

**A TAXONOMY FOR THE DESIGN OF PERSONAL INCOME TAX AND
BENEFIT SYSTEMS**

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ABSTRACT

This paper identifies the main **objectives** that personal income taxation and benefit systems, (reverse sides of the same coin), can be expected to fulfil. Objectives can also imply costs, at either or both micro and macro levels.

This paper also identifies the main **features** that determine any personal income tax and benefit system. One from a set of different options could be chosen for each feature. Some of these options are described. For instance, the tax/benefit unit could be one of: the individual; a married couple or civil partnership; any heterosexual or same-sex cohabiting couple; a family; or a household. The option that is chosen will have enormous implications for the achievement of the various objectives.

Several objectives may be influenced by **any one feature**, and, similarly, several features may influence **each objective**. Thus features and objectives are interrelated in very complex ways, and **TABLE 3** attempts to summarise this.

The paper provides:-

- (i) a **taxonomy** for personal income tax and benefit systems, to facilitate **comparisons** between competing proposals;
- (ii) a framework for the **analysis** for any scheme which proposes a particular set of options for features of a personal income tax and benefit system, in order to predict its effects (intended or otherwise);
- (iii) a **model**, to use as a precursor to more sophisticated simulation modelling;
- (iv) a **check list** of questions for the **design** of efficient systems to meet sets of specified prioritised objectives.

The 'costs of the system' could refer to different aspects of each objective .

The paper concludes with an application of the analysis to a citizen's income system.

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I. INTRODUCTION

Much of the debate about social and economic policy is preoccupied with instruments, rather than with the policy objectives that they are implicitly supposed to fulfil. Post war UK social policy has been characterised by piecemeal change, seemingly unrelated to any real or imaginary policy objectives.

The alternative approach is to specify the set of objectives first, including priorities where there is potential conflict, and only then to design the set of instruments which most closely fulfils them. This approach is similar to the economic engineering proposed by Keith Roberts (1983).

This paper identifies some of the main **objectives** that personal income tax and benefit systems may be expected to fulfil, and these are summarised in Table 1. The common **features** shared by direct personal income taxation and benefit systems, (reverse sides of the same coin), are summarised in Table 2. Some of the options that can be chosen for each feature are described. The paper indicates which objectives (or outcomes) are influenced by **each feature**, and similarly identifies which features influence **each objective**, and these relationships are summarised in **TABLE 3** below. The analysis provides a basis for the design of future income taxation and benefit systems, and a framework for the analysis of current systems and future proposals.

Finally, the features of a tax and benefit system that define a citizen's income, or basic income, scheme are discussed.

In this paper, the term '**benefit**' will be reserved for social assistance payments, to distinguish them from social insurance payments (which provide payments to replace loss of earnings in the event of maternity, invalidity, sickness, unemployment or retirement (MISUR)), and thus to distinguish between these two very different systems.

The term '**minimum income**' refers here to a benefit entitlement of a recipient when his/her other income is zero. The terms Basic Income (BI) and Citizen's Income (CI) are used interchangeably.

An example of an identifiable, **comparison or benchmark group**, would be that of the working-age adult, who has no obvious augmented needs (due to disability or chronic sickness), who is without the responsibility for the day-to-day care of adults or children (not a parent-with-care), nor any impaired ability to earn, so that, when paid work is available, s/he may be expected to be able to maintain him/herself without experiencing poverty.

II. THE OBJECTIVES

The main implicit or explicit objectives or criteria (Meade, 1970, p.269) of any personal income taxation or benefit system are described in some detail below, and summarised in Table 1. They fall into three groups:- equity, humanitarian and efficiency objectives.

TABLE 1. POTENTIAL OBJECTIVES FOR PERSONAL INCOME TAXATION AND BENEFIT SYSTEMS.

OBJECTIVES		
EQUITY	i	FINANCIAL AUTONOMY
	ii	REDISTRIBUTION
	iii	INCLUSION
HUMANITARIAN	iv	PERSONAL COSTS
	v	POVERTY PREVENTION
	vi	FINANCIAL SECURITY
EFFICIENCY	vii	INCENTIVES TO WORK & SAVE
	viii	EFFECTIVE TRANSPARENT ADMINISTRATION
	ix	EFFECTIVE COMPLIANCE

EQUITY OBJECTIVES.

