Say c=.8 still, then:

       (a) $Y=c(Y^{disp})+I$ where $Y^{disp} = Y-tY$ = income after the income-tax

       (b) $\Longrightarrow Y=cY-ctY+I$

       (c) $\Longrightarrow Y-cY+ctY=I$

       (d) $\Longrightarrow Y(1-c+ct)=I$

       (e) $\Longrightarrow Y=[1/(1-c+ct)]I$

     (3) So, if c=.8 still & t=.2 (roughly what's true about the postwar era), then $Y = [1/(1-.8+.16)]I = [1/.36]I$ =(approx) 2.78I

   b. So, the multiplier is now only 2.78. Whereas prior to the war, any random shocks which hit exogenous factors would have been multiplied 5-fold, now, thanks to the dampening effects of the tax-and-transfer system, they are only multiplied 2.78-fold.

   c. Thus, the postwar stability is very easy to explain from a Keynesian or New Keynesian standpoint. (From a neoclassical standpoint it's more difficult).

4. So what about the postwar's inflation record? Hibbs' argument is simple: the stability & security achieved by postwar Keynesian policies also insulated wage & price setters from the most disastrous consequences of refusing to lower wages/prices or refusing to moderate claims for growth of wages/prices.

   a. MV=PQ

     (1) Before, with the gold standard,

       (a) M was relatively fixed by the gold supply

       (b) V was exogenous

       (c) so, any attempt by price-setters to increase prices by more than velocity would allow resulted in decreased output (*i.e.*, unemployment, losses, & bankruptcies).

     (2) Now, M has been freed from the gold supply, & price & wage setters know that if they demand too much in the way of price increases, government policy is likely to react to shore up demand (q). Price setters are therefore (relatively) less concerned about excessive price increases, knowing that the policy-authorities (government, or bank (because government leans on it), or both) will bail it out by spurring demand (q) & or money (m).

5. The neoclassical attack on all this Y=C+I+G stuff is basically that C=cY is *ad hoc*.

   a. In the neoclassical view, people adjust spending, saving, & investment decisions to economic circumstances which <u>include</u> expected government policy. So, if the government increases G-T, this has no multiplier effects, rather the private sector adjusts C & I downward reflecting the expected increase in taxes.

   b. From a neoclassical view, wage & price settlements are only the proximate causes of inflation; the root cause of inflation "always & everywhere" (to quote Friedman) is money-supply growth. Therefore, the causes of inflation must be sought in the incentives facing monetary policy makers, not in any new insensitivity of wage & price setters to excessive wage/price increases.

   c. The neoclassical theory, though, would then have to provide some other set of explanations for Hibbs' facts (A), (B), & (C) about the postwar economy.

6. Hibbs' argument, essentially a (new) Keynesian one is simpler:

   a. High, sustained real-income growth is still unexplained here in my view (though Olson had a lot to say on that). Hibbs will argue more or less explicitly later, that the new growth was a result of the successful implementation of the Keynesian Welfare State (KWS: Keynesian macroeconomic policy plus a set of automatic stabilizers in the tax-and-transfer & related systems)

   b. Macro stability & individual security stems very directly from"Keynesian Welfare State" (KWS)

   c. The opportunity for sustained inflation was opened by removal of the gold standard, the motive force behind the sustained inflation is actually the stability & security (B) achieved by the KWS.

VI. Direct evidence relating to these arguments: Beyond the broad evidence that there was something different about macroeconomic performance in terms of growth, stability, & inflation, Hibbs offers some more direct evidence that some of the mechanisms to which he attributes these changes indeed changed:

  A. Response of consumer-price inflation to economic booms & slumps **(Table 1.2, p. 24)**:

    1. Using Annual Data from 1890-1949:

$$DCPI_t = +0.07 + 0.54\sum_i DCPI_{t-i} + 30.4[\ln Y - (\ln Y)^*]$$
T-stats: $\quad$ (0.09) $\qquad$ (3.21) $\qquad$ (2.92) $\qquad\qquad\qquad$ $R^2 = 0.38$

2. Using Annual Data from 1950-1980:
$$DCPI_t = +0.32 + 1.01\sum_i DCPI_{t-i} + 9.00[\ln Y - (\ln Y)^*]$$
T-stats: $\quad$ (0.51) $\qquad$ (5.97) $\qquad$ (0.83) $\qquad\qquad\qquad$ $R^2 = 0.69$

3. These equations demonstrate two things:
    a. The price level was mean-reverting in the pre-war period but strongly trended in the postwar period (that's what the second coefficients in each equation indicate)
    b. More critically for present purposes: prices responded more & more certainly to output booms & slumps in the prewar than in the postwar period
4. Hibbs has already offered one important argument as to why this might have been so; he now notes additionally a more proximate cause that wages were increasingly set in staggered, long-term (3-years on average), nominal contracts in the postwar period as unions became a firmly established aspect of the political-economic landscape.
    a. Wages, therefore, simply could not adjust as swiftly & surely to output fluctuations under those conditions. His point is that such contracting practice would not have been sustainable if postwar KWS hadn't assured that the cost of failure to adjust would be mitigated.
    b. Firms, meanwhile, knew unions were there to stay & that KWS was operating, & so could afford to allow this sort of wage rigidity in exchange for labor peace it brought (avoiding strikes & other disruptions, *etc*.)
5. This may all be changing or have changed at least to some degree:
    a. Declining unionization & relative decline of unionized, mass, standardized production sectors
    b. Increasing openness [Why would this matter?]
    c. Back-to-back severe recessions of '79-80 & '81-'82 may have changed political and economic landscape...
B. There are other important changes that have occurred in the institutional structure of the American political economy
    1. The Financial System: govt (& central bank in particular) as the "lender of last resort" (part of FDR's "New Deal")
        a. Federal deposit insurance (FDIC, FSLIC) ==> bank panics have vanished. Hard to over-estimate importance. Almost every prewar depression (which were massive by modern standards remember) began w/ bank panics.
        b. Large network of federal loan guarantees, subsidies, & agencies ==> socialization of risk, lowers effective interest rates facing many buyers & thus allows many more transactions to occur which otherwise could not have (remember our supply & demand curves & the triangle of lost exchanges)
    2. The introduction of a central bank with the legal capacity/responsibility to run counter-cyclical monetary policy for the nation (Treasury-Federal Reserve Accord of 1951):
        a. Using Annual Data from 1890-1929 **(Table 1.3, p. 32)**:
$$DM2_t = +4.85 + 0.25DM2_{t-1} - 0.01DM2_{t-2} + 0.06DCPI_{t-1} - 10.9[\ln Y_{t-1} - (\ln Y_{t-1})^*]$$
T-stats: $\quad$ (2.43) $\qquad$ (1.19) $\qquad$ (-0.05) $\qquad$ (0.24) $\qquad$ (-0.72) $\quad R^2 = 0.00$
        b. Using Annual Data from 1950-1980:
$$DM2_t = +1.62 + 0.52DM2_{t-1} + 0.07DM2_{t-2} + 0.29DCPI_{t-1} - 19.0[\ln Y_{t-1} - (\ln Y_{t-1})^*]$$
T-stats: $\quad$ (1.91) $\qquad$ (2.88) $\qquad$ (0.41) $\qquad$ (2.01) $\qquad$ (-1.79) $R^2 = 0.55$
        c. These equations demonstrate two things:
            (1) Monetary policy became much more predictable
            (2) Monetary policy became much more counter-cyclical
    3. Whether this had a large effect in achieving postwar stability is a debated topic [personally I find the evidence here & elsewhere pretty convincing that it did—when policy was actually conducted counter-cyclically]
C. We already talked extensively about the fiscal-policy changes & the introduction / increase of tax-and-transfer & other automatic stabilizers into other macroeconomic policies
VII. The Costs of Unemployment **(Chapter 2)**
    A. Definition, measurement, & interpretation: b/c UE is universally recognized as an important indicator of macroeconomic health, & also as an important indicator of individual hardship, its definition, measurement, & interpretation are controversial & political
        1. Official Definition: from Current Population Survey, number of people 16+ who were w/o work in past week, were available for job, & actively sought work during preceding 4 weeks as a percent of the total civilian labor force
        2. There are various reasons to believe UE overstates [such as...] & various others to believe it understates [such as...], but it's pretty easy to see that, for comparisons over time, it hardly matters which alternative one uses—if they're erroneous, they must all be roughly constantly so over time (see figure 2.1)

3. Reasons to be careful about over time comparisons anyway:
    a. Intro. of or increases in UE insurance increase benefit of registering as UE'd, likely increase reported rates
    b. Some programs (*e.g.*, food stamps, AFDC, *etc.*) explicitly require work-registration, likely increase official labor pool
    c. Change in the demographic composition of the workforce. Two huge trends:
        (1) Baby boomers as they moved through the age distribution
        (2) Female labor-force participation
    d. Estimates are these factors may have increased official UE perhaps 2% from 1950s to today

