

On the political economy of employment in the welfare state

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Abstract

OECD tax policy is to have low exemption. This causes high gross minimum wages. Abolishing taxes below the gross minimum would not cost anything, since people may not work below that minimum, and thus don't earn and don't pay taxes, anyway. Present-day unemployment is inefficient, and thus there exists a Pareto improving alternative that is not exploited. This situation may require an abstract analysis as follows.

The central questions in the political economy of employment in the welfare state are: *can* one solve unemployment, does one *know* how, and does one *want* to ? Here, a BHL-model satisfies the stylized facts and thus serves theoretical and empirical uses. There are three types of agents: *Benefit* recipients at social subsistence, and *High* and *Low* productivity workers; giving the letters BHL (e.g. pronounce 'beachly'). A welfare state is nonrevolutionary when the BHL data are stable across regimes; and this is assumed. The first result is a possibility theorem (*can*) that there are two regimes of either full employment or unemployment. The second theorem explains the choice by *know* and *want* causes. Full employment results from conscious choice or chance (while lacking knowledge). Unemployment results from conscious choice or wrong co-ordination (where a Pareto optimizing change is blocked only by lack of knowledge). This gives an explanation for the full employment (1950-70, Japan/Sweden) and unemployment (other) regimes. A policy conclusion is to improve informational (planning) procedures.

Thanking prof dr. J.J.M. Theeuwes (Leiden), and various former colleagues from the Central Planning Bureau (The Hague). All errors remain mine.

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Introduction

We look into the employment problem of the welfare state. Unemployment is not taken as a natural disaster like an earthquake, but regarded as the result of policy. The central questions in the political economy of employment in the welfare state are: *can* one solve unemployment, does one *know* how, and does one *want* to ?

Theorems I and II address these questions. The approach of this paper is to use logic in order to circumvent the uncertainty of parameter estimates. Though the paper doesn't give full statistics, it is conjectured that the theorems capture the stylized facts. A *proposition* - as a statement on reality - can be regarded as a mathematical theorem about/within a model of stylized facts. When there is a tautology, we attain truth by definition.

In the welfare state, it is more efficient to have full employment, since unemployment causes lower income - not only directly as in old-fashioned capitalism but also, more noteworthy, by the additional benefit burden. The first sections develop the stylized facts and theorem I. To attain the necessary level of generality, we use a reduced form where the economy is mapped into a rather tautologous model with three types of agents. One type is the net receiver; two types are net tax payers - and since two points give a line, that single line represents the state of the economy.

Next to the *budget set* and *preferences*, it appears useful to distinguish *information*. Government policy making is not guided by prices as markets are. Perceptions play a special role. For example, when policy makers associate tax policy with income distribution policy, and in that manner overlook inefficiencies, then policies are blocked that would otherwise benefit everyone. The later sections develop theorem II on information. A subsidiary lemma is very general and concerns any suboptimality due to misinformation. Theorem I - an information item - inserts in Theorem II.

The first proposition establishes conditions under which both unemployment and full employment are possible. This generates the *partial* arguments of economists, that, however, can be very diverse, e.g. that unemployment results from too high wages, or that productivity depends upon aggregate demand. The second proposition gives the integral argument, or *general* theory, how (un-) employment situations are managed. The employment regime can be chosen by conscious choice, or there is lack of knowledge. Lack of knowledge forks into two cases. With full employment, the situation is dubbed 'chance'. With unemployment, it is called a co-ordination failure.

This paper has been written against the backdrop of the voluminous studies Centraal Planbureau (1992a&b) and Cool (1992). It is from this background that these two theorems have been selected as being of foremost importance. The paper focusses on some main mechanisms that block full employment and prosperous growth in modern welfare states. In highlighting these mechanisms, the paper finds that it is useful to abstract from aspects such as baby booms, technology and international competition. It is thought that the two theorems, in a sense simple but in another sense complex, help to clarify a fruitful direction for both analysis and policy improvement.

Stylized facts

In his paper on the ISLM model, the magnificent John Hicks (1937) could disregard differences in labour as being of secondary complication. Presently, the crucial setting is one of heterogeneous labour. Policy co-ordination then involves three distributions:

1. the gross income distribution corresponding to the productivity distribution,
2. the net income distribution aspired by the policy maker ('society'),
3. the net income distribution, actually resulting from taxes imposed (including e.g. the social security 'insurance' payroll tax) and from payments handed out.

A full development of heterogeneity would start with e.g. the Van Praag & Halberstadt (1980) continuous productivity distribution. This development could proceed like Cool (1994a), who outlines a structural model of heterogeneity and dynamics, and discusses the inflation-unemployment "tradeoff" in that framework.

However, it turns out that the propositions that are most interesting, from the viewpoint of political economy, do not require continuity, and can be formulated by assuming dichotomous High and Low productivity labour, combined with one class of Benefit recipients. This assumption allows for a reduced form formulation that allows for generality. In the simple mathematical model the dichotomy gives fixed numbers, in actual observation they are subgroup averages which depend upon general equilibrium processes. The benefit level is rather not an average but a threshold, like the surface of the sea at Scheveningen beach. The words Benefit, High, and Low give letters BHL, and this abbreviation may be pronounced - converged upon after many walks - as 'beachly'.

The mathematical simplification has some basis in the social psychology of a pecking order (Aronson (1992a&b)). The more developed economic reason is the following summary explanation of stagflation (Cool (1994a)).

Firstly, some tax theorists suggest that the social subsistence level should be exempt from taxation. Hofstra (1975) recalls the Cohen Stuart 1889 analogy, that a bridge must hold its own weight before it can be used. Dynamically, when social subsistence is exempt, and social subsistence grows with general welfare, then tax exemption must be indexed with income rather than inflation. However, tax rates are generally indexed on inflation only, see OECD (1986). The result is either poverty or a minimum wage that causes unemployment. Examples for the USA and Holland are:

- The Economist (1991) p45-46 states: "the most intriguing proposal now doing the rounds in Congress (...) is to increase the personal tax exemption (the amount by which taxable income is reduced for each person in a household). In 1948 the exemption was set at \$600 a person; in 1990 it was \$2050. According to recent evidence before the House of Representatives select committee on children and the family, had the exemption been indexed from 1948 it would now be worth \$7800."
- For Holland, regard exemption for singles with 1990 incomes below \$19230 with exemption of \$3128. In 1951 exemption was \$429. In prices of 1990 this would be \$1957, which is close to the actual 1990 exemption. If the index would include the rise in the private sector real wage, then 1990 exemption should be \$7508, which is close to the actual 1990 social security subsistence level of about \$7967. This exemption concerns taxes, and other premiums worsen the labour cost perspective.

Secondly, the policy of lowering exemption relates to a policy of lowering marginal rates. This itself comes from a theory on labour supply and incentives. This theory however is not strong on facts. Empirical research shows that labour supply elasticities are rather low, see Theeuwes (1988) and Hum & Simpson (1991) and the references therein. The theory behind policy depends on a static Marshallian model of the labour market and a misconception of the Phillips curve. Alternatively, the dynamic Nash bargaining model shows that higher marginal rates deter wage claims and thus (via the Phillips curve) increase employment. Important is too, that marginal tax rates are generally computed incorrectly, see Appendix One.