The three equity objectives determine the extent to which society is divided and polarised, and whether some individuals are discriminated against. They affect the individual directly, and also help to determine the character of society.

(i) The **degree of financial autonomy** of an adult determines whether s/he has control over the administration of finances on his/her own behalf.

Autonomy endows an individual with an economic identity, financial independence, and confidentiality and privacy in his/her financial affairs. It is a necessary condition for mutual relationships between adults in a household, and equitable bargaining positions,

rather than the least advantaged member being extremely vulnerable to domination by the more financially advantaged members, and being removed from the wider protection of society. Autonomy is essential if individuals are to have choice in their lives, particularly about their own consumption, about how much unpaid work they do, and also about household formation (Miller, 1986).

(ii) The **redistribution effects** of the system do not refer just to the difference between pre-tax and post-tax incomes, but to the distributions of paid employment and unpaid work, including caring responsibilities for both children and adults. Redistribution of income can be over a life cycle for any individual, or it can be from richer to poorer individuals, both **between** and **within households**.

(iii) The degree of **inclusion in society** will be influenced by the extent to which double standards are employed, that is, different objectives and criteria are chosen for different parts of society. This determines the extent to which individuals are discriminated between, categorised, and segregated, so that different groups can be made subject to different standards of treatment and control. Positive discrimination towards disadvantaged groups could lead to a more united society. However, in practice, differences in circumstances have been used to marginalise the already disadvantaged

HUMANITARIAN OBJECTIVES

These define the extent to which our society is humane, particularly to its weak and disadvantaged members.

(iv) The individual's **personal costs of access** in paying taxes (over and above the amount of liability), or in applying for and receiving benefit, can be measured in terms of the time spent queuing, or filling in forms, effort, money, emotional energy, of loss of privacy or dignity, including any stigma, humiliation, or the imposition of extra obligations, associated with it. This has direct consequences for the take-up rate of benefits.

(v) The **adequacy** of the minimum income can be judged according to Townsend's poverty criteria (1979, p.31), which he defines as meeting both physical subsistence requirements, and the need to participate in one's community. Thus it does not refer only to material needs, but to social and other needs also. 'Adequacy' varies over different societies according to whether other services are provided free at the point of contact, such as education and health care. 'Adequacy' must contain an element of poverty prevention, which anticipates needs, rather poverty relief, which is inadequate by definition, because it is not effective until after the damage has been done. Prevention (ex ante), for poverty, as for other spheres in life, such as ill-health or crises, is cheaper than cure (ex post).

Meeting costs of disablement, including the costs of care in full, gives people with disabilities the chance to choose their carers either from within the family, or from

without, and gives household members a choice about the amount of time spent in caring for another member with disabilities or frailties, and about the amount of time spent working outside the home. Adequate minimum incomes give all individuals some choice and control over their lives, including a better bargaining position for low wage individuals in the labour market.

(vi) **Financial security** reflects an individual's expectations and anxiety about the future adequacy, variability and predictability of his/her future minimum income, and the hassle associated with justifying and claiming it. The majority of people in the world face financial insecurity, and even in the rich west, many are just two or three months salary away from losing a job, their home and even their family.

EFFICIENCY OBJECTIVES

While having an effect on the individual, these objectives relate more to the economy as a whole.

(vii) The **incentive effects** of the systems on the individual to save, and to take paid employment (for both low- and high-income earners), are the objectives most closely related to the macroeconomic goals of achieving target levels of aggregate economic activity, growth rate and stability. The incentive-to-work effect really only makes sense within the context of a comprehensive policy about paid and unpaid employment, (as opposed to a general anti-unemployment rhetoric). The incentive effects, among other things, can influence individuals' choices about how many hours of paid employment they wish to undertake.

(viii) **Effective transparent administration.** The administrative system must enable the transfers to beneficiaries, and tax revenues from tax-payers, who may be the same set of people, to be paid in a simple and transparent manner.

(ix). **Effective compliance.** The costs to society include the tax revenue foregone due to fraud, the total of benefits claimed illegally, and also to the costs of compliance. The amount of the loss of revenue and benefit fraud will be affected by the compliance activities. If the first decreases as the latter increases, a minimum may be identified.

Policy makers and other individuals will choose their own particular objectives and priorities from this menu, and it is not the purpose of this paper to define an optimum set of objectives.