B. Aggregate Costs of Unemployment
    1. At one level, obvious: unemployment means lost human resources means lost output.
    2. The political impact is even greater:
        a. Unemployment is a rate: given that people get & lose jobs, 5% unemployment usually means about 12.5% to 15% of the labor force will have been without a job for at least part of the year
        b. Vicarious experience of those who know or see those actually unemployed themselves
    3. The estimated psychological, social, & even medical costs of UE should not be underestimated.
        a. National levels of all of the following have been found to be related to UE (in the obvious ways) by various researchers: stress, mental health, suicides, cardiovascular & renal disease, crime.
        b. A summary estimation (in '70s) was that 1% more UE for a year produces 30,000+/0 more deaths in that year.
    4. Okun's Law: there's a rather tight empirical relationship between growth rate of output & change in UE rate.
        a. Using 1950-1983 Annual Data **(equation 2.1, p. 50)**:

$$(\ln Q_t - \ln Q_{t-1}) \quad = \quad +0.036 \quad -0.021 \; (U_t - U_{t-1})$$
$$\text{Std. Errs.:} \quad (0.002) \quad (0.002) \qquad R^2 = 0.82$$

        b. This indicates that each 1% UE for a year is associated with 2.1% slower growth of real GNP in that year; today that would translate to something well over $1,000/household per % UE per year.
        c. Now, it's certainly the case that the value of the extra "leisure" added by that amount of people not working should be added back in, but the best estimates of that are that it's at most 25%. (We know it can't be all of the lost value or those unemployed would have valued their leisure more than what they could have earned working, & so would not have been seeking work & so would not have been officially unemployed.)

C. The Incidence of Unemployment
    1. Table 2.3: UE rates by demographic group **(Table 2.3, p. 53)**
        a. Occupational differences are dramatic
            (1) Note esp. the white-collar/blue-collar divide in the incidence
            (2) This divide is cyclical
            (3) It has diminished somewhat [implications of this...?]
        b. There's also something of a gender gap, but it's relatively small—it disappears entirely if you control for differences in occupation across genders. I.e., what gender gap there is in unemployment incidence is a direct reflection of the gender gap in the type of jobs obtained.
        c. There's a large race divide, & it shows little sign of diminishing. It's also cyclical.
        d. There's a mammoth difference across age groups. Again, cyclical.
        e. These differences tend to cumulate: UE among minority, youth, blue-collar is *really* high & *really* cyclical
    2. **(Table 2.5 p. 58)**: the changes in pre- & post-tax-and-transfer income due to a 1% rise in UE (this is a way to assess the effectiveness of T&T in reducing the individual hardship of UE)
        a. Conclusion 1: The T&T system does (or did) exactly what it was supposed to do
            (1) reduced the private impact of UE,
            (2) did so more for the very poor than the relatively well-off,
            (3) it may have had undesirable side-effects, as opponents argue, but certainly accomplished its primary task.
        b. Conclusion 2: The T&T system seems to have worked almost equally across racial groups above the poverty level, but worked noticeably less well for minorities living below the poverty level than for non-minorities below the poverty level (though it clearly was at least some help to both).
        c. Conclusion 3: The T&T system offset the losses of female heads of households less well than male, but it's also true that 1%UE created less income losses for female HoH's to start. (This is because more of female HoH income comes from non-market activities than a male HoH.)

D. Sum:
    1. However you measure, UE has massive aggregate costs.
    2. Also however you measure, it has markedly different impact across demographic, occupational, & income groups.
    3. The T&T system offsets some but not near all of these two facts.

VIII. The Costs of Inflation

A. Definition: pervasive rise in money prices of goods & services (on average)—i.e. decline in purchasing power of money
    1. Must be distinguished from relative price movements: not movement of some price or set of prices, but movement of all prices (including labor prices), on average, against the value of money.
    2. Technical measurement issues, which, of course, are inevitably political, as with unemployment, because resolution different ways benefits some, hurts others.
        a. Requires creation of an index of prices, but on which goods?
            (1) Some "representative" bundle of consumption goods ==> CPI
            (2) All personal consumption goods ==> PCE deflator
            (3) All goods & services produced in the economy ==> GDP deflator
            (4) There are others: e.g., all goods & services purchased in the economy ==> GNP deflator
        b. CPI by far most common among all but academics; CPI & GDP both prominent among academics
            (1) Various private & public COLA's fixed to CPI
                (a) Many government programs fixed to CPI
                (b) Many bargained wage settlements include CPI adjustments
                (c) maybe ½ of Americans directly affected by it *via* public laws or private contracts
            (2) Certainly the most commonly cited index in general news programs, *etc.*
    3. Problems with Price Indices (and therefore Inflation), esp. with CPI
        a. CPI (& all others) are NOT "cost of living" indexes, even if flawless b/c do not & cannot allow for substitution
            (1) Choice is either some fixed bundle ==> price index overstates cost-of-living increase
            (2) Or the current bundle ==> price index understates cost-of-living increase
            (3) ["Average" of two seems logical to do so, doesn't it? Wouldn't be perfect, but would probably help.]
        b. CPI in particular made egregious errors in the way it treated housing
            (1) Double counts by using both sale prices & mortgage costs in the index
            (2) Bigger problem: Treats house prices increase as *consumption*-price increase, but for home-owners this is an *asset*-price increase
            (3) New CPI series now uses "rental equivalent" as the consumption-price of housing
        c. Recent hubbub is not about these issues, but about one Hibbs neglects (as did many until recently): quality increases—how can you tell how much of $50 price increase on a car is for quality increases in the new model?
    4. B/c CPI overstates actual inflation (& even more so cost of living), & b/c it's built into so many contracts, it...
        a. Fuels the "wage/price" spiral.
        b. Increases standard of living of those fully indexed to it (*e.g.*, SS recipients, unionized labor) relative to those not (*e.g.*, non-unionized workers, current workers)—*ceteris paribus*:
            (1) could easily be that informal mechanisms which keep some of the others' incomes rising with inflation more than compensate,
            (2) but that cannot be the case in general because the explicit full indexation to something overstating the true inflation implies that more than half the rest of the weight of the economy is inflating slower.
    5. **CPI's problems w/ housing were known for at least a decade before any action was taken (in 1983-5). [why?]**
    6. So-called "core" or "underlying" inflation: PCE-Food Prices-Energy Prices. These are considered "core" in the sense that they most directly reflect the wage/price spiral.
B. Core Inflation about 1.5% in early 1960s; took 3 big upward jumps in the period since until the early 1980s; then it came plummeting back
    1. LBJ 1965-68:
        a. Vietnam + Great Society + Little or No Tax Increase
            (1) ==> Debt & Inflation, and
            (2) ==> Real economic boom
            (3) Money-supply growth was fully supportive
        b. By early 1969, UE was 1.5% points below the "natural rate"
            (1) ==> underlying inflation had risen to 4%
            (2) ==> LBJ finally eased off a bit, introducing a 10% income tax surcharge
    2. RMN I 1969-72:
        a. Standard conservative deflation
            (1) Cut deficit by 2%
            (2) Burns (Nixon's appointed Fed Chair) cut real money-growth first to .5% then to -2%
        b. ==> 1970-71 recession
            (1) UE rose to 6%
            (2) Only .75% above natural rate, so not much anti-inflation was achieved in the early go
Aside: Postwar Rule of Thumb: Each 1% UE above "natural rate" for a year ==> .5% decline in inflation