Thirdly, there is a crucial phenomenon of crowding out on the labour market. Minimum wages not only cause unemployment straightforwardly, but also have a spillover effect on the remainder. Vacancies can be filled by higher productive people, and those have a lower risk of unemployment. If crowding out would be blocked (see below), then the risk of unemployment is shifted to the higher wage brackets, causing a Phillips curve sensitivity, which generates suitable full employment wages, and hence no (relevant) inflation. Measures to block crowding out boil down to giving the low productivity group some guarantee for work at decent income. Such guarantees can be collective/semi-private arrangements of the Swedish/Japanese type. For the more common mixed economies, the guarantee is market-conforming, and notably consists of tax exemption. Crowding out on the labour market typically refocusses the policy co-ordination problem to the lower end of the market. This phenomenon tends to reduce the problem and our vocabulary in these pages to social subsistence, tax exemption and (legal) minimum wage.

The stylized facts can be summarized as:

- In the 1950-1970 period, welfare states generally had a *high* tax exemption level and full employment.
- In the 1970-1990 period welfare states generally had a *low* tax exemption level. To ensure a decent standard of living, required gross income then rose and exceeded productivity in the low end of the market, generating unemployment, while shifting the Phillips curve and reducing its sensitivity.
- Even when the statutory tax system has a low exemption level, then subsidies for the lowly productive keep them in work. And subsidies can be at the firm or state level. This is crucial for the Japanese and Swedish experiences, see e.g. Aoki (1990) and Standing (1990). Note that, in a *reduced form*, subsidies turn up as ‘system-wide exemption’. A subsidy is no ‘real’ subsidy if it compensates for wrong taxes.

Stagflation has both a dynamic (inflation) and a static or stationary (unemployment) aspect. The reduced form that is most relevant concerns the latter stationary aspect. Rather than looking at dynamics, we can look at the (long run) comparative statics of the regimes of full employment (1950-1970; Japan/Sweden) and unemployment (1970-1990). The regime switch depends upon the choice of tax parameters. For expository reasons we can take social subsistence and productivities as purely constant.

Recorded full employment situations may have been caused by ‘chance’. Policy makers in 1950-1970 may have thought that functional finance was effective, while it also was the tax exemption level. A re-evaluation of the history may show also that leading economic advisers in the 1950s may have been wiser than those of the 1960s.

It remains a stylized fact that much of this subject matter is well-known. For example in Holland, Central Planning Bureau economists Van Schaaijk (1983), Bakhoven (1988) and Cool (1990) pointed the way to full employment. The model developed below however is not well-known yet. The state of knowledge turns out to be part of the model.

The final stylized fact is, that welfare states are BHL (beachly). Checking this requires next definitions.

Concepts

Definition: A welfare state is bhl iff it remains meaningful to trisect its membership into the economic classes of Low and High productivity workers and (social subsistence) Benefit recipients.

Definition: A welfare state is nonrevolutionary, iff its economic classes and their data are stable across the change of employment regime.

Definition: A welfare state is BHL iff it is bhl and nonrevolutionary.

Remark: Denote net benefit as B , and High and Low gross productivity as H and L . Also *bhl-ness* technically implies $H \gg L \geq B$.

Remark: L may be associated with a minimum wage and H with some average income including profits.

Remark: Subgroup subperiod averages are generally meaningful.

Remark: Stability can sometimes be found by normalizing, e.g. take subperiod $H(t)$ as the subperiod numeraire.

Remark: A person's benefit is sometimes related to the former period working wage. However, anything can be clustered into a social subsistence average.

Remark: A nonrevolutionary welfare state still allows for politics and economic change.

Lemma 1: A welfare state is BHL iff there is stability over the regimes of the variables B , H , L and the associated numbers of agents.

Proof: Self evident. Q.E.D.

Remark: The relevant notion is that the change from unemployment towards full employment (or vice versa) does not destroy the productive base of the economy. Instead of taking this notion explicitly, we have taken a stronger property of nonrevolutionarity, that allows, if bhl-ness applies too, to take (approximate) constancy of the variables.

Remark: At first glance these definitions seem self-defeating for the effort to apply the mathematical method to employment regime switches. When 35 million, nowadays unemployed in the OECD, are supposed to find a job, then apparently the policy maker is supposed to be able to judge on the 'stabilities' involved. That seems an impossibly strong assumption. We may however remind of the regime switch from 1950-1970 to 1970-1990. In addition, as modellers we discuss equilibrium states of various paths. Also, it is possible to give the variables an incremental interpretation, e.g. take 34 of the 35 (million) as permanently on benefit, and only look at 1 million on the margin (giving "local-BHL-ness").

Definition: Biological subsistence, for survival, is S .

Definition: The benefit (included in the concept of the BHL economy) has the following social security properties:

- i. the net benefit has the social subsistence level $B \geq S$,
- ii. people on benefit may not work,
- iii. eligible are:
 - iii-a. permanent benefit recipients (e.g. ‘the elderly’)
 - iii-b. people able to work but currently unable to earn at least net B (these people are called ‘the unemployed’).

Remark: it is useful to have category (iii-a) in the model. It introduces a degree of sufficient complexity. When there are levies even under full employment, then it is easier to understand that wrong co-ordination may cause a switch to unemployment. But (iii-a) might count zero people.

Remark: Property (iii-b) has the effect of a legal minimum wage. It sets a floor in the market. For expository reasons, the unemployment benefit threshold for workers (XB) has not been set at $S \leq XB < B$, but at $XB = B$.

Remark: The reservation wage effect is as follows. When vacancies with net income higher than B are registered, then the relevant unemployment benefits are simply scratched. This mimics the array of measures needed for continuous reality.

Remark: This definition implies that people working with subsidies in the Swedish/Japanese case are not on ‘benefit’. Such subsidies thus must be accounted differently, as part of taxes.

Remark: The black economy (working while on welfare) is neglected. We neglect also the case that some people hate being on welfare, and thus continue working even when their net earnings are below the benefit threshold ($S < \text{net earnings} < XB$).

Lemma II: For a welfare state, the (apparent) existence of people with a productivity $L' < B$, does not block the application of BHL-ness.

Proof: Consider the pathological case of people with productivity $L' < B$, i.e. so low that (in whatever regime) their net market income is lower than B . Take the dentists, who in a regulated market cannot start a practice, and who are very bad at farming in a flowerpot. These people can be treated as:

- (1) society is willing to classify them as (iii-a),
- (2) like the Swedish/Japanese approach, they may keep on working with some employer subsidy Z ; in that case $Z = B - L'$;
- (3) society lowers B to $B = S$ or $B = L'$, and reconsiders the problem;
- (4) if regulations are the bottleneck, then changing these regulations redefines ‘given’ productivity L' . So the reduced form applies anyhow; i.e. the regulation is a tax in terms of the reduced form, and ‘real productivity’ is higher than L' ;
- (5) they get charity, steal or die, and hence there is no welfare state.

Hence BHL-ness implies that these cases can be ‘averaged out of the discussion’ or be left out for expository reasons.

Q.E.D.

Remark: In other words, BHL-ness is sufficient for discussing employment in the welfare state (but not necessarily for other topics, for example, how regulations affect productivity).

Theorem I

Theorem 1: For a BHL economy, both full employment and unemployment are possible.

Proof:

We apply straightforward logic to find two regimes that can be classified using a tax line.

Looking at the BHL concept, the only possibility for variation is in category (ii-b). The recipients in that class all move together, and thus there are only two regimes (*in* or *out of* benefit dependency). Given that gross productivity has been fixed, the only possible variation concerns net income. We assign the term “tax regime” to the possible states in net income. Let r be the index for tax regime 0 (unemployment) or 1 (full employment). We find, in other words, that these regimes are implicit in the BHL concept. The only question remains what regimes actually can exist.

Given BHL-ness, we thus have: r is 0 or 1, and:

1. n permanent benefit recipients;
2. m persons with gross productivity H and net $M(r)$;
3. x persons with gross productivity $L \ll H$, and net $X(r)$.