III. THE FEATURES OF PERSONAL INCOME TAX AND BENEFIT SYSTEMS

The main **FEATURES** that define any direct personal income taxation or benefit system are identified. For each feature, there are several possible options, which are

described below, and from which one **OPTION** must be selected for a particular scheme. Each option influences the objectives in a unique way. Features and options are summarised in **TABLE 2** below.

Each feature influences two or more objectives. These **RELATIONSHIPS** are summarised in **TABLE 3** below.

(A). THE METHOD OF DETERMINATION

Who designs the tax and benefit systems, or is able to influence it, and thus whose objectives are adopted, and **how** the process is conducted, (whether openly, or shrouded in secrecy as by The Official Secrets Act in the UK), has the most profound consequences for all members of society, not least for their feeling of future financial security.

The set of options include:-

- (a) Civil servants and MPs (as now), or some other set of advantaged adults;
- (b) A representative mixture of advantaged and vulnerable adults (who are unable to be self-sufficient), as in a focus group or citizens' jury, for instance;
- (c) A referendum of all adults every few years could be used to determine some key issues, such as the proportion of Gross National Product per head that would constitute the level of the minimum income for the comparison or benchmark group;
- (d) Certain key rights and features could be guaranteed through a written Constitution and a Bill of Rights;
- (e) Political parties might be required to specify their tax and benefit policies in detail in their manifestos, indexing them to some macroeconomic indicator, such as GDP per capita. and actually to implement them very early on in their next administration.
- (f) Local authorities may be given a certain amount of discretion within the system.

(B) THE TAX/BENEFIT UNIT

The set of options for the tax/benefit unit include:-

- (a) The individual,
- (b) The married couple or civil partnership,
- (c) Any married or unmarried heterosexual or same-sex cohabiting couple,
- (d) The family including dependent children,
- (e) The household, including adult relatives, lodgers and other residents.

Units, other than the individual or the legally registered couple, can be extremely difficult to define.

The choice of tax and benefit unit affects just about every objective in very profound ways. Objective (i): Anything other than the individual as both benefit and tax unit denies the individuals who comprise that unit the right to a financial identity and autonomy. In addition to having a profound effect on the relationships within the unit, a group unit denies the weakest members the right to administer finances on their own behalf, denying them choice of consumption, and exposes them to the risk of poverty. The fact that the unit as a whole appears to have an adequate income does not guarantee to each member within it an adequate income and consumption. Anything other than the individual as unit ignores the least advantaged and most vulnerable, who become subsumed in the multiple unit and lose any individual identity. The individual as unit is benign. Choosing a group as unit is about as punitive as it is possible to be in its refusal even to acknowledge the separate existence of the least advantaged (Miller, 1986). The benefit unit in the UK used to be the household (Deacon and Bradshaw, 1983, pp.39-40), but was universally detested, since it could require a relatively affluent lodger to support the whole household. One would expect the choice of tax and benefit unit to affect an individual's decision about household formation, and the group as unit will lead to a larger number of single households than otherwise.

The choice of unit influences objective (ii), the redistributive effects of the system within the household. Individual-as-unit could help to disperse some of the inevitable inequalities that arise within a group unit, and that are masked by the official practice of using the group unit for monitoring and reporting income distribution figures. The distribution of the income of individuals is even less equal than the distribution of group units.

Finally, the choice of unit affects both objective (vii), the incentive effects within the group, (determining the extent to which each member's incentives are dependent on the other members' circumstances), and objective (viii), the administration, in that the choice of individual-as-unit, rather than the group, implies an increase in the number of cases to be handled, (though increased costs could be counterbalanced by each case being less complex).

(C) ELIGIBILITY

Eligibility determines the coverage of a system, or the basis of inclusion within the system, according to certain principles. It defines not only the conditions for access to benefit entitlement for members of society, but also their liability to taxation. It is the basis by which society modifies property rights determined by markets and other events in the past. The options can range from the universal, where all are included and any benefit received is unconditional, to the selective, where some are excluded, or the amount of any benefit received is contingent on circumstances. Even when eligibility is universal, the population for whom it is intended must be defined and delineated.