     c. In August 1971, Nixon & Burns reverse tack (we've heard this story in Tufte)
        (1) 8/71 wage & price restraints imposed (only time in US history, I believe)
        (2) "Gold Window" closed August 1971
        (3) then goes for pre-election stimulus like never before
            (a) 1.5% deficit in '71, then 1.7% in '72
            (b) Real money-supply growth of 2.4% & 3.7%
            (c) (all of these were big numbers at the time)
        (4) ==> boom, & then inflation as soon as price controls lifted (after the election of course: late '73, early '74)
  3. Then food-price shocks in late '72, early '73, followed by OPEC I in 10/73 ==> massive redistribution of global wealth from consumers of food (non-agricultural sector) & energy (US) to producers of it (agr. sector, & OPEC)
     a. This was a **relative price shock**—one of keys to understanding the political impact of inflation is to understand how & why folk were & are confused by this.
  4. GRF (Aug.) 1974-76:
     a. "Whip Inflation Now"
        (1) Deficit cut 1% of GDP
        (2) Burns more than accommodates: real money-supply growth -5.6% in '74 & -4.2% in '75
     b. This essentially the same sort of "policy blunder" made by policy-makers in early stages of Great Depression:
        (1) The problem was an adverse relative-price shock on an imported supply-item; fiscal & monetary contraction will predictably exacerbate the unavoidable real losses associated with that. It did:
            (a) ==> worst recession since great depression: UE to 8.5% & didn't come back down past 7.7%
            (b) ==> this was 2.5% over the "natural rate", so inflation did decelerate by 1.5% to less than 6%
        (2) GRF backs off a little as election approaches, but UE still at all time high.
            (a) Inflation was (partially) whipped, but the political economic issue is that there was nothing domestic policy could do about the real-price shock but decide who would pay its price
        (3) Ford explicitly chose to make UE sufferers pay: "Unemployment affects 10% of the population; inflation affects everyone."
  5. JEC 1977-80:
     a. A completely different set of constituencies, therefore a completely different set of economic priorities
     b. Early Term:
        (1) Real money-growth +1.1% in '77, deficit +2%
        (2) ==> UE fell 2% from end of '76 to beginning of '79
        (3) Still above "natural rate", so inflation remained stable despite the decline
     c. As a beef-price increase (relative) occurs ("Where's the Beef?") & CPI begins to creep up (general) in response, Carter began to ease off the accelerator a little, then OPEC II hit:
        (1) Oil prices rose from $15 to $35, creating the same kind of supply-induced initially relative, then general, inflation as before
        (2) Carter, presumably to reassure financial markets, had named Paul Volcker Fed Chair (in '78 I believe)
            (a) Volcker increases discount rate (a rare Fed action) twice in '78-'79, 1% (a large amount) each time
            (b) No monetary accommodation at all: 3% real money-growth decline '79, unprecedented 6.5% in '80
            (c) If Volcker wanted Carter out of office, he set things up nicely:
        (3) Again, the results were predictable:
            (a) nothing could be done with domestic policy about loss of domestic income created by oil-price shock
            (b) strong monetary anti-inflation would work to stop general inflation, but it works by creating recession & UE ==> Carter faced electorate with UE rising, inflation high, & growth falling. He lost.
  6. RWR I 1981-84: (Hibbs reserves thorough discussion of Reagan I for the conclusion)
     a. Fiscal Deficits:
        (1) Defense rises to replace social spending ("winning cold war" replaces "achieving Great Society" as goal)
        (2) Tax cuts, esp. tax cuts on businesses & on marginal rate of taxation at high end of income distribution
        (3) This was supposed to pay for itself (Laffer Curve), it didn't ("laughable curve" actually)
     b. Monetary Contraction: the great Volcker deflation continued because...
        (1) RWR, his constituency, & his advisers ideologically & self-interestedly committed to it
        (2) New economic theory suggested that if deflation were credible & announced, it would have no real costs
     c. ==> '81-'82 greatest recession since the Great Depression. After 4 years of tight money & 3 of postwar record UE, INF finally subsided by 1984.
  7. N.b., after each inflationary episode was reined in, inflation did not return all the way back to its previous level but remained a point or two higher.
IX. The Story So Far (ch. 1-3.2 review; chapter 3 completion):

A. **Chapter 1**: Postwar Macroeconomic Performance
    1. Three striking features of postwar economic performance compared to prewar experience
        a. Sustained, relatively high growth
        b. Remarkable macroeconomic stability & comparative individual security
        c. Sustained, continuous inflation
    2. The explanation for IA1b:
        a. Individual: Unemployment insurance & other transfer programs ==> greater individual security
        b. Macro: Deposit insurance ==> investment & savings security
        c. Macro: Automatic stabilizers & government discretionary fiscal policy
        d. Macro: Discretionary monetary policy
    3. The explanation for IA1c:
        a. The macro stability—especially insofar as it is maintained by government action—shifts the balance for price & wage setters to be just a bit more inflationary
        b. Freeing of money from gold standard gave policy makers option of accommodating inflationary impacts of these settlements. Elected policy-makers were likely to take an inflationary way out more often than not.
        c. In short, IA1b indirectly caused, or at least facilitated, IA1c
B. **Chapter 2:** The *Objective* (*measurable*, *observable*, *actual* as opposed to *perceived*) Costs of Unemployment
    1. Aggregate Costs:
        a. Represents direct loss of productive capacity; *i.e.*, Okun's Law: 1% UE± <==> 2% slower real GDP growth±
        b. An aggregate rate of X% corresponds to 2.5X-3X% of labor force experiencing 1+ bouts of UE during year.
        c. Large social costs (health, crime, *etc.*)
    2. Distributional Impact of Unemployment: hits ... harder than ... & in a more cyclical manner
        a. Lower strata of occupational hierarchy ... higher strata ("white-collar" v. "blue-collar")
        b. Lower income groups ... higher income groups
        c. Females ... Males
        d. Nonwhites ... Whites
        e. Young (24 & under) ... Prime Age (25-65)
    3. These costs socialized to some degree by UE insurance programs—not near completely of course
C. **Chapter 3:** The *Objective* (*measurable*, *observable*, *actual* as opposed to *perceived*) Costs of Inflation
    1. Inflation vs. Relative-Price Increases
        a. Relative Prices have large aggregate and distributional effects; these often confused with inflation
        b. INF has little or no discernable agg. effects; some distributional effects at very high-end of income distribution
    2. Distributional Impact of Inflation
        a. Impact on the quintile distribution of income: none to slight shift from top 40% to bottom 40%
            (1) doesn't matter whether one continuously adjusts quintile groups for potentially differential inflation rates among the products purchased by the different groups
            (2) again, if anything, luxury-good inflation exceeds necessity inflation in most times
        b. Simulations seem to indicate that inflation costs are substantial over time (say, 15% losses over a 5-year period) only for the top 0.01% of the income distribution
        c. Nor is there any long-run "bracket creep" to mention: even before automatic inflation-adjustments to income tax, discretionary changes at least kept pace with inflation—inflation was & is real-tax-burden neutral
            (1) Ln(Tax Revenue)=-10.9+1.017ln(PQ)+.432ln(Q)   [p. 95]
            (2) Again, if anything, slight tendency for inflation to have increased tax liabilities of upper end
        d. If adjustments of labor nominal recompense lags that of capital, then inflation would worsen the "functional" distribution of income ==> once again, if anything, slightly the opposite is true. If anything, nominal payments to capital adjust more slowly than nominal payments to labor.
        e. In sum: distributional effects are small, against the top 40% & for bottom, & if large for anyone it is against a group up around the 0.01 percentile. This last is so because...
    3. Impact on Corporate Profitability
        a. Inflation has a negative effect on after-tax profitability of business or after-tax return on capital, & therefore on after-tax stock returns
        b. ==> the negative relations between inflation & stock returns seems to have operated through this impact of inflation on after-tax profitability.
            (1) Consider this for 1990s: "...the recipe for the high after-tax corporate profitability & rapidly rising equity share prices realized during the 1960s was the conjunction of brisk growth, little idle capacity, & moderate inflation rates that did not undermine the pro-investment tax policies legislated by Congress..." (P. 107).
            (2) [So, what if anything has changed about this situation?]

4. Aggregate Impact of Inflation
    a. No evidence that inflation *per se* reduces savings rates or investment
        (1) which is odd because it does change the relative price of present & future consumption
        (2) inflation has an income effect (price of future goods higher so must save more to have same real amount later) and substitution effect (price of present goods lower relative to future goods so one substitutes) the evidence seems to indicate that they roughly cancel.
    b. No evidence that inflation shifts the composition of investment from non-residential to residential
        (1) since mortgage borrowing is tax-deductible based on nominal rates & since interest income is tax-liable at nominal rates, it should be that inflation shifts incentives toward residential construction away from non-residential capital-formation
        (2) apparently this has been offset by
            (a) tendency for mortgage borrowing to be rationed rather than nominal rates continuing to rise
            (b) convention of fixed nominal payments implies that real mortgage costs are heavily front-loaded in high inflation periods
            (c) relative energy-prices were rising in the two major inflations ==> smaller homes bought
    c. In short, no discernible aggregate costs either
5. In sum, objectively, inflation has little aggregate or distributional cost, what little effect there is seems on net to have hurt the higher end of the income distribution relative to the lower & corporate vs. consumer interests
    a. ==> a puzzle as to why the population as a whole is so obsessed with inflation
    b. The *real* costs of inflation, according to Hibbs, are those associated with policy-makers reactions to it. In working to reduce inflation, policy-makers have induced or abetted every postwar contraction.
        (1) So, the next question is what might explain the different degrees to which policy-makers have opted to stifle the economy so as to "Whip Inflation Now"
        (2) Along the way, we need to address how it is that so many have misunderstood & continue to misunderstand the impact of inflation.