And the regimes are characterized by net income conditions $X(0) < B$ and $X(1) \geq B$:

- (0) In regime 0, $X(0) < B$ and x are eligible for benefit B - and they don't work.
- (1) In regime 1, $X(1) \geq B$ and x don't get benefit B - and they work and earn L .

On benefit, the welfare rule is strict on not-working, while by assumption the black economy can be neglected. Off benefit, the x have no other means of support and thus work, and earn gross L . Since net income cannot be larger, $L \geq X(1) \geq B$. (If they would not be able to find work, this regime does not exist.)

In the following equations, personal income y takes values H and L . For example, relation (1-r) gives the tax system in formulas, where the personal tax $T(y, r)$ depends upon personal income y and the tax regime r :

$$T(H, r) \equiv H - M(r) ; \quad T(L, r) \equiv L - X(r) \quad (1-r)$$

Two points share a line. Hence, the tax system can be represented by a straight line, with an intercept and a marginal tariff. These implied ‘parameters’ (actually: reduced form variables) are defined in (2-r), with 2 pairs of 2 equations & 2 unknowns, giving tax exemption $V(r)$ and marginal tariff $b(r)$. The line is the *reduced form* representation, while the statutory system which guides people’s actions could be anything. Each regime gives a *set* of reduced form lines; our interest concerns the boundary line.

$$b(r) (y - V(r)) \equiv T(y, r) \quad (2-r)$$

Relation (3-r) defines national income $Y(r)$, where the personal incomes are multiplied by the numbers of persons involved. Revenues $mH + n0 = mH$ are regime independent. Depending upon the regime the x bring in L or not.

$$Y(r) \equiv mH + rxL + n0 \quad (3-r)$$

Relation (4-r) states the condition of a balanced budget. National income equals the sum of net incomes after redistribution. The condition may be called “Walras’ Law”. (Note: For a behavioural model, when there is borrowing, then this borrowing can be mapped out of the discussion by including it into ‘taxes’, alike the Ricardian argument.)

$$Y(0) = mH = mM(0) + (x + n)B \quad (4-0)$$

$$Y(1) = mH + xL = mM(1) + xX(1) + nB \quad (4-1)$$

The budget condition implies that the tax ‘parameters’ are functions of each other. Per regime, a higher exemption means a higher marginal tariff, and vice versa. The regime switch itself might, but need not, be the exception. Given that marginal rates b are generally regarded as policy variables, we solve for V . With $V(1) \leq L$:

$$(x + n) B = m T(H, 0) = m b(0) (H - V(0)) \quad (4-0) \Rightarrow$$

$$V(0) = H - (x + n) B / (m b(0)) \quad (5-0)$$

$$nB = m T(H, 1) + x T(L, 1) = m b(1) (H - V(1)) + x b(1) (L - V(1)) \quad (4-1) \Rightarrow$$

$$V(1) = (mH + xL - nB / b(1)) / (m + x) \quad (5-1)$$

There is a critical level of gross income $K(r)$, such that unemployment results iff earnings L are less than $K(r)$. This follows directly from rule (iii-b). This critical income solves from $K(r) - T(K(r), r) \equiv B$, giving, at first:

$$K(r) = (B - b(r) V(r)) / (1 - b(r)) \quad (6-r)$$

Substituting (5-r) in (6-r) gives $K(r)$ as a function of only one tax parameter. The regime switch occurs at $K^*(1) = L$, and hence critical values are marginal rate $b(1) = b^*$ and exemption $V(1) = V^*$:

$$b^* = \frac{L - (1 + n / (m + x)) B}{L - (mH + xL) / (m + x)} \quad (7-b)$$

$$V^* = \frac{nB - (L - B) (mH/L + x)}{nB - (L - B) (m + x)} \quad (7-V)$$

Rewriting conditions $X(0) < B$ and $X(1) \geq B$ gives:

$$\{L - T(L, r) < B\} \Rightarrow \{L < K(r)\} \quad (8-r)$$

$$\{L - T(L, r) > B\} \Rightarrow \{V(r) \geq V\} \quad (9-r)$$

Now consider the regimes, and determine whether they can exist:

Full employment: Given that $L > B$, it follows from (9-1) that the tax exemption can be chosen on or above the critical value V^* . Hence $V^* \leq V(1) < H$. A prime example is $V(1) = B$. Hence (iii-b) is empty.

Unemployment: L is given as the market clearing wage for low productivity persons. If $V(0) < V^*$, then taxes on these persons are increased, and their net income drops below B . Given that $X(0) < B$, they are eligible for benefits, and apply. Hence (iii-b) is not empty.

It has been shown that both cases are possible.

Q.E.D.

Remark: This exposition may seem an overly complex translation of the Cohen Stuart 1889 quote (above) to the welfare state situation. The proof might have said “self-evident” after the first paragraph. Given the record of unnecessary unemployment, this author may however be excused for driving the point home. The usefulness of the BHL concept may be, that officials now can report, “we have diagnosed x people on benefit who should be able to earn $L > B$ on the market, so let’s try to find out how we are stopping them from doing so”.

Remark: A more didactic exposition may start with a *structural* tax relation, e.g. with $b(r)$ replaced by $\beta(r)$ in (2-r); see (Cool (1992/94)). Then one can show that a *ceteris paribus* reduction of the tax exemption will increase unemployment. Hence, for the return of full employment it is necessary (but not sufficient) to increase income tax exemption - or something from the *ceteris paribus* part. Then, the second step in the exposition (as we have done here) is to rename the axis into *compounded variables*

(including VAT, regulations, subsidies, excises, charity, etcetera), and then consider (2-r) as the reduced form. Then we find necessary and sufficient conditions.

Remark: Theorem I doesn't establish that unemployment has only *one* cause. Various kinds of unemployment have various causes. But, when various causes are mapped into the world of BHL-ness, then theorem I applies. For example, an unemployed academic would be categorised as unskilled labour, even though his employed colleagues earn much more. (The BHL concept thus is drastic. The reasons for applying it have been explained elsewhere in this paper.)

Remark: Under unemployment, the benefits cause additional taxes $x.B$ which are levied on a smaller tax base. Given that x are unemployed anyway, the tax exemption $V(0)$ can be lowered, so that the marginal rate is as low as possible. This has the effect that $K(0)$ shifts to the right, so that the gap between the offered wage L and the wage 'required for a decent living' widens. There is obviously hysteresis, of a 'catastrophic' kind. While this applies here to the reduced form, the same mechanism sometimes applies to the structural form too.

Remark: Theorem I is strongest in the $r = 1 \rightarrow r = 0$ part. Given full employment, it is easy to mess it up; and it is easy to see that you can mess it up. The other way around is less obvious. Here, both the requirement $L \geq B$ and Lemma II are crucial. For expository reasons those are sufficient, but not as sharp as they could be. For example, we might accept a small loss in $H(1) \leq H(0)$, as long as net $M(1) \geq M(0)$.

However, even then the analytical structure remains, that productivity L is *assumed*, so that it doesn't come as a big surprise that employment is possible. This actually is similar to the Arrow-Debreu setting, where endowments are assumed, and full employment appears to be possible. The modern reader might be inclined towards assumptions that generate the impossibility of full employment. (See for example the Grandmont (1983) setting of expectatory mismatch.) However, each impossibility can be questioned too. It is up to *reality* what model applies. Stated differently: the value of above tautological theorem is that it helps us to understand what is implicit in our concepts, so that we may be more aware in observing whether these concepts apply. This fits in with our (Fregeian) concept of a *proposition*.