TABLE 2. THE MAIN FEATURES OF PERSONAL INCOME TAXATION AND BENEFIT SYSTEMS

FEATURES		OPTIONS
A	METHOD OF DETERMINATION	MPs & civil servants Focus groups or citizens' juries Periodic referendum Constitutional rights Party manifestos Local discretion
B	TAX & BENEFIT UNIT	Individual Legal couple Any cohabiting couple Family Household
C	ELIGIBILITY	Citizenship, presence Actual means (<i>ex post</i>) Unfulfilled needs Potential means (<i>ex ante</i>) Worth or desert Dependency principle Insurance principle, MISUR Charity Capacity Merit Birthright
D	CONTINGENCY	Personal attributes Household association Activity status Expenditure and savings decisions
E	LEVEL OF BENEFIT (Benchmark Group)	
F	STRUCTURE OF INCOME TAX/TAPER RATES	Progressive Proportional (flat tax) S-shaped Z-shaped Regressive
G	ADMINISTRATION METHOD	CI paid to all Tax credits used Negative Income Tax
H	COMPLIANCE	

ELIGIBILITY Cont'd

Starting with the most universal basis, and becoming more selective, the options for eligibility include:-

(a) **Citizenship, or permanent residence, or domicile, or presence**, (as with the UK child benefit), is the broadest and least conditional basis for eligibility, where every member of society, as defined, is included.

(b) **Actual means** is another universal basis for eligibility. In the UK, in theory all personal tax units are within the income tax system, but in practice, only those with 'taxable income' are affected. Actual means are assessed after the event (*ex post*).

TABLE 3. TO SHOW WHICH FEATURES INFLUENCE EACH OBJECTIVE

FEATURES	OBJECTIVES								
	EQUITY			HUMANITARIAN			EFFICIENCY		
	i	ii	iii	iv	v	vi	vii	viii	ix
A. METHOD OF DETERMINATION		**	**		*	***	*		
B. BENEFIT & TAX UNIT	***	**	*		**	*	**	*	
C. ELIGIBILITY	**	**	***	*	**	**	*	**	*
D. CONTINGENCY		*	***	***	***	*		***	***
E. MINIMUM INCOME LEVEL	**	***	*		***	**	***		*
F. STRUCTURE OF TAX/TAPER RATES		***	**		*		***	*	*
G. METHOD OF ADMINISTRATION				***	*	*		***	**
H. COMPLIANCE			*	*				*	***

KEY: *** THE KEY INFLUENCES)
 ** MAJOR INFLUENCES) ON THE OBJECTIVE
 * MINOR INFLUENCES)

What about **Means Tested Benefits**, MTBs? Do they constitute an eligibility criterion? MTBs are a perverse hybrid and constitute a bit of an anomaly in this taxonomy. The benefit part is usually highly conditional on other criteria or circumstances, (see (D) ‘contingency’ below), but the beneficiary is means-tested, as in a reverse (or perverse?) tax or tax credit, (see (G) ‘administration’ below). If the withdrawal rate for the benefit overlaps with the income tax range it can produce very high rates of effective marginal tax rates, (see (F) ‘tax structure’ below).

All of the remaining criteria for eligibility are more or less selective.

(c) All individuals have needs. **Unfulfilled needs** give rise to the experience of deprivation, but the level that avoids that experience can vary from person to person, or from group to group. Thus, a direct measure of actual means might not be relevant. People with disabilities, frailty or chronic illness, comprise one group who obviously have greater needs than able-bodied people. ‘Need’ as a basis for entitlement represents society’s agreement to share responsibility for providing for unfulfilled needs, leading to a less divisive society. Catering for different needs, often based on changing circumstances, usually leads to a more complex system, which is more expensive to administer, and is more costly in personal terms of time and effort for the recipient.

(d) **Potential means** is difficult to define. It is used to judge impaired capacity to earn. It includes an assessment before the event (*ex ante*) of an individual’s income from all sources, including potential earnings. Potential earnings should take account of working time available (which could be reduced for people with disabilities, for instance), the going wage rate, and the demand for labour in the local labour market. Problems arise for the individual when the assessed potential means are not realised.

The solution could be a **guaranteed work** system, where the state acts as employer of last resort, ensuring that any net benefit received is **earned** from society and is of benefit to society. If the guaranteed work is to enable the recipient to meet basic needs, then both a certain number of hours and a sufficient wage have to be guaranteed, the latter then acting as a minimum national (or local) wage.

Criteria (c) - (d) determine an individual’s ability to be self-sufficient.