X. Public Concern About Inflation & Unemployment **(ch. 4)**
    A. If we divide answers to the Gallup Poll question "What is the most important problem facing the country today?" among *International & Defense Issue* answers, *Domestic Political & Social Issue* answers, & *Economic Issues* answers, the last has been dominant since 1974—some retrenchment of late, but still 60%.
    B. Among economic issues, two of the most enduringly prominent are UE & Infl.
        1. Inflation higher in personal than sociotropic evaluations
        2. Evidence is people evaluate policy makers more on sociotropic considerations [Why?]
        3. **[See Figs. 4.2 & 4.3]** Salience of UE relative to Infl. & v.v. responds to objective conditions
    C. Let's work through the 1st paragraph on page 134:

$$\text{Inflation Concern}_t = +45.4 \quad -6.88\, U^{Gap}_t \quad -6.72(U^{Gap}_t - U^{Gap}_{t-1}) + 2.36\, p_t \quad + 1.39(p_t - p_{t-1}) - .569\, r_t$$

Standard Errors (6.16)   (1.15)   (3.14)   (0.62)   (1.61) (0.77)

(% saying Infl. more important than UE +.5 equally import.) = g(UE-UE$_n$, CPI inflation, per capita real Y^{disp} growth)

So, despite the surprisingly strong—though still objectively unexplainable—general aversion to inflation, the bulk of the *variation* in the relative concerns of voters for UE & infl. is due to objective variations in UE.
    D. Moreover, the relative aversion of voters toward UE & infl. differs persistently by income, occupation, & partisanship **[Figures 4.5-4.7 & Table 4.1]**

XI. Macroeconomic Performance & Mass Political Support: Hibbs' Dynamic Model of Presidential Approval
    A. Ln[% Approving/(1-%Approving)] =
        +w (Cumulative, Discounted, Relative Incumbent-Party Performance)
        +(1-w)(Cumulative, Discounted, Relative Administration Evaluation)
        +Fixed Administration-Specific Advantage/Disadvantage
    B. $Y = \ln(\text{Approval}\%) - \ln(1-\text{Approval}\%) = ...w*b*\{\sum g^k(D_t D_{t-k})X_{t-k}\} + (1-w)*b*\{\sum g^k(I_t I_{t-k})X_{t-k}\} + S...$
        1. The w vs. (1-w) is estimating the degree to which presidents are being evaluated on the basis of their party's cumulative performance relative to the opposing party's, discounted, vs. the degree to which they are evaluated on the basis of their administration's cumulative performance relative to all other administrations, discounted
        2. The g is measuring the rate at which past performances, both of this president & of the comparison group (past presidents of the other party or past presidents), are being discounted by voters ("fade out of memory")
        3. The DD term is just an indicator of whether this quarter & the one k periods ago were governed by presidents of the

same party. If so, that past performance adds to the cumulative party-evaluation; if not, that past performance detracts from it.
4. The II term, is doing the same thing only it indicates whether the quarter k periods ago was governed by the present president (adds to cumulative performance) or a previous one (subtracts from it)
5. The X terms are just all the different factors on which presidents are thought to be evaluated: Vietnam, Rally Events, Watergate, Inflation, per capita real Y^{disp} growth, Unemployment, Energy Prices
6. The S term is some fixed unique characteristic of each president. Hibbs calls this the "shadow" evaluation of the hypothetical opponent, but acknowledges that in practice it contains a lot more than that.
C. I reproduce the information in Table 5.1 below:

Among Democrats, 1961.1-1984.1 (R^2=0.98)

$\ln[(\text{App})/(1-\text{App})] = ...0.985(\text{JFK})+0.652(\text{LBJ})-0.165(\text{RMN})+0.154(\text{GRF})+0.408(\text{JEC})-0.765(\text{RWR})$
$\qquad\qquad\qquad (0.042)\quad (0.040)\quad (0.034)\quad (0.057)\quad (0.037)\quad (0.033)$

$+.697\{\sum.834^k D_t D_{t-k}(-.084\text{VIET}_{t-k}+.223\text{RALLY}_{t-k}-.026\text{WTRGT}_{t-k}-.028\text{INF}_{t-k}+.011\text{dRY}_{t-k}-.030\text{UE}_{t-k}+.002\text{OILP}_{t-k})\}$
$(.021)\ (.005)\qquad (.003)\qquad (.007)\qquad\quad (.001)\qquad\quad (.001)\qquad (.001)\qquad (.002)\qquad (.0004)$

$+(1-.697)\{\sum.834^k I_t I_{t-k}(-.084\text{VIET}_{t-k}+.223\text{RALLY}_{t-k}-.026\text{WTRGT}_{t-k}-.028\text{INF}_{t-k}+.011\text{dRY}_{t-k}-.030\text{UE}_{t-k}+.002\text{OILP}_{t-k})\}$
$\ (.021)\ (.005)\qquad (.003)\qquad (.007)\qquad\quad (.001)\qquad\quad (.001)\qquad (.001)\qquad (.002)\qquad (.0004)$

Among Republicans, 1961.1-1984.1 (R^2=0.96)

$\ln[(\text{App})/(1-\text{App})] = ...-0.818(\text{JFK})-0.852(\text{LBJ})+1.43(\text{RMN})+1.45(\text{GRF})-0.554(\text{JEC})+1.44(\text{RWR})$
$\qquad\qquad\qquad (0.045)\quad (0.045)\quad (0.047)\quad (0.070)\quad (0.045)\quad (0.055)$

$+.748\{\sum.771^k D_t D_{t-k}(-.069\text{VIET}_{t-k}+.290\text{RALLY}_{t-k}-.017\text{WTRGT}_{t-k}-.039\text{INF}_{t-k}+.018\text{dRY}_{t-k}-.025\text{UE}_{t-k}+.0011\text{OILP}_{t-k})\}$
$(.033)\ (.012)\qquad (.005)\qquad (.010)\qquad\quad (.001)\qquad\quad (.002)\qquad (.002)\qquad (.004)\qquad (.0006)$

$+(1-.748)\{\sum.771^k I_t I_{t-k}(-.069\text{VIET}_{t-k}+.290\text{RALLY}_{t-k}-.017\text{WTRGT}_{t-k}-.039\text{INF}_{t-k}+.018\text{dRY}_{t-k}-.025\text{UE}_{t-k}+.0011\text{OILP}_{t-k})\}$
$\ (.033)\ (.012)\qquad (.005)\qquad (.010)\qquad\quad (.001)\qquad\quad (.002)\qquad (.002)\qquad (.004)\qquad (.0006)$

Among Independents, 1961.1-1984.1 (R^2=0.92)

$\ln[(\text{App})/(1-\text{App})] = ...-0.038(\text{JFK})-0.321(\text{LBJ})+0.476(\text{RMN})+0.891(\text{GRF})-0.089(\text{JEC})-0.019(\text{RWR})$
$\qquad\qquad\qquad (0.049)\quad (0.052)\quad (0.040)\quad (0.072)\quad (0.047)\quad (0.038)$

$+.783\{\sum.842^k D_t D_{t-k}(-.062\text{VIET}_{t-k}+.246\text{RALLY}_{t-k}-.020\text{WTRGT}_{t-k}-.031\text{INF}_{t-k}+.015\text{dRY}_{t-k}-.015\text{UE}_{t-k}+.0017\text{OILP}_{t-k})\}$
$(.028)\ (.007)\qquad (.003)\qquad (.001)\qquad\quad (.001)\qquad\quad (.002)\qquad (.001)\qquad (.002)\qquad (.0005)$

$+(1-.783)\{\sum.842^k I_t I_{t-k}(-.062\text{VIET}_{t-k}+.246\text{RALLY}_{t-k}-.020\text{WTRGT}_{t-k}-.031\text{INF}_{t-k}+.015\text{dRY}_{t-k}-.015\text{UE}_{t-k}+.0017\text{OILP}_{t-k})\}$
$\ (.028)\ (.007)\qquad (.003)\qquad (.001)\qquad\quad (.001)\qquad\quad (.002)\qquad (.001)\qquad (.002)\qquad (.0005)$

XII. Conclusions from this analysis
  A. Obvious partisan pattern to "shadow evaluations" of each president
    1. Dem's like Dem's & Rep's like Rep's—this in addition to their differential responses to each of the other variables
    2. There is on average a net pro-Republican presidential edge of about 9%
  B. Lag structure
    1. Relatively homogenous across D, R, I groups; approx. = 0.82
    2. Decay Rate:
      a. This implies that about 18% of the total impact of each factor is felt immediately (within 1 quarter)
      b. About 55% by 1 year, 80% by 2 years, 96 by 4 years.
      c. Last quarter of four-year term weighted 24X as heavily as first; last year 11X as heavily as first.
    3. [How does this work?]
    4. [What are its substantive implications here?]
  C. Weight on cumulative, relative, discounted, party performance relative to cumulative, relative, discounted, administration performance in evaluation of the president