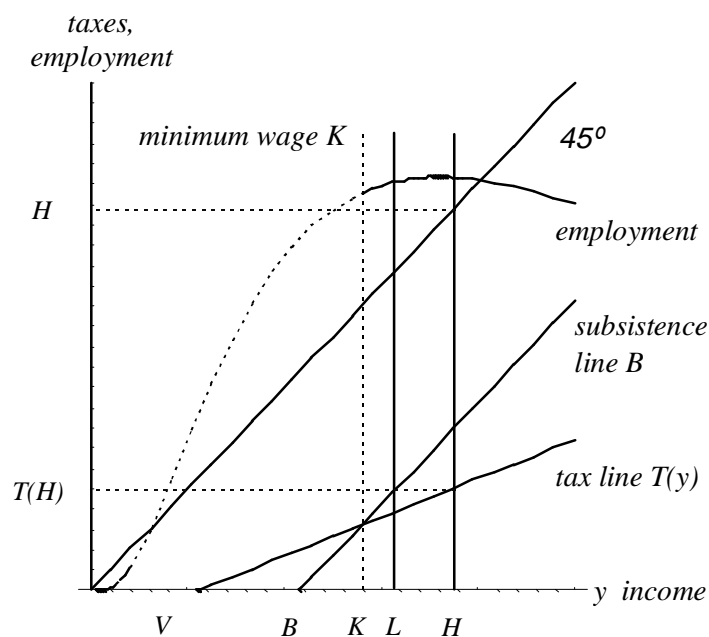
Diagrams

Diagrams help understanding the analysis. A first diagram introduces the main concepts, using only one regime. The second diagram shows the two reduced form regimes. The third diagram recaptures the reduced form regimes in terms of a national production function. The fourth diagram takes the Dutch structural statutory tax system as example.

The first diagram.

In Figure 1, the horizontal axis gives income, and the vertical axis associated tax and employment. Employment is a lognormal productivity distribution. Below the legal minimum wage productivity is fictitious and here dashed. The tax $T(y)$ is the sloped line through V on the horizontal axis. For income H , taxes are given by $T(H)$. Net income is given by the difference between the tax line and the 45° line, in this instance $M = H - T(H)$. We can draw a line through B parallel to the 45° line, giving required minimal net income. The intersection of this B -line with the tax line gives the critical gross income K . This is given by the dashed vertical line with the “minimum wage” label. A person earning less than K has a net income below B , which causes unemployment.

Figure 1: basic concepts

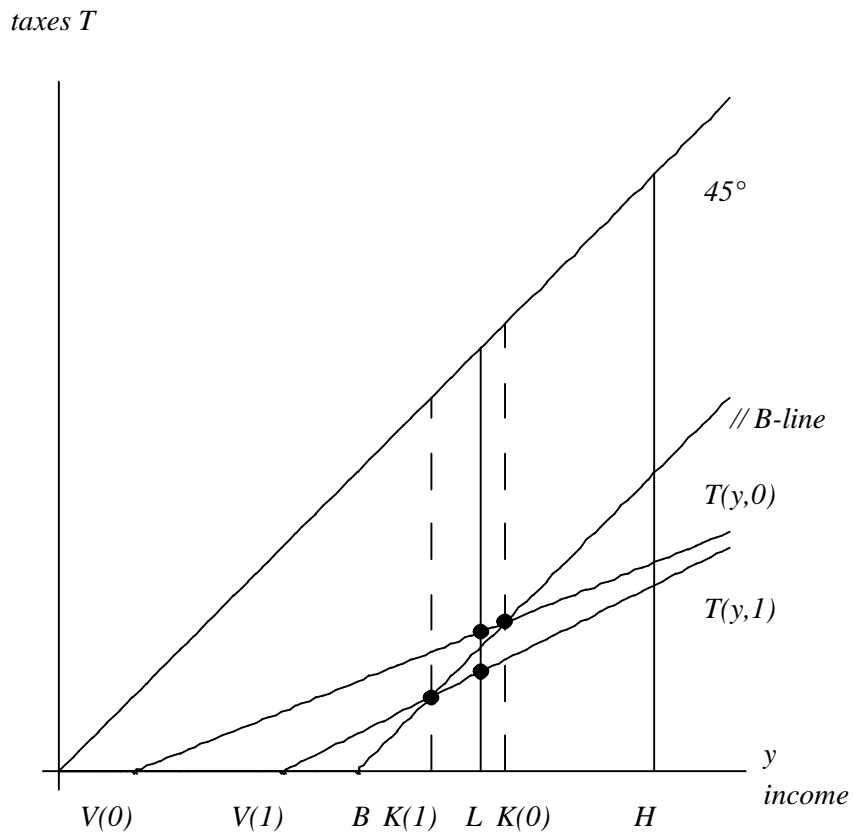


The second diagram.

Figure 2 shows two tax regimes, $T(y, 0)$ and $T(y, 1)$, characterized by different exemptions $V(0)$ and $V(1)$, and different critical incomes $K(0)$ and $K(1)$. The main difference is net income at L . In regime 0, net income at L falls below subsistence, causing unemployment and higher taxes to pay for benefits.

It can be seen that $T(y, 0)$ is above $T(y, 1)$, or that average tax rates are lower under full employment. On the left section of the horizontal axis, $V(0) < V(1)$. On the right section, since taxes in regime 0 are higher and levied on a smaller tax base, $T(H, 0) > T(H, 1)$. Thus the effect on the average tax rate is clear. The effect on the marginal rate depends upon the numbers. The case depicted here, with a higher marginal rate in regime 1, is only one possibility; but it shows that a higher marginal rate can combine with actually lower taxes.

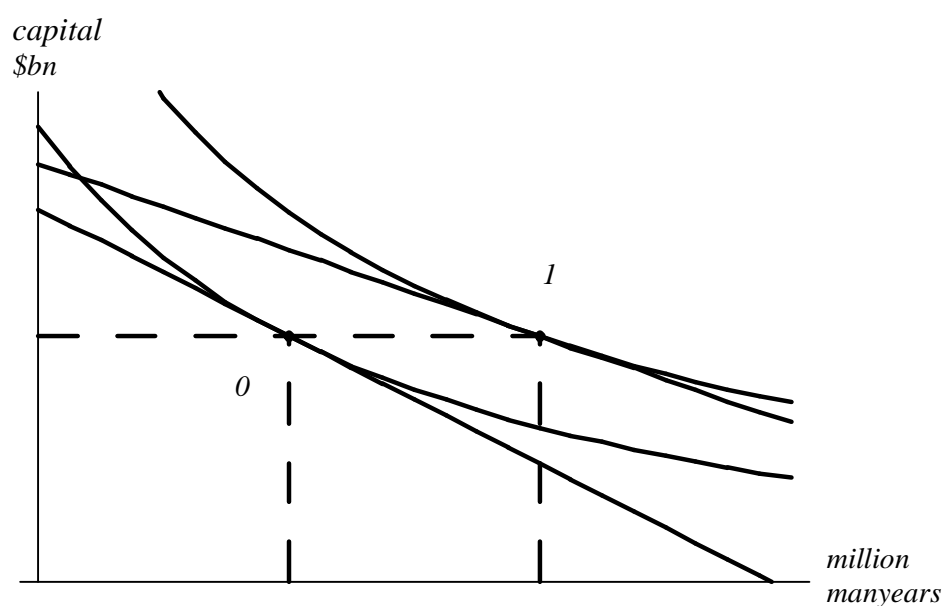
Figure 2: Tax regimes



The third diagram

Figure 3 shows how national income is produced. Capital and labour combine in a production function and give national income. Capital is aggregated in dollars, labour in manyears. In regime 0 only m work, producing a national income of mH in wages and profits (note that m is not a wage but productivity in general). The slope of the tangent gives the price ratio of wages and rents. In regime 1 $m + x$ work, producing $mH + xL$. The rise of national income from regime 0 to 1, or the increase in efficiency from going from the first to the second isoquant, is xL . The slope of the tangent shows that the price ratio of wages and rents has changed. Wages have fallen *on average*, but the story for each individual is different (and depends upon the competitive position of the x on submarkets).