(e) **Worth, or desert**, has been one of the most predominant and enduring elements in income maintenance systems in the UK for four hundred years. It is based on the principle that each should be self-sufficient (the paid-work ethic) and should earn his/her own keep, and keep what s/he earns. People who are unable to meet this requirement are deemed to have committed the social crime of wilful or negligent dependence on others and are dealt with summarily.

However, since some individuals who are not self-sufficient have mitigating circumstances, this worth principle attempts to distinguish between the deserving and the undeserving, by identifying the causes of, or the intentions underlying, the lack of

self-sufficiency, in order to exclude the undeserving. These are observed very clearly where entitlement is based on cause of disablement, cause of lone parenthood, the ubiquitous work test, where willingness to work is assessed, and the requirement that beneficiaries should have an address. The differential treatment of people as benefit recipients and as tax-payers in the UK illustrates the operation of this principle very clearly.

(f) The **dependency principle** excludes some people, where society passes responsibility for some of its adult members onto one or more private individuals. Those who are required to be dependent are not entitled to the same rights and privileges from the state as those who are supposed to be responsible for them.

There are other bases for eligibility, or access, which operate in other spheres of life:-

(g) The **insurance principle** for replacement of loss of earnings is based on the twin conditions of **contribution record**, which is determined in turn by full-time continuous employment record and reflects the inequalities in the labour market, and **entitlement conditions**, which reflect the reason for the loss of earnings: maternity, invalidity, sickness, unemployment and retirement (MISUR), and determine the period of entitlement.

Entitlement due to unemployment is difficult to define with all its connotations of cause and intent. The insurance principle tends to impose the (otherwise unnecessary) institutional rigidities of work categories, (full-time, part-time, self-employed, unemployed, retired), into the work place and labour market. It is usually unable to cope with the part-time and self-employed categories, and tends to discourage flexible and part-time working by putting these workers beyond the scope of the main social insurance provisions.

If a scheme for replacement income for loss of earnings were based on the insurance principle, then it would be an actuarially-sound system, separate from the rest of the tax and benefit system. It could be state-run, occupational, or private, although the private sector might be unwilling to underwrite unemployment insurance. The rest of the features of the tax and benefit systems, (unit, contingency, etc.), also apply broadly to insurance systems.

(h) **Charity** is a very arbitrary and fickle basis for 'entitlement' with many conditions attached. **Capacity** (to learn) is often the basis of entitlement to scholarships. **Merit** and **birthright** are other common bases for access to resources, or property rights, in our society.

None of the bases described above is free of problems. In addition, it is possible for a very fragmented system to evolve, where different bases of eligibility are used for different tranches of income, creating several tiers of tax and benefit systems, each one becoming more selective than the last. Also different groups of people have different

combinations of bases, thus causing divisions in society, and adding to the complexity of the whole.

Eligibility is one of the most important features of any personal tax and benefit system, and has far-reaching consequences.

The exclusion of deprived individuals, who are unable to be self-sufficient, from eligibility for benefit, reduces their autonomy, segregates them from the rest of society, perpetuates their poverty and adds to their insecurity about the future. It also has implications for the redistributive effects to society, and for the number of tax/benefit cases to be administered, and selective types of eligibility can add to individuals' personal costs.

(D) CONTINGENCY OR SELECTIVITY

In many ways, the distinction between eligibility and contingency is artificial. Eligibility determines the coverage of a scheme, **who** is entitled and who is excluded, while contingency determines **how much** those included are liable to pay in tax or are entitled to receive, according to circumstances. Together they determine the differentials compared with the minimum income entitlement of the comparison or benchmark group.

The total amount of benefit to which a unit is entitled, or the amount of its tax liability, tends to be a function of two factors (Dilnot et al, 1987) :-

- (i) **actual means**, (assessed in retrospect, either directly by income tax, or by tax and means-tested benefits);
- and
- (ii) **contingency**, or discrimination, where entitlement depends on the **circumstances** of the tax or benefit unit (assessed before transfers are made). Marginal tax and benefit withdrawal (taper) rates may also be varied according to circumstances.

It is worth noting the various **CIRCUMSTANCES** that are often applied with respect to tax and benefit decisions. Either these circumstances have been used, or there has been discussion about their possible use. They fall into four main groups:

- (a) personal attributes,
- (b) association,
- (c) activity status, and
- (d) expenditure and savings decisions.