1. Also relatively homogenous; approx. = 0.75 (but this excludes the administration fixed effects, S)
2. [What does this suggest substantively?]
D. The Honeymoon Effect:
1. Natural result of the lag structure & the discounting of past evaluations
2. The estimates suggest that "honeymoons" are higher & decay more steeply in new administrations representing partisan shifts than for administration shifts within party
E. See **Table 5.3** for some calculations of the impacts of non-economic variables
1. "Rally-Round-the-Flag Effects": These primarily international events produce...
a. Bipartisan behavior in Washington,
b. Decreased media criticism of White House & Congress,
c. And an increased focus on the president as the commander in chief, an emphasis on national unity behind pres.
d. Almost regardless of "good" or "bad" nature of news, international events improve president's approval rating
2. VIETNAM:
a. severely hurt LBJ, also hurt RMN, but less severely because Dem's disliked incumbents more for casualties.
b. About 1000/quarter sustained for a year ==> -4.4% (from R's) to -6% (from D's) approval
3. EVENTS:
a. Sizable impact of a typical international event [+4.5% (from D's) to +6.9% (from R's)]
b. Occur at a rate of about 1.5/year, but JEC was hit by 5 events from 1979.4 to 1980.1 (Iran/Afghanistan)
(1) Hibbs estimates these provided a +24% gain among Dem's during the campaign, helping a previously weak JEC overcome a strong challenge from Ted Kennedy in the primary
(2) Events receded in time for election, & JEC became first elected incumbent to lose re-election bid since Hoover lost to FDR.
4. WATERGATE:
a. Coded here as a series of "events"—*i.e.*, each quarter during the scandal given a score from 1 to 3 depending on the degree to which RMN was personally implicated by the revelations in that quarter.
b. From 1972:2 to 1974:3, RMN loses from 17% to 21% approval from the accumulation of these revelations
F. President cut some slack for problems arising from OPEC-driven energy-price increases, but not much
G. PARTISAN DIFFERENCES IN EVALUATION of PRESIDENT on ECONOMIC PERFORMANCE

MARGINAL RATE OF SUBSTITUTION	*PARTISAN GROUP*		
	Democrats	*Republicans*	*Independents*
-(UE^{Gap}/Infl.)	**-1.1**	**-0.65**	**-0.49**

H. Independents' evaluations are much more sensitive to all of these factors than D's & R's because their evaluation is usually more near the break-point between just approve & just disapprove. [Implications?]
XIII. Interpretation of the 1980 (Carter v. Reagan) & 1984 (Reagan v. Mondale) Elections
A. The question of interpretation:
1. Some claimed then, & claim has resurfaced more lately, that these elections revealed a shift of electorate to right on "federal government's role in domestic social & economic affairs" (p. 186)
2. However, elections could also be interpreted as more usual loss by an incumbent presiding over awful economic conditions & victory by an incumbent presiding over quite good and/or strongly improving economic conditions
3. Careful examination of micro & macro evidence from those elections in comparison with previous ones indicates quite clearly that latter explanation is more sound.
4. [However, I'd suggest that what may have transpired is more like a sequence beginning with economy-inspired victories & losses which produced 12 years of Republican presidency. The policies of those 12 years, along with other exogenous economic, social, & political changes, produced a structural transformation of US electorate so that now, public likely *is* more right on these issues than it was pre-Reagan. *I.e.*, XIII.A.2==>XIII.A.1]
B. Macro evidence: comparison of the economic records of the Carter & Reagan I administrations (Fig. 6.2).
1. Carter (beaten handily Reagan)
a. Inverse electoral business cycle
b. Faced electorate with 3rd worst UE, worst inflation, & only negative real per capita disposable income growth among postwar incumbent candidates
2. Reagan I (crushes Mondale, who caries only his own state & DC)
a. Perfect electoral business cycle

       b.   Worst or 2nd worst UE but improving, average inflation & improving, & 2nd best real per capita disposable income growth among postwar incumbent candidates

   3.   Last four incumbents to lose: Hoover, Ford, Carter, & Bush—all faced electorate with lousy economy (and Ford wasn't elected himself & had recently pardoned Nixon)

   4.   Point is well-summarized by **Figure 6.3**: economy alone does a nice job of explaining (could easily have predicted) outcomes of 1980 & 1984—nothing odd about them, *e.g.* no necessary indication of any rightward shift.

  C.   Micro evidence: survey data reveals no clear rightward shift in public opinion, generally or specifically, at least 'til '84

   1.   **Table 6.3**—reasons voters gave in election-day polls for voting for Reagan in 1980 & 1984

       a.   Possibly some genuine anti-big-government sentiment is emerging by 1984

       b.   But most major programs continued to enjoy quite strong support (only "Food Stamps" or a general reference to "welfare" lacked majority support for maintaining or increasing funding)

       c.   **Table 6.4**: only 5-10% indicated that "he's a real conservative" was a personal quality affecting their decision to vote for Reagan in 1980 & 1984

   2.   Trends in ideological self-placement (liberal-moderate-conservative) of voters 1972-1984 (**Table 6.5**)

       a.   Perhaps some slight shift, possibly to right, but it was definitely unclear & minor whatever it was by 1984

       b.   Beware of the "rubber ruler effect" of ideological self-placement responses

  D.   Ironies

   1.   President most credited with causing the political collapse of welfare-state liberalism, JEC, was...

       a.   ...probably the least liberal of postwar Democratic presidents (at least until Clinton)

       b.   ...defeated at least in part because he abandoned traditional Democratic expansionary policies & pursued conservative anti-inflationary policy late in his term

   2.   President most credited with creating/coalescing new support for fiscal conservatism, strong antibiggummintism, & the "end" of Keynesian policy, RWR...

       a.   ...presided over the greatest period & amount of deficit spending since WWII,

       b.   ...hardly affected the size or the pace of growth of federal government, though the location of spending altered dramatically from domestic social to military spending, and

       c.   ...presided over the greatest & most prolonged *Keynesian* boom of the postwar era.

  E.   [What did happen, then? Discussion]

XIV.   The Party-Cleavage Model of Economic Policy & Outcomes (**ch. 7**)

  A.   Core elements of the theory

   1.   Parties have differing preferences over economic outcomes; in particular, the left seeks to avoid unemployment relative to inflation more than the right & *v.v.*

       a.   Comparatively, US parties of left & right are...

          (1) more heterogenous,

          (2) less distant from each other ideologically,

          (3) and more to the right than the spectrum in other democracies

       b.   ...but the distinction is still quite clear & obvious, & has been at least since FDR ushered in modern era of class politics to replace older era of sectional politics. Evidence from party-elite survey in 1976 of top problems:

          (1) Democrats identified UE #1 & Infl #2

          (2) Republicans ordered them INF #1, Govt Size, Defense, Dev'pmnt of Energy Resources, Crime, & UE #6

   2.   Voters very easily recognize which party is "theirs", & act upon these differences

       a.   Some indication that occupational differences in "structural class voting" may have diminished, but...

       b.   Income divisions in "structural voting" has, if anything, increased.

       c.   In any event, clear voter distinctions between parties remains a key aspect of politics in US (and elsewhere).

       d.   [Which party is the party of labor & which is the party of big business? Which party is the party of the well-off & which is the party of the struggling earner?]

   3.   Policy makers are partisan, have various policy instruments at their disposal which can effect trade-offs between certain economic outcomes, & use these instruments according to their reputations & their constituents' interests.

   4.   **Conclusion:** if XIV.A.1-3, then govt policy, aggregate macroeconomic outcomes, & distributional outcomes will all exhibit strong partisan dimensions. Preliminary evidence: 7 of 8 postwar recessions occur under Rep. pres.

   5.   Some clarifications & caveats regarding the partisan differences:

       a.   They are relative not necessarily absolute.

       b.   Party positions not perfectly fixed; ultimately they respond to incentives emanating from electoral competition.

       c.   Parties will respond to "dominant" problems, even if they require actions distasteful to party's ideological base.

  B.   The Unemployment Model

   1.   Parties Target Different UE levels: $U^T_t = b_0 + U^N_t + b_1 DEM_{t-1}$

       a.   Targets are relative to "natural" UE rate in this model [perhaps they should be absolute, but that's not terribly

central to any of what follows]

    b. The party setting the target which is embodied in the policies which currently matter is the party that was in office last quarter. This one period lag is supposed to capture the fact that it takes time to enact policy. There are at least 3 sources of this & other lags in the system:

      (1) Behavioral Lags: those involved in the formation & formulation of policies.

      (2) Institutional Lags: those involved in the implementation of a formulated policy.