Figure 3: national income



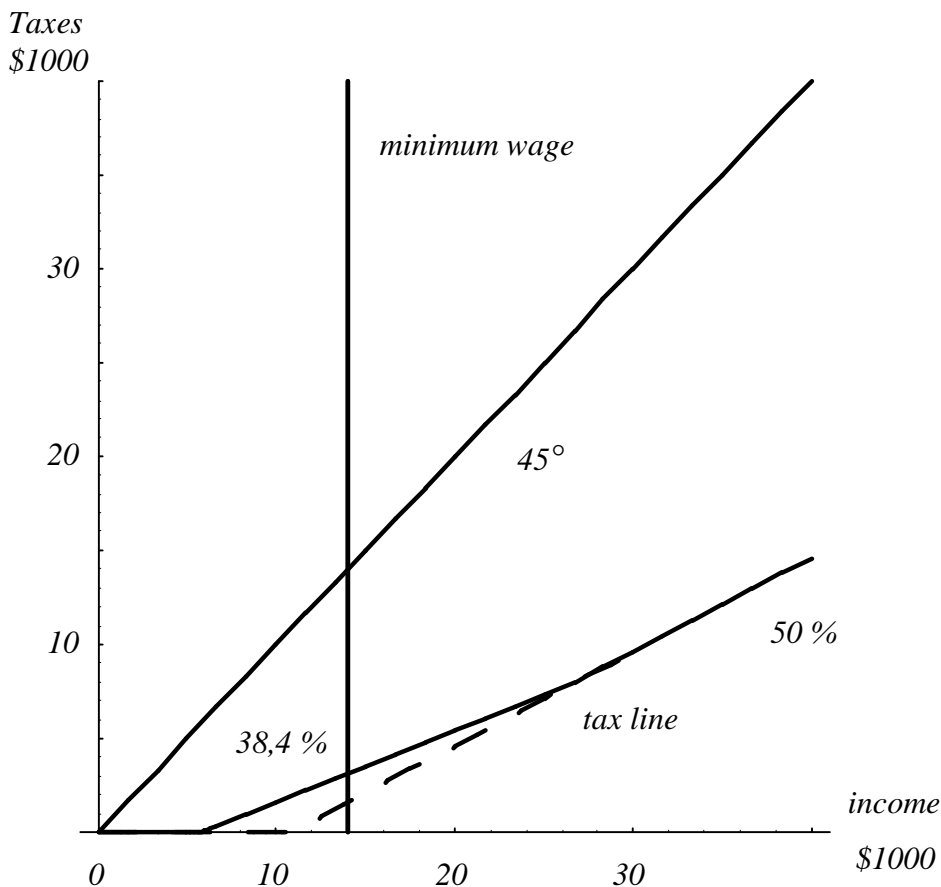
An econometric problem is that econometric models are based on observations m and H , i.e. on the inefficient area, so that extrapolation towards the true efficiency frontier is difficult, notably when labour is heterogenous.

This econometric problem often associates with policy neglect. Policy makers (notably politicians) tend to see the decision process as a clash of preferences. When a tax reduction is proposed, to tackle unemployment, then this is translated in their minds into terms of the distribution of income - and then it is quickly opposed. But when there is inefficiency, then policy is not necessarily a matter of preferences only. Under inefficiency, there exists a Pareto improving alternative, that apparently isn't exploited.

The fourth diagram.

Figure 4 shows an actual situation in Holland 1993 in 1990 dollars. The axes now don't show the reduced form variables, but show the structural income and tax. Statutory tax has an exemption, a first bracket of 38.4%, a second bracket of 50% and a last bracket of 60% (the latter not shown here). The legal minimum wage of about \$15 thousand creates a net social minimum of about \$11 thousand. An interesting coincidence for Holland is, that if the 50% bracket were extended downwards (the dashed line), then it would be possible to choose exemption at (almost) that net social minimum of \$11 thousand.

Figure 4: Taxes in Holland



The crucial thing to see is, that the tax system below the legal minimum wage is wholly academic for full timers. Full timers are not allowed to earn less than \$15 thousand, and hence the whole tax range below that has no application. The gross minimum wage could be lowered from \$15 to \$11 thousand. You could have any marginal rate in that bracket. For example a 50% rate, and then a jump at \$15 thousand to the old line. You could have a 100% tax regime along the benefit. (This benefit line has not been shown here.) This would keep net income constant, and would be entirely without loss of tax revenue since no full timer nowadays works in that bracket. The reduction of the minimum wage

would generate employment, and reduce benefit payments. Note that a 100% regime in a single year need not be a problem for incentives, since incentives rely also on nonwage items, and one can use economic growth both for incentives and for gradual change to a normal structure. And interestingly, the recovered benefits might even be used to finance a tax reduction in the first brackets, perhaps even such that the mentioned dashed regime would be possible.

There are various matters that complicate the structural situation in Holland. To name a few:

- social security premia for employers raise minimum wage costs up to \$18 thousand, aggravating the vacuity of the combined system.
- collective bargaining results into sectoral minimum wages that are on average at least 10% higher than the legal minimum wage.
- the legal minimum wage does not hold for parttimers. Holland now has a lot of parttime work.
- the statutory tax holds for all incomes, not just labour income.
- to allow for decent net benefit and pension incomes, there is a merry-go-round of subsidies and taxes.
- statutory taxes are not individualised (though terminologies suggest this). For example, housewives can ‘transfer their exemption’ to the money earning partner. But such transfer still generates a low total exemption as shown in figure 4. For singles, the situation is worse.
- the Dutch 1990 tax reform (known as “Oort reform”) actually reduced exemption. This relates to a special story. Politicians appear to have had a Marshallian model in mind, where the reduction of marginal rates would generate employment. The Oort reform that reduced statutory marginal rates actually generated employment, confirming these presumptions. But the causal process was entirely different, since the Marshallian model doesn’t quite apply. Gelauff (1992) clarifies part of the explanation. Gelauff uses a Nash wage bargaining model with two properties. The reduction of statutory marginal rates reduced Phillips curve sensitivities, and induced larger wage claims and lower employment. The Oort plan however also included a reduction of average taxes, and this caused employment to rise on balance. Stated in mundane terms: the reduction of average taxes was sold on the political market as a reduction of marginal rates.
- there are terminological confusions. The notion of “waiving taxes for the lowly productive” has been translated here by “raising exemption” and implemented with e.g. a short 100% marginal rate bracket. The latter option is not well-known or easily considered. The notion of “raising exemption” is often taken to imply that all other brackets *shift along* with exemption. In that case the higher exemption benefits all incomes, and this causes a huge loss of tax revenue. E.g. Gelauff (1992), who uses the official general equilibrium model of the Central Planning Bureau to compute the economic impact of raising exemption, adopts this expensive approach.

One sees that the structural model is a bit complex and non-linear, and that we benefit conceptually from the BHL simple linear reduced form.