They are listed in TABLE 4 below:-

Some of the variations falling under the heading 'association' have provided the options for the tax/benefit unit.

Contingency influences the objectives in several ways. It is essentially divisive (objective iii). It can influence the adequacy of post-tax income of the non-standard group (obj. v), and can affect take-up rates. The contingency conditions can undermine the security of the recipient (obj. vi), if they are based on circumstances that can change frequently, such as certain types of association. Where they are based on artificial, arbitrary categorisations of some continuous measure, or are subject to petty discrimination, or where combinations give rise to anomalies, contingency can be punitive to the recipient (obj.vi).

Much of the complexity of the tax and benefit system arises from contingency, and hence the complexity and costs of administration, (obj.viii). Contingency can also increase both incentives and opportunities to abuse the system (obj.ix).

The contingency underlying the tax system is less overt than that which usually underlies the benefit system, but the possibilities are still there.. Tax allowances on the basis of some approved types of expenditure outlay (previous tax relief on mortgage interest payments, or pension premiums, for instance) or savings, are divisive.

(E) MINIMUM INCOME LEVEL

The minimum income level, rather than being a fixed amount, is often indexed to a macroeconomic indicator. Linking it to prices has been a parsimonious response in the UK; a more generous one would be to index it to GDP per capita.

The level of the minimum income, (when a beneficiary has no other source of income), also affects just about every objective. First and foremost it affects the adequacy objective (v). An inadequate benefit is punitive, increases dependency on others, and divides the recipient from the rest of his/her community. It adds an element of insecurity to his/her life (obj. vi). An inadequate benefit may increase the recipient's incentives to work (Minford, 1983) (though these might be counteracted by high combined marginal tax and taper rates). The level of the minimum income obviously has redistributive effects (obj. ii). It may affect incentives to abuse the system as well (obj. ix), though the direction of influence on the incentives is not necessarily obvious.

(F) THE STRUCTURE OF COMBINED DIRECT PERSONAL TAXATION AND BENEFIT WITHDRAWAL (TAPER) RATES.

The structure of taxation defines the tax base, the 'shape' of the tax and taper rates, and the period of assessment.

It is assumed here that the tax base is that of **personal income** from all sources, but that it could be converted to an **expenditure** base by the exemption of savings from taxation, or to a **wealth** base, by including in the income base, actual or imputed income from various capital assets. Income represents actual means. Different sources of income may be subject to different rates of tax, in order to fulfil certain objectives. The

choice of tax base has implications for redistribution (obj. ii), for being divisive (obj. iii), and for incentives to take paid employment and to save (obj. vii).

An integrated personal income tax and benefit system is one designed as a unified system, to avoid arbitrary and unintended interactions and to plan the combined effects of tax and taper rates. (In practice, they are often kept separate, as in the UK, so that tax payers and benefit recipients can be subject to different treatment (HMSO, 1986, Cmnd 9756, p.31, para. 6.10)).

There is an infinite variety of designs for the 'shape' of personal tax and taper rates. They fall roughly into the following four groups, according as the combined tax and taper rate varies with gross (pre-tax) income, from the lowest incomes, through the middle range, to the highest incomes.

(a) '**Marginally progressive**' designs, where low-income groups are taxed at the lowest combined tax rates, and the highest income groups are subject to the highest marginal tax rates. These would ensure that the proportion of gross income paid in income tax increases as the gross income increases.

(b) '**Proportional tax, or flat tax**', systems tax all income levels at the same rate. This is simpler to administer, and to deduct at source, than a progressive tax.

(c) '**S-shaped**' designs, where the middle-income range is taxed at the lowest rate. The S-shape refers to the graph that would result from plotting post-tax income on a vertical axis against pre-tax income on the horizontal axis. The slope of the graph is determined by the combined effective marginal tax and taper rates. It has the effect of shifting upwards the post-tax incomes of all the people with higher incomes compared with those of people with low incomes, which is highly divisive. These are of two types, depending whether the highest or the lowest income group is subject to the highest rate of tax. Another variation on this is the '**Z-shaped**' structure, where the middle-income range is taxed at the highest rate of tax.

(d) '**Marginally regressive**' designs, where the marginal tax rates decrease as pre-tax incomes increase.

Tax rates can vary according to gross (pre-tax) income, either graduating smoothly, or more usually in a piece-wise linear fashion. An effective combined marginal tax and taper rate greater than 100% induces a poverty trap.