      (3) Structural Lags: those involved in process by which implemented policies have their effects on economy; *i.e.*, lags given by the structure of economic reality. These last are modeled simply in the next step.

2. "Partial-Adjustment Model" of Unemployment: $U_t - U_{t-1} = d(U_t) = \phi_1(U^T_t - U_{t-1}) + \phi_2[d(U_{t-1})] + b_2(RealShocks_{t-1}) + e_t$

    a. The point here is simply that unemployment doesn't adjust instantaneously to changes in policy by the administration, nor for that matter does it respond instantaneously to exogenous shocks (like OPEC I & II).

    b. Rather, (first term on right) the administration wants to move unemployment from where it was last period, U_{t-1}, to where they'd like it to be, U^T_t, but only ϕ_1 of this is going to happen this period because UE is sticky.

    c. The rest of the movement this period in unemployment comes from three sources:

      (1) Inertia: ϕ_2 of last period's movement lingers for this period: $\phi_2[d(U_{t-1})]$,

      (2) Exogenous Shocks: real variables beyond administration's control like oil prices: $b_2(RealShocks_t)$

      (3) Random Factors: a whole bunch of stuff that might affect unemployment but are outside the model: e_t

3. If you substitute B.1 into B.2 & solve for this period's unemployment, you get the simplified model of the theory's predictions: $U_t = \phi_1 b_0 + (1-\phi_1+\phi_2)U_{t-1} - \phi_2 U_{t-2} + \phi_1 U^N_t + \phi_1 b_1 DEM_{t-1} + b_2(RealShocks_{t-1}) + e_t$

    a. This says simply that today's unemployment is some constant (the first term) plus some function of...

      (1) ...past unemployment (the next two terms),

      (2) ...the natural rate of unemployment (the fourth term),

      (3) ...the partisanship of last quarter's administration (the next term), and

      (4) ...any real and/or random shocks occurring this & previous periods (the last two terms)

    b. We can estimate this equation same as we have others to see whether, how, & how accurately it describes what historically has happened. Finding a negative coefficient for DEM_{t-1} would be support for the partisan model.

C. Development of the Real Output Model is perfectly analogous to the Unemployment Model:

1. $\ln(Q_t) = \phi_1 b_0 + (1-\phi_1+\phi_2)\ln(Q_{t-1}) - \phi_2\ln(Q_{t-2}) + \phi_1\ln(Q^N_t) + \phi_1 b_1 DEM_{t-1} + b_2(RealShocks_{t-1}) + e_t$

2. Its empirical evaluation is likewise analogous except that a positive coefficient for DEM would be support.

D. **Table 7.3 & Figure 7.3** present & demonstrate the results.

1. About 1.5-2% lower UE target reflected in unemployment outcomes under Democratic administrations than Republican; about 5.3%-6.2% greater real output. (Standard errors for these estimates between ½ & 1/3 as large as the coefficient estimates, so these results are reasonably reliable.)

2. About 2/3 of the impact of an 8-year administration (2 terms) occurs in the first two years.

3. [Doesn't appear to be any effect of Congress. Why might this be true or why might we find it though it may not be true? These notes terminate at about page 232 of text (through section 7.3 inclusive)]

XV. Distributional Outcomes Under Right & Left (**section 7.4**): obviously, tend to be more favorable under left than right

A. By virtue of the unemployment differences we already explored alone, we know that left is associated with considerably more egalitarian outcomes than the left

B. Also a direct effect *via* the impact of parties on tax & transfer (T&T) policies

1. US pattern was of movement toward greater progressivity of T&T system under Democratic administrations, & inaction under Republican administrations.

2. Two major movements: FDR's New Deal & LBJ's Great Society & "war on poverty"

    a. Generally, 20/40 ratio falls during Dem & rises slightly or stays flat during Rep

    b. By end of '70s, something like a 75% reduction in official poverty rate achieved by various programs in place.

3. History: FDR's New Deal —> Truman supports & extends funding —> Eisenhower neutral, inaction —> JFK/LBJ renewed action, some flood of new programs, but increased bureaucratic jumble also —> RMN/GRF innovative consolidation proposal (written by Moynihan), but no new action

    a. Thus, most of postwar history was ratchet-like: up during Dem, flat during Rep

    b. This changes with Reagan (as discussed in chapter 9)

C. Simple Empirical Model: $d(I_t) = (I_t - I_{t-1}) = a_0 + a_1 DemPres_{t-1} + a_2 DemHR_{t-1} + a_1 DemSen_{t-1} + e_t$

1. $d(I_t) = (I_t - I_{t-1}) = .107 \quad -.0549(DemPres_{t-1}) \quad -.00452(DemHR_{t-1}) \quad +.00292(DemSen_{t-1}) + e_t$
    std. errs.   (.11)   (.0271)   (.003)   (.0029)

2. Defining the Variables:

    a. *I* here is the 20/40 ratio

    b. DemPres = 1 if Democratic President, 0 if Republican

    c. DemHR is the proportion of the House of Representatives that is Democratic

d. DemSen is the proportion of the Senate that is Democratic

[Aside: Inequality, Efficiency, & Voter Participation

Suppose output in the economy can be described by: $Y=Y(t)=\sum y_i$

where Y is total production (income) in the economy, & that, at least beyond some point, total output is declining in taxes, t. y_i is income of each individual i. (The argument is that, at least beyond some point, taxation reduces incentives to work, invest, *etc.*)

Suppose now that voters are offered the option of setting some fixed tax rate, t, & redistributing the revenues from that tax evenly to all citizens. Then, after tax-and-transfer income of ith citizen could be written: $y_i + t \cdot Y(t)/N - t\ y_i$.

Now, if tax-and-transfer rate is voted in simple democracy, then median voter wins, & so, in simple democracy, T&T rate desired by citizen with median income wins. What rate is that? Well, solve for tax rate that maximizes her income:

$$\text{Max}_t\ (1-t)y_m + t \cdot Y(t) \quad \Longrightarrow \quad -y_m + Y/N + t(dy/dt)/N = 0$$
$$t\ (dY/dt)/N = y_m - Y/N \qquad \Longrightarrow t^* = |1/(dY/dt)| \cdot (Y/N - y_m)$$

That is, median voter desires tax-and-transfer system that is increasingly generous as difference between average & median income (skew of the income distribution) grows.

Now, add to this that not everyone votes. In fact, relatively well-off have much greater participation rates than relatively less well-off. This implies that median *voter* is wealthier than median *person*, & so difference between average income & median-*voter* income is generally smaller the greater the participation rate (*ceteris paribus*).

This, as Hibbs indicates, goes a long way to explaining the considerably lower T&T rates in US than in other democracies.

In fact, I have done some work on this myself. The evidence is that the response of the T&T system to an increase in inequality depends on the voter-participation rate. Where greater proportions of the population vote, response of T&T systems to an increase in inequality is to become more generous (T&T rate increases). Where voter participation is lower, response is less generous. In US, for example, there appears to be no response of T&T-system generosity to increased inequality.

Back to our regularly scheduled program...]

XVI. Hibbs then demonstrates that the movements in UE, inflation, & income inequality (outcomes) with partisanship that he has just demonstrated are, in fact, mirrored by movements in government economic policies which could have produced these outcomes. **Table 7.7 (p. 249)** is to demonstrate that the apparent partisan fluctuations in outcomes are not spurious; they appear to have indeed been caused by partisan fluctuations in policy.

XVII. Political (*i.e.*, electoral) Business Cycles in Relation to Partisan Business Cycles **(ch. 8)**

A. The electoral-cycle model, recall, is based on a few assumptions. Hibbs lists them as:
1. The over-riding goal of incumbents is to win elections, so they manage the economy to maximize votes.
2. Electoral outcomes are heavily influenced by macro performance, & voters discount further past & (expected) future performance relative to more current performance
3. Governments can affect macro-economic performance in the short-run, but...
4. Such effects are unsustainable, & bring inflationary consequences, which, however, are not fully recognized by voters until after elections.

B. Hibbs notes: failure of 1 or 3 disconnects the economy from electorally motivated policy; failure of 2 or 4 disconnects electoral considerations from macroeconomic performance.

C. He argues that it is actually 1 that is most suspect:
1. Dem & Rep may be loathe to sacrifice their core constituencies interests to (attempt to) stir a pre-electoral boom.
2. Pres needs support *throughout* their terms in order to advance their (partisan) agendas.