Understanding is helped sometimes by sticking labels onto situations. Economic literature already knows the “Dutch Disease”.¹ There may be reason for the label of “Dutch Mental Disease”, for the (Dutch) inability to co-ordinate taxes, social security and labour market conditions, even in the face of 20 years of huge unemployment and extreme growth of benefit reliance. In Holland of the 1990s about 25% of the labour force is on benefit of some kind. It is a point of consideration, though, that the coordination failure occurs within the whole OECD, so that Holland only stands out as one of the extreme examples. Elsewhere, I relate this to the structure of Western democracy, the “Trias Politica”, and arrive at a suggestion that would allow us to improve on our democratic standards (Cool (1994b)).

The next sections try to say more on the “Dutch Mental Disease”.

¹ When the world price of an internal resource rises (OPEC & Dutch natural gas), the rising exchange rate has an adverse effect on normal exports and normal economic activity.

Concepts continued

Above analysis is essentially incomplete. It has not been specified how the tax regime comes about. The tax regime is an expression of the social choice already made, but it has not been explained how a particular choice has been caused. What is required is a power distribution on the $n + m + x$ agents in the economy. In conventional terms the power distribution is expressed as a social welfare function SWF, and the tax regime is the result of the maximization process subject to the state of information I :

$$\text{maximize } SWF(m, H, M, x, L, X, n, B, r; I) \quad (1')$$

Using a SWF serves expository purposes. When turning to practical application we could use the Drissen & Van Winden (1990) approach. But the logic of both approaches is the same.

The introduction of r as a separate variable in the SWF means that it stands as a proxy. The economy is not simply a collection of individuals maximizing utility over consumption and labour. There are some institutional aspects too. Perhaps unemployment would be inferior to employment for most people. An example of an institutional influence however is, that social security officials might benefit from unemployment, since it keeps them in attractive jobs. All such (Public Choice) phenomena can be collected on their point of relevance: the employment regime r .

There is a Pareto Optimizing Change (POC) iff some advance and none suffer. Since proxy r enters the utility function of those in power, the regime switch from 0 to 1 need not be POC. This is a clear demonstration of the relevancy of r for the SWF.

Secondly, there is information I . Ever since Keynes and Tinbergen, but for some economists more acutely since Muth and Lucas, economists have given attention to the information sets that guide the activity of agents. This concerns not just plain knowledge, but rather what people believe about the state of the world. The information sets may contain individual and social aspects, like own prices and the (announced) general price level.

Variable I is an aggregate. It represents the state of knowledge of those in power, where 'having some power' is a state of nature given by an array or by a distribution. The latter is not further developed here.

The use of variable I could complicate the analysis in various ways. R&D could be an economic activity affecting social welfare itself, amending (1') etcetera. But the present formulation suffices for our purposes. Note, the maximization process itself finds its operational implementation in the actual work of some agents in the economy. Such work might be implicit and thus not explicitly remunerated. More conventionally there are some administrators (e.g. a "Council of Economic Advisers") who are explicitly paid for their information handling activities (whatever outcome on r).

Piore (1987) reminds us that unemployment is not a natural disaster like an earthquake, but derives its cause, nature and significance from the social system as a whole. In this line, when unemployment arises, we would find the solution by studying the whole system. This includes information. And Piore's reminder, being a reminder, is a piece of information. Indeed, one important social type of information concerns theory itself, and economic models in particular. The development of rational (or model-consistent) expectation theory implies this too. Economic theories about unemployment are themselves part of the information sets in society. An adequate description of unemployment not only requires a statement of taxes, social security and e.g. legal minimum wage, and their technical interaction, but also a statement of people's perceptions.

When unemployment arises, it may be caused by the power distribution, but the cause can also be plain lack of knowledge. It may very well be that Piore's proposition has not gotten sufficient attention from policy makers and advisers. And this lack of attention, if it were true, would be a prime example of the influence of the information set on economic activity.

There are two relevant states of information: $I = I$ meaning that those in power perceive of a (sound, compact) solution of unemployment, and $I = 0$ meaning that this is not the case. Theorem II, to be formulated next, thus is rather general. Theorem I on BHL-ness then is an existence proof for theorem II. Note that knowledge about theorem II itself might but need not be included in $I = I$.

The Dissipation of Knowledge ("DOK") ΔI by science, education and media generally is detriment to those in power. Hence DOK generally is not PO, in the ordinary sense of PO. However, many would hold that DOK *morally* dominates PO - and if these people are in power, this conviction is reflected in the SWF. Note also that ΔI need not be positive, e.g. when a wise king dies or a wise government party loses the elections. Note that when DOK coincides with a shift in power, the prime cause can be both personal properties involved or the information; but here we only look into the latter.

We conclude this section by a short abstract discussion of the concept and properties of information, and Lemma III. The following definitions concern a controllable dichotomous system with states $s = 0$ or $s = 1$.

Definition: *Basic* information is a list of "what one does" to have one state in one moment and another state in the next moment.

Definition: Sound information J_s is a list of *both* what one does to maintain s and what one might do to change s into $1 - s$.

Definition: Sound information is called *compact* iff $J_0 = J_1$.

Definition: A state s is said to be caused *by chance* iff a situation of s and unsound belief J 's are stable. It is said then that there is a *hidden cause* linking J_s to s .

Definition: A state s is said to be *controllable* iff there exist - in principle - basic information on both s and $1-s$; though this information need not be known by the agents, and it need not even be known to the agents that the matter is not unknowable.

Example: One may e.g. know how to burn a match, but not how to restore cinders into a match again (except for restarting the universe, but that is not likely controllable). Let 1 stand for match, and 0 for cinders. Then J_1 exists, but J_0 doesn't (only partly).

Remark: Two consecutive states (excluding information) are of the form $\{0, 0\}$ and $\{1, 1\}$ where the regimes are maintained, and $\{0, 1\}$ and $\{1, 0\}$ where there is a switch. These give four lists of basic information, if policy is to be conscious. Sound information joins the information concerning $\{1, 1\}$ and $\{1, 0\}$ on one hand, and $\{0, 0\}$ and $\{0, 1\}$ on the other.

Remark: Using sound information rather than basic information has analytical advantage. A Roman emperor may think that he maintains employment by sacrificing to the gods. We rather discuss cases where governments deliberately abstain from wrong policies.

Remark: Sound information exists as $J1$ on $s = 1$ and $J0$ on $s = 0$ separately. Sound information is denoted in binary values again. The tuple $(J1, J0, s)$ is the state of a sound system. Information is here the prime cause and s the prime effect.

Remark: If s is the case, and one doesn't believe J_s , so that $J_s = 0$, then one believes some alternative $J's$. Someone unfamiliar with matches would have the unsound (perhaps only basic) information 'this is just a piece of wood'. More complex situations need thorough analysis. (E.g. someone may know the text of a theorem and benefit from that, but may not know its proof.)

Remark: Compactness means that one knows the explanation of one state, iff one knows the explanation for the other state. Then we can use a single variable J .

Lemma III: If there is sound information $(J1, J0)$ on a controllable dichotomous state s , then

- (i) if the information is not compact then there are 8 states of the system, with 4 states implying a hidden cause,
- (ii) if the information is compact, these numbers are halved.