Means-tested benefits (MTBs) provide an inefficient second method of testing one's means, in addition to the efficient method of means-testing the **whole of one's income** via the personal taxation system. If their taper rates did not overlap with the income tax rates, then they would not necessarily cause extra damage. However, MTBs in the UK have almost invariably overlapped and been associated with extremely high combined effective marginal tax rates on low-income groups, (70% or more for those on Child or

Working Tax Credits) giving rise to marginally regressive tax structures of types (c) and (d) above. Thus they provide an in-built disincentive for people on MTBs to look for and accept paid employment (obj. vii), trapping them in poverty (obj. v), perpetuating their situation, effectively dividing them from the rest of the population (obj. iii), who then falsely interpret their engineered leisure as idleness. Thus, highly regressive tax and benefit structures, (c) or (d), tend to be very divisive to society. In addition, the process of means-testing for benefits is regarded as demeaning and lowers the take-up rate of the benefit.

Tax reliefs and allowances also contribute to the final structure of tax and taper rates. Tax reliefs on expenditures that tend to be positively related to the units' income levels (eg. reliefs on mortgage interest payments or pension premiums) tend to make the structure more regressive.

To summarise, the choice of tax and taper structure has implications for redistribution (obj. ii), for the degree of divisiveness in society (obj. iii), and can influence the incentives to work of people at all income levels (obj. vii), administration costs (obj. viii), and incentives to abuse (obj. ix).

The time unit for the period of assessment for taxation, which is usually a year, is much longer than that required for assessment for benefit, which is usually one or two weeks.

(G) ADMINISTRATION

De Wispelaere and Stirton (2008) provide a very good description of the requirements of an effective administrative system. These include defining the eligibility and contingency requirements and translating them into operational criteria, which are transparent, accessible and congruent; identifying beneficiaries and ensuring compliance; and providing a conduit, or distribution mechanism, for the effective disbursement of any benefits. Administration systems determine how and when the transfers (cash benefits or tax payments) are made.

An integrated tax and benefit system does not preclude separate administrative systems for benefits and taxation. In other words, the integration refers to the overall design, rather than to the methods of administration.

The benefit could be:-

a **gross benefit** (equal to the minimum income level to which the tax unit is entitled), independent of other sources of income, and even though the unit might have a tax liability greater than the benefit;

a **means-tested benefit**, where the gross benefit is adjusted according to other income, but is not adjusted for the tax unit's tax liability which is payable separately;

a **negative income tax**, where a lesser tax liability has been deducted from a gross benefit;

a **tax credit**, where the value of the benefit is deducted from a greater tax liability.

Gross benefits and means-tested benefits occur with separate administrative systems, and the negative income tax and tax credits with the integrated administration. MTBs tend to be extremely unpopular with recipients, and lead to lower take-up rates.

Administration also defines how a payment is made, whether it is paid automatically into a financial account of his/her choice, or as a cheque sent through the post, or a 'pension book' that acts like a set of post-dated cheques that can be cashed at specific places, or the benefit might have to be collected in person. De Wispelaere and Stirton (2005) remind us that transfers can be in kind, (such as free access to state education), as well as in cash.

Administration also includes the frequency of the payment, whether weekly, fortnightly, monthly, annually, or even only once-in-a-lifetime. This latter would be one-off capital grant to help with education or setting up a small business. More frequent payments are important for those on low or fluctuating incomes.

The more frequently that claims have to be renewed or monitored, and the more the recipient has to do, then the greater their personal costs, in time spent waiting in offices, in time and expenses of travelling, in understanding and fulfilling lengthy and complicated forms, in being subjected to interviews (obj. iv). These personal costs of access to benefits can create enormous deterrents to take up.

Another administrative decision refers to the administration of benefits due to minors and others who are deemed by courts of law to be unfit to handle their own financial affairs.

Deduction of income tax at source is a relatively painless method for tax-payers to meet their liabilities, though the complexity of the tax system has implications for the agents charged with making those deductions. Similarly, self-assessment for tax purposes has implications for the cost of administration, compared with that of other forms of assessment.

Many Scandinavian countries go further than self-assessment and either publish or make available both declared incomes and the amount of tax paid on them. The tax-payers take pride and obtain kudos in proportion to both their declared income and their tax contribution to society.