D. Combined Partisan & Electoral Economic Policy & Outcome Models are reported in **Table 8.1, pp. 260-1**:
1. Some, but not usually statistically significant, evidence of electoral effects.
2. Esp. growth of real disposable income per capita seems to exhibit electoral effects.
3. Partisan effects though appear stronger & surer (*i.e.*, more statistically precise)

E. Hibbs mildly skeptical of *general* importance of electoral motivations in economic policy,
1. But he does acknowledge that some selected obvious-to-indisputable examples have occurred: Nixon '72, Reagan '84, & Johnson '64 in decreasing order of indisputability,
2. Yet he notes that if manipulation were too systematic, then...
   a. Public would (no doubt with help from the media & challengers) eventually see what's going on,
   b. Presumably they would discount or even punish it,
   c. So policy-makers would come to avoid it.
3. In any event, partisan differences are "more durable & predictable than the occasional election-motivated cycles that have so excited journalists" (p. 278).

XVIII. The Reagan Years & Their Legacy **(ch. 9)**

A. Supply-Side Economics & the New Monetarism (neoclassical monetary policy)—Theory & Ideology
1. The Laffer Curve:

a. (Income) tax revenues are given by tY(t) as we noted above.
b. There is little doubt that, beyond some point, output would shrink more in response to extra taxes than the higher tax rate would generate in revenue.
c. Thus, revenues as a function of the tax rate are "backward-bending"

2. Neoclassical monetary theory:
a. if a commitment to clamping down on money supply growth were known & credible, then prices & wages would be set accordingly, & the real economy would be unaffected.
b. MV=PQ : if the commitment to slow down the growth of M were announced, & believed, then price-setters would lower P accordingly so as not to force adjustment from Q.

[Aside: Neoclassical monetary theory in more detail

Start with a "rational expectations" model of the economy:

(1) $Y = Y_n + \alpha(\pi-\pi^e)$ output (Y) is generally equal to natural output (Y_n), but in the short run prices might be sticky so that, if the monetary authority created an inflation rate greater than expected inflation (*i.e.*, if $\pi-\pi^e$) were positive, then output can temporarily exceed the natural rate. This is the short-run (or expectations-augmented) Phillips curve; it's slope is α.

Now suppose the policy maker has a value function given by:

(2) $V = -(\frac{1}{2})A(Y-Y^T)^2-(\frac{1}{2})\pi^2$ this says that the policy maker does not like deviations of output from some (presumably high) target rate Y^T, & dislikes inflation.

So, policy makers with preferences described by (2) facing an economy described by (1) & controlling the inflation rate (a simplification), will act as if solving the following maximization:

$\text{Max}_\pi -(\frac{1}{2})A(Y_n + \alpha(\pi-\pi^e)-Y^T)^2-(\frac{1}{2})\pi^2$ where, you will notice, that (1) has been substituted into (2)

$\Longrightarrow A \alpha (Y_n + \alpha(\pi-\pi^e)-Y^T) -\pi = 0$ ...maximizing is done by taking the derivative of the expression to be maximized with respect to control variable (π) & setting the result equal to zero...

$\Longrightarrow (1 - A \alpha^2)\pi = A \alpha (Y_n - \alpha \pi^e - Y^T)$ ...rearranging...

(3) $\Longrightarrow (1 - A \alpha^2)\pi = -A \alpha^2\pi^e + A \alpha (Y_n - Y^T)$ ...rearranging again...

So, policy makers with preferences like these, facing an economy like this, chooses an inflation rate as given by (3), but here comes the "rational expectations" part. Price setters *know* the policy maker behaves this way, & so their expectations, π^e, are going to be given by the same equation. That is, in equilibrium you get something Abe-Lincoln-like: "you can't fool all the people all the time". On average, π^e will equal π. So, rewriting (3) with $\pi^e=\pi$ gives you:

(4) $\pi = A \alpha (Y_n - Y^T)$

and, substituting $\pi^e=\pi$ back into the equation describing the economy, (1), we get that in equilibrium:

(5) $Y = Y_n + \alpha(\pi-\pi^e) = Y_n + \alpha(\pi-\pi) = Y_n + 0 = Y_n$

I.e., monetary policy has no real effects in equilibrium. If that's so, then the only thing one has to do to avoid the real costs of monetary contraction is announce the contraction soon enough & be believed in that announcement so that the $\pi^e=\pi$ reflected in wage & price contracts will include the expected contraction...

...and now back to our regularly scheduled program.]

3. So, then, loosely building on (& creatively misinterpreting) these theories, claim of early Reagan administration & its partisan supporters was that...
a. Taxes could be lowered without lost revenues, and
b. Inflation could be slashed without real effects
c. Moreover, lower taxes would spur investment, & so administration promised lower inflation, faster growth, lower taxes, & a balanced budget.
4. It played very well with many audiences, especially those who benefitted dramatically from the distributional side-effects: lower taxes came especially in the form of lower capital, capital gains, & high-end income taxes.
5. It was also theoretically suspect &, it turns out, empirically quite wrong.

B. Some revealing administrative statements & policy facts [For each of the following, ask yourself why a Republican administration, the furthest right in recent history in fact, would have pursued these policies.]
1. Reagan's "child's allowance" analogy: argument for tax cuts now soon became that forcing congress to choose between deficits, raising taxes back, & cutting spending, would force them to choose cutting spending. This may have worked; it took a while, though, as we know, for most of the next 12 years the deficit option was borne.
2. The impact of the Reagan-Volcker deflation fell most heavily on manufacturing, & especially import-competing manufacturing (see "beach-head effect" below).
3. Social spending was cut, though not as dramatically as promised/pretended(?)/hoped(?). Cuts came heavily out of AFDC & Food Stamps; Supplemental SS & Medicaid were actually raised, & social security was not touched.
4. Military spending was raised (though not as dramatically relative to Carter's proposals, which were to increase also, as critics have alleged).

5. Most of impact on income distribution, though, achieved by tax changes. These were devastating to working poor, less severe for non-working poor (welfare) & middle class, & huge boon for wealthiest 20%. In effect, changes sharpened the divide between work & welfare.

C. The "Reagan Revolution", as we saw last time, was *not created by* any shift in popular opinion to the right, but, we can now see, it *may have created* one:
1. The huge deficits & resulting debt crisis constrained future government spending options,
2. Social-spending cuts & harsh recession swelled ranks of desperately poor, but these came from working poor mostly. Working poor are Dem's, and some of them vote, while desperately poor withdraw from society entirely.
3. Massive retrenchment of more progressive aspects of T&T system vastly benefitted wealthiest 20%. The way this was done fostered financial-market excesses of '80s. "Buy-and-break-apart" strategies were fostered by tax policies & by "beachhead effect" of fiscal & monetary policies, & all served to drive further wedges between old industrial interests & the new Republicanism.
4. Eventually, middle-class ownership of capital became so widespread (don't get me wrong: this in itself is not a "bad" thing in the least), that the interests represented among the voting population had indeed taken a considerable rightward step. Thus, the New Democrats & modern post-Reagan Republicanism.

[A final aside: "Beach-head Effects" from the Volcker-Reagan Deflation:

Massive deficits ==> huge increase in the borrowing requirement of government
Coupled with tight money ==> sharp rise in the interest rate
==> a dramatic appreciation of the exchange rate
==> exports become much more expensive & imports much cheaper
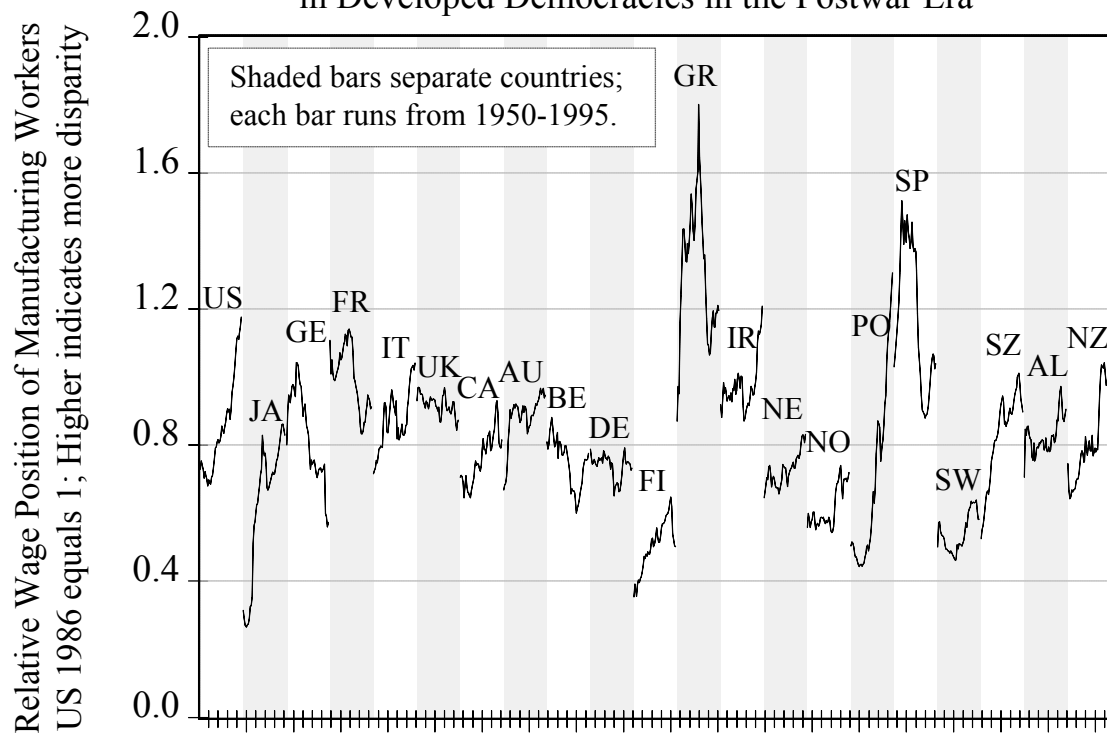==> export & import-competing industries get slammed.
==> dollar price of foreign assets falls dramatically
==> sell off export & import competing firms & use the money to purchase cheap foreign assets
...the structural changes induced by these policies seem to account well for the New Republican & New Democrat ideologies.]