Proof:

We tabulate the possible states of the system $(J1, J0, s)$:

		J1 J0 s	meaning		
		-----	-----		
(1)	J = 1	1 1 1	given J = 1	one chooses	s = 1
(2)	J = 1	1 1 0	given J = 1	one chooses	s = 0
(3)	J = 0	0 0 1	given J = 0	one chances at	s = 1
(4)	J = 0	0 0 0	given J = 0	one chances at	s = 0
(5)	J = -	1 0 1	given J1 = 1	one chooses	s = 1
(6)	J = -	1 0 0	given J0 = 0	one chances at	s = 0
(7)	J = -	0 1 1	given J1 = 0	one chances at	s = 1
(8)	J = -	0 1 0	given J0 = 1	one chooses	s = 0

In cases (3), (4), (6) and (7) the government doesn't possess sound information and believes some J_s (e.g. 'the world is as it is'), but it chances at s nevertheless. This implies that there is a hidden cause, so that $(J1, J0, s)$ is not the single causality. (For example, the state of the system was inherited, and those in power wish to keep things as they are. In that case $(J'1, J'0, s)$ has causality within a more complex model, describing in more detail how people act on their beliefs.)

If the information is compact, the argument only concerns states (1) to (4).

Q.E.D.

Theorem II

When we apply Lemma III, which is about information handling in general, to our subject matter of employment, we get what for this area amounts to a theorem.

Definition: There is wrong co-ordination iff a SWF optimal change is blocked only by lack of knowledge.

Theorem II: Given sound compact theory (e.g. on the BHL economy):
(i) full employment results from conscious choice or chance
(ii) unemployment results from conscious choice or from wrong co-ordination

Proof:

Possible states of sound compact knowledge and employment (I, r) are:

- (1) (1, 1): having the knowledge, full employment results;
- (2) (0, 1): lacking the knowledge, full employment results; thus there is a hidden cause; thus it is by chance;
- (3) (1,0): having the knowledge, unemployment results; thus, the explanation comes from the power distribution, so that full employment is not to the advantage of those in power, and the choice for unemployment is conscious;
- (4) (0,0): lacking the knowledge, unemployment results; the introduction of the knowledge unveils two subcases:
 - (4.1) There is a switch to (1): optimal change was blocked only by lack of knowledge, hence wrong co-ordination;
 - (4.2.) There is a switch to (3): information doesn't matter.

Q.E.D.

Remark: Theorem II is rather general. Theorem I on BHL-ness is a specific example of a sound compact theory, and thus gives an existence proof for II.

Remark: In both employment regimes we have 'conscious maximizing behaviour subject to the state of information', but the regimes themselves cause different points of departure. There little use in subdividing case (2). If more information is introduced, the power distribution may cause unemployment. This effect however has already been covered in (3). See Appendix Two for "more on chance".

Remark: Cases (3) and (4.2) give the situation where the possibility of full employment, as established in theorem I, merely is logical but not empirical. Even in a BHL economy it is conceivable that power parameters and political reaction patterns are such that the economy remains in a state of unemployment forever.

Remark: In case (4.1), and when there are subpopulations of theorists ('those who know') and policy makers ('those who can do') then there is the *Van Schaaijk Corollary*: "Those who know, cannot do anything about it; those who can, don't know."

There remains the interesting point of the difference between Pareto Optimality and SWF optimality, when information is the active variable. Here Lemma IV applies.

Definition: A state is Restricted Pareto Optimal if it would be PO when restricting the analysis to only some effects (so that the full SWF does not apply).

Lemma IV: For a BHL economy, regime 1

- (i) has the highest level of national income,
- (ii) is restricted PO (RPO) compared to regime 0,
- (iii) is possibly Pareto dominating (in the normal unrestricted sense).

Proof.

(i) Equation (3-r) immediately implies $Y(1) \geq Y(0)$.

(ii) For Restricted Pareto Optimality, look at the change from 0 to 1:

(B) permanent benefit recipients are not affected by a regime switch,

(H) $M(1) \geq M(0)$,

(L) $B \leq X(1)$

Hence all agents improve in a material sense. Thus regime 1 is “Pareto Optimal” compared to regime 0, if we *restrict* attention to these (income) aspects.

(iii) The evaluation of the regimes is done by the SWF, that includes Public Choice complexities. Since such complexities need not be present, a change to regime 1 might however be a pure POC in the normal sense.

Q.E.D.

Remark: It stands to reason that if a change to full employment occurs, it is mainly because it is POC. This highlights the problem of wrong co-ordination.

Remark: In normal work-ethic conditions, the income-leisure utility considerations of the x low productivity workers improve too, when they move from forced leisure to a decent job. It is conceivable though, that the advance in net income does not compensate for the loss of leisure. Therefore, the concept of RPO is really restricted. In another respect, the voting power of x may be small, and when society decides that unemployment was a silly affair, the x may be said to have had an unintended bonus while it lasted. (With humour, society might even try to recover that bonus.) There is scope to define and judge PO from some fundamental rights rather than from the actual flux of the moment.

Remark: In an applied general equilibrium context we would have to deal with complex aspects, like people fearing to lose their jobs, and the loss of income resulting from crowding out. Adding ‘approximately’ would help Lemma IV surviving.

Concluding remarks

This paper has not provided complete statistics on existing welfare states, and it can neither replace the need for more study, especially with the cornucopia of applied general equilibrium modelling. The analysis here does however fit in with the stylized facts. It is good strategy to apply logic to circumvent the uncertainty of parameter estimates. There is sufficient reason as well to accept that the two propositions forwarded here give main results in a nutshell.

The first proposition is that both unemployment and full employment are possible for the (BHL) welfare state. The second proposition is that unemployment follows from either conscious choice or wrong co-ordination caused by lack of knowledge, and full employment from choice or chance.

It may be emphasized that the logical force of the argument derives from the undeniableness both that one can take subgroup averages and that two points share a line. That line finds its translation, in economic vocabulary, of a social welfare function with a distributional power interpretation.

Above discussion on information is a small step in formalising rather well-known insights. Formalisation, how small the step may be, can be crucial to get the statistics going, and in helping to establish what the state of the world actually is. Apparently we need statistics on what e.g. policy makers believe.

Above discussion provides a foundation for a policy conclusion, that for many welfare states with declared objectives on full employment, it would be good to improve on informational procedures.

PM. Informational procedures require attention in the science of economics itself too, see Appendix Three.

Appendix One

Statutory rates are changed yearly, complicating standard economic analysis. This especially complicates marginal analysis. The static (statutory) marginal rate can be taken as the partial (non-time-dependent) differential:

$$SMR(L) = \partial T(L) / \partial L$$

The dynamic (statutory) marginal rate is the total (time-) differential (or the partial derivative that includes changes in statutory taxes). For clarity we take the relative difference:

$$DMR(L) = (T(L) - T_{-1}(L_{-1})) / (L - L_{-1}) = \Delta T / \Delta L$$

When taxes are indexed on income, then the dynamic statutory rate equals the average rate. This equality holds even per person, when (income) growth is balanced and the share of taxes in the economy does not change. For nonzero values we have the tautology:

$$\Delta T / \Delta L = T_{-1} / L_{-1} \quad \Leftrightarrow \quad \Delta T / T_{-1} = \Delta L / L_{-1}$$

Under balanced growth, people find their niche within the income distribution, and they are further-on confronted with a constant average rate. The statutory structure could be progressive, but when rates are indexed on income, and assuming balanced growth, then the actual marginal rate on actual income changes equals that same average rate.

The ‘marginal rate’ of textbook analysis, which has often been taken as the static statutory rate, should rather be taken as the dynamic rate. Up to now empirical analysis has found little sensitivity for (so-called) ‘marginal rates’. But this may well come from taking the wrong rate as the relevant rate. Note also that average rates are lower than static statutory marginal rates.

Good economic analysis will take account of both static and dynamic statutory rates. Yet, for the present paper it suffices to conclude that a long run analysis (on regime switches) may well concentrate on the average tax rate ($DMR(L)$).

Appendix Two

The mentioning of 'chance' in theorem II induces a discussion on randomness.

Let Queen Q fall in love with Prince Random PR. Q especially adores PR when he goes about the court with an attractive air of responsibility. To this end she gives him the job of Treasurer. However, PR does not know much about taxes, and true to his name he chooses tax exemption at random. Hence, any regime is 'subject to approval by official royal authority', and in this sense there is a SWF and maximization. And only economists think that the economy is relevant. On the other hand, this is an incomplete sense of optimality. If PR happened to choose regime 0, then teaching PR about taxes would have Pareto Optimizing effects. In this sense, only one case is really optimal. This example shows that we can discuss cases with random elements, and that our classification of cases supports clarification to some people. Thus $Y(1) - Y(0)$ would be the ex post implicit price paid, in regime 0, by the Queen for decentralizing decisions to a nitwit. If PR has ex ante probability p of choosing regime 0, the ex ante expected loss is $(1 - p).(Y(1) - Y(1)) + p.(Y(1) - Y(0))$. It is not very useful, however, to indulge in the notion of randomness, when considering Theorem II. The stylized fact is that it is the lack of knowledge that is crucial here.

Appendix Three

A May 1992 version of this paper has been published in November 1992 in Cool (1992). The reader may verify that little has been changed here, in September 1995. The paper has been submitted to *European Economic Review* in 1992 and the *European Journal of Political Economy* in 1994. I include the referee reports because a little discussion may help to clarify the argument, and, because it shows that informational improvements in economics itself could well be considered.

Referee One - EER 1992

The main conclusions of the paper are certainly not original. In fact, the paper shows that an economy could have full employment or unemployment and that full employment can be reached by chance or by the conscious action of economic government. This results say only that everything is possible.

Moreover, the so called model is presented in a very sloppy way. In fact the model is presented in the middle of the proof of theorem I (p. 5), which is quite an unusual procedure. The symbols used are not fully explained before they are used, etc... Finally, the 'model' is a trivial one. The behavior of the economy is neither derived from a fully specified micro model, nor explained in details. Furthermore, it is not useful for empirical testing.

Therefore, I do not think the paper is publishable, neither in the present, nor in a future version.

Comment

Theorem I concerns not just any economy, but BHL conditions. That full employment would be possible, would surely interest the OECD, struggling in 1994 with more than 35 million (officially) unemployed. The first result is not only that everything is possible, but gives *causes*, in the area of minimum wages. The proof only takes notions that are contained within the definitions used in the theorem. A close look shows that this is very rigorous, and it is even surprising how much one can do with a few definitions. Within the scope of the analysis, a fully specified model is redundant, since we use the reduced form. The 'triviality' of the model should be judged on the strength of the theorem and its empirical scope. The used definitions warrant empirical relevancy in an (almost) tautological manner. Similarly for theorem II which the referee rather neglects.

Referee Two - EER 1992

This paper discusses the effect of unemployment benefits and taxes on unemployment. Dr. Cool discusses important issues and is concerned with real world institutions. However the paper has important weaknesses.

Dr. Cool considers only labour supply. Labour demand is modelled only by the assumption that there is a fixed wage that each worker can receive. Very oddly neither job search nor leisure is mentioned. Instead it is assumed that job market participants maximize income. Clearly there is not much more to be said. Matters are not helped by the fact that Cool gives unconventional meanings to standard terms; he refers to knowledge of the basic laws of functioning of the economy as information, he refers to incorrect theories as coordination failure and he uses Pareto optimal to refer to a Pareto improvement.

The relevance of the simple theory is argued by pointing to stylized facts - in particular to the fact that Japan and Sweden have unemployment rates much lower than other industrialized countries. The case of Sweden is clearly relevant to Dr. Cool's argument, but Sweden's strict enforcement of availability for work rules should also be mentioned. The relevance of Japan is much less clear. He appears to be arguing that Japanese firms guarantee workers employment at a loss if necessary. This appears to be a reference to the practice of lifetime employment in large firms. If so it does not apply to all workers and is not comparable to a automatically available subsidy to low wage workers as discussed in the theoretical section. This section of the paper is unclear- it is not sufficient to say that the Japanese and Swedish cases need no reference.

I have some suggestions. I think that a serious international comparison of tax-benefit systems and unemployment is of interest. I am not an expert in the field but have noted that prominent works on unemployment treat the effects of the tax system extremely casually and do not mention employment subsidies at all. Further such studies are often strictly cross sectional and do not exploit changes in tax-benefit systems at all. I suspect that there is a good paper to be written by someone willing to study tax and benefit regimes in different countries at different times.

Comment

A reduced form is used, so supply and demand considerations are not of immediate importance. There is not a fixed wage, but there are stable incomes, and even so stable that the assumption of constancy of earnings does not affect Theorem I. It is not assumed that participants maximize income only. Whatever the agents have decided on leisure, shows up in earnings.

It is not clear why knowledge could not be counted as information, and why the adoption of an incorrect economic theory by government officials in the 1960s could not be counted as (cause of) a coordination failure for the economy at large. The condition Pareto Optimal can be applied to a *situation* or a *change* (of regime). A PO situation cannot be improved. A PO change means that the situation is improving (But the suggestion has helped to enhance clarity, by using the term POC.)

The paper mainly points out that Japan and Sweden have low rates of unemployment, and then goes on with the reduced form. It doesn't help to emphasize a supply detail (availability) when demand is the bottleneck. Lifetime employment in Japan may still be sizeable enough to make an impact (notably when costs are not shifted onto society, that then would have to raise taxes).

The (non-expert) suggestion of a new paper ... outlines the body of my paper, and overlooks that the main results of such a 'new' study are already summarized here.

However, and interestingly, the observation on ‘prominent works’ supports my conclusion about co-ordination failure by applying wrong theories.

Referee Three - EJPE 1994

Thank you for submitting your paper for publication in the EJPE. We have asked for an evaluation of the paper. The opinion that we have received is that the paper potentially makes an original contribution in some ways, but is not all that original in other dimensions. Also, the paper does not reveal recognition of past literature which has dealt with the type of issues which you raise.

I would propose that you consult with some academic economists on which aspects of the paper are novel and which not, and regarding how to best make in a concise way the points that you wish to emphasize. Or you may choose to find a co-author who could be helpful. If you then subsequently wished to submit a revised version, we would again give it consideration.

Comment

This is vague on what is considered ‘original’ and ‘not all that original’. Similarly on the literature. It is implied that if I don’t refer, then I would be unconscious of the work of others. The referee himself has not studied Cool (1992) himself, I know for sure, and thus doesn’t know my wider references at all. I cannot but regard the reaction as quite arrogant.

Nevertheless, I’ve presented this paper with a copy of the EJPE letter to an academic economist in the field of Public Choice. This however didn’t result into a useful reaction either.

Some concluding comments

To the defense of these journals: I rely on Public Choice *and* labour market theory *and* macro-economics *and* ... so demands on referees are tough here. Nevertheless, I think that publishing is a better way to settle arguments than the present referee system. I would not mind to add the referee reports to the published article. This can eventually evolve into some Elo rating system.

Note that I didn’t refer to the AER 1995 issues, the Edmund Phelps book, the David Card c.s. work, etcetera. This is not because I would not be aware of these. There are some problems of digestion. With Phelps, if turnover costs would be so important, a small subsidy would have huge effects ... not quite likely though. With Card, a minimum wage might slightly raise employment right above the minimum, but this local effect differs from the effect of a sizeable displacement of that minimum. These matters have not yet caused me to change the present exposition above.

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