Relative Wage Position of Manufacturing Workers (Income Disparity)
in Developed Democracies in the Postwar Era

Shaded bars separate countries; each bar runs from 1950-1995.

Y-axis: Relative Wage Position of Manufacturing Workers; US 1986 equals 1; Higher indicates more disparity

Manufacturing Wage and GDP per Capita Indices from IMF IFS CD-ROM.
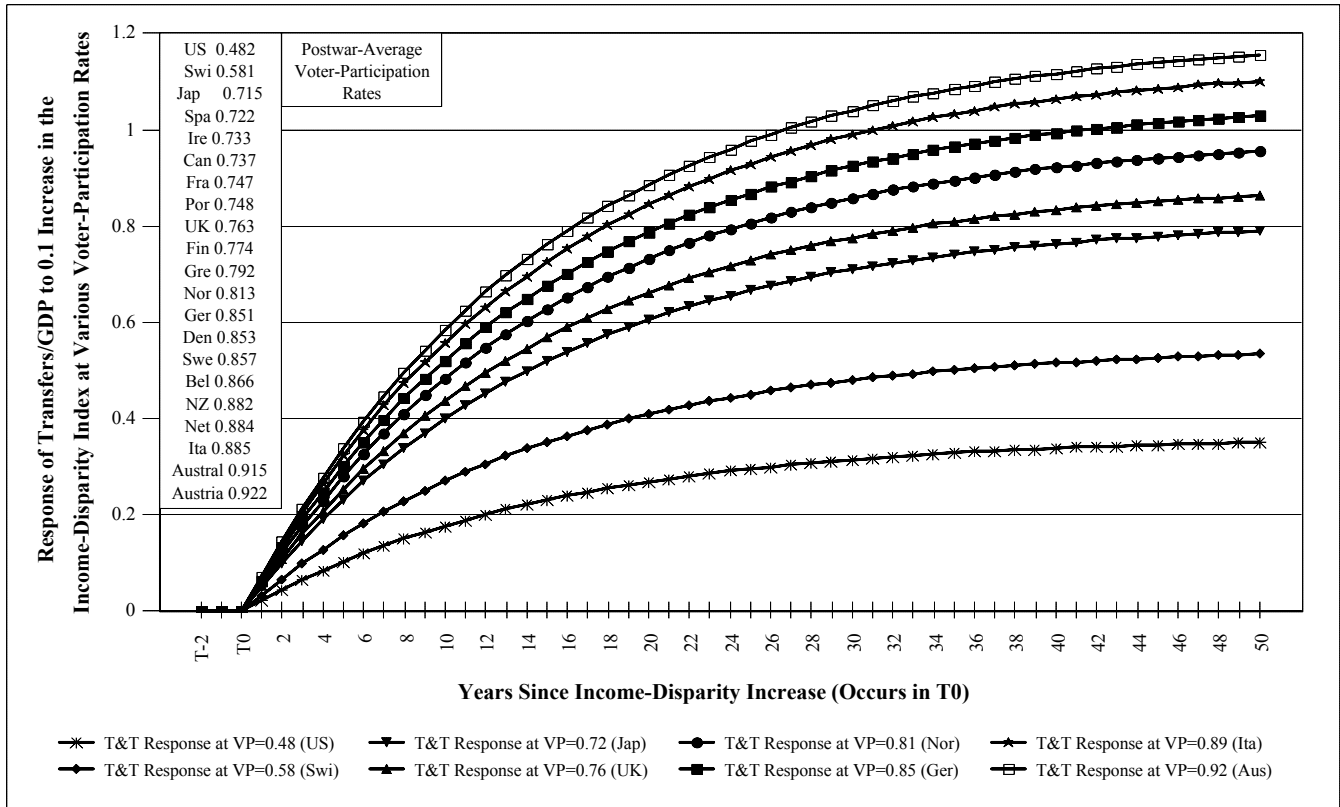Data made cross-nationally comparable by GINI indices from the LIS.

Figure 2: Response of T&T-System Size to 0.1 Increase in Income Disparity at Various Voter-Participation Rates
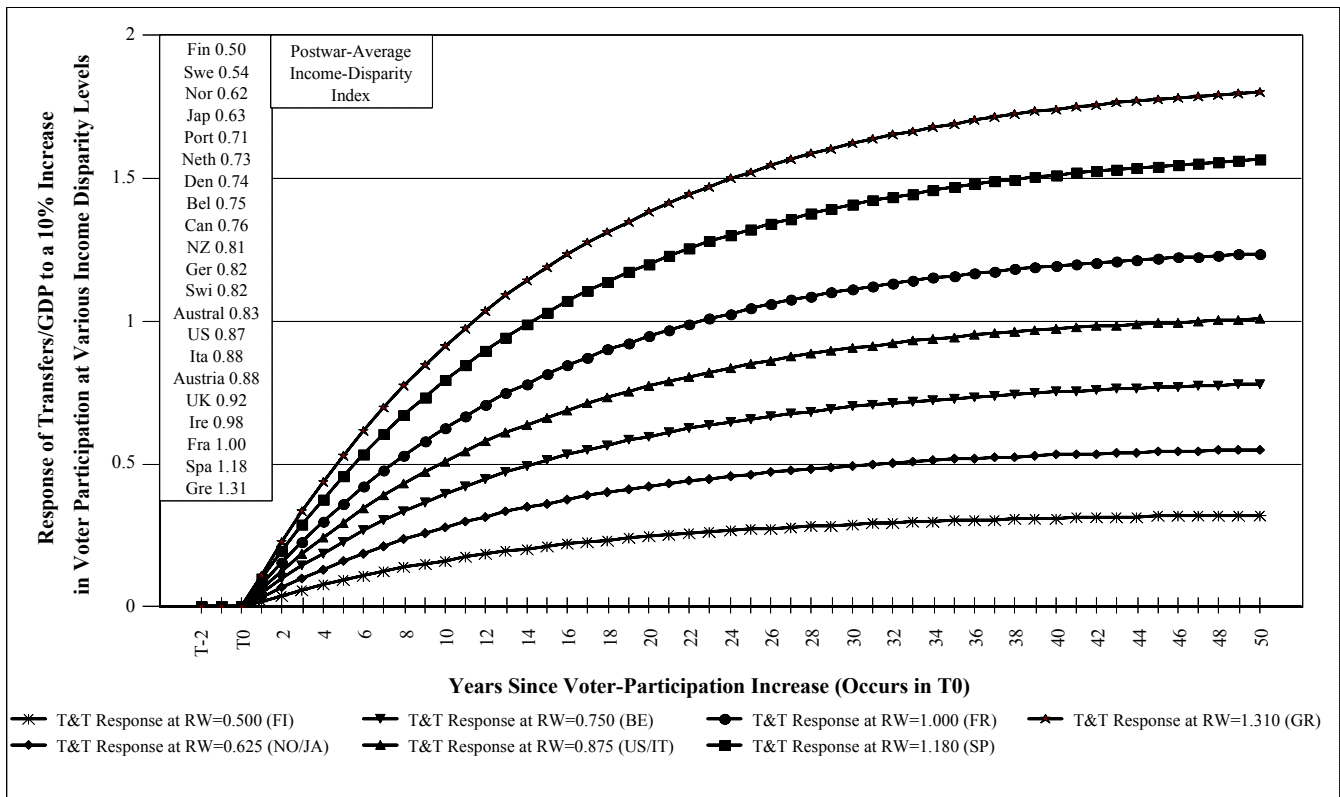

Figure 3: Response of T&T-System Size to 10% Increase in Voter Participation at Various Income-Disparity Levels