The method of administration obviously influences the costs involved, to net beneficiary and to net taxpayer personally, and to society as a whole. It can influence feelings of security, and it can affect opportunities to abuse the system

(H) COMPLIANCE

Lastly, the systems employed for detection of fraud in both the tax and benefit systems determine whether transactions are carried out in an atmosphere of suspicion or of mutual trust, the amount of resources invested in the investigation of fraud and the returns on the outlay, and the severity of the penalties compared with the size of the fraud. A cost effective system would try to maximise the returns on the outlay. It could be argued that the fairer the tax and benefit systems are perceived to be by the general public, then the less will abuse be condoned.

The system can, but need not, be punitive to the innocent beneficiary or tax-payer, and will affect administration costs, and will influence the opportunities to abuse, and the net costs of abuse to society.

An income maintenance scheme would need to include a **safely-net** element, to cater for those who do not qualify under the eligibility rules chosen, or who are deemed to be in poverty despite the scheme, and for **exceptional needs** which arise as a result of infrequent, irregular, and unpredictable random shocks, which result in unexpected increases in expenditure or reductions in income, such as fire, flood, being the victim of theft or violence, survivorship, or even having to move house at short notice. The solutions include drawing on savings, insurance, loans and grants. All but the last rely on the minimum income being sufficient to underwrite these transactions. Even wealthy people are unable to insure themselves against every eventuality.

* * * * *

IV. THE COSTS OF THE SYSTEM

The set of objectives or criteria for any tax or benefit system implicitly includes 'costs' of the system. This is a very vague term, and could refer to any one of several different definitions. The costs may be MICRO, affecting individuals directly, or MACRO, affecting society or the economy as a whole. TABLE 5 below indicates how the term 'cost' be used, and the objective with which it is associated is noted on the left.

[TABLE 5 near here]

TABLE 5. POTENTIAL OBJECTIVES FOR PERSONAL INCOME TAXATION AND BENEFIT SYSTEMS AND THEIR ASSOCIATED COSTS.

OBJECTIVES			COSTS OF THE SYSTEM	
			MICRO	MACRO
EQUITY	i	FINANCIAL AUTONOMY		
	ii	REDISTRIBUTION	Gainers and Losers	Net transfer bill
	iii	INCLUSION	Emotional cost of exclusion	No. of net beneficiaries
HUMANITARIAN	iv	PERSONAL COSTS	Personal costs of access	
	v	POVERTY PREVENTION	Effects of poverty	Gross transfer bill Cost of poverty relief: - directly to families - indirectly via other public services: eg. health, social services, crime prevention, etc
	vi	FINANCIAL SECURITY	Personal stress of insecurity	
EFFICIENCY	vii	INCENTIVES TO WORK & SAVE	Changes in effective marginal tax rates facing individuals. New wage structures.	a) potential one-off shift in GDP? b) potential one-off change in growth rate of GDP? c) further decline in growth rate of GDP? d) Shift to non-wage sector. e) Capital mobility?
	viii	EFFECTIVE TRANSPARENT ADMINISTRATION		The costs of administration
	ix	EFFECTIVE COMPLIANCE		Loss of revenue due to fraud, & costs of monitoring population

Notes: The net transfer bill is the sum of net benefits received by all. It is also the total amount of net tax transferred from richer members of society to poorer ones, (or vice versa).

The gross transfer bill is the sum of the minimum income levels to the whole population.

Usually, when criticisms are made about the costs of any proposed system, they are referring to one of the definitions relating to the fulfilment of objectives (ii) or (vii).

* * * * *

V. APPLICATION TO CITIZEN'S INCOME OR BASIC INCOME SCHEMES

A Citizen's Income (CI) or Basic Income (BI) is not a policy objective, but an instrument, comprising several components. It is a very simple concept, and appeals to many across the spectrum of society. Depending with what other instruments it is combined, it can help to fulfil a wide range of different policy objectives and lead to widely different types of society.

In its trust deed of 1989, The Citizen's Income Trust, refers to "Basic Income Systems (defined here as schemes which guarantees to each and every man woman and child the unconditional right to an independent income)". Citizen's Income, basic income, minimum income guarantee, universal grant, and social dividend are names given to the same concept in different parts of the world, with some minor differences, and are of the same generic type of income maintenance schemes as negative or reverse income tax, and tax credits.

Being an instrument, CI and BI can be defined in terms of the features of tax and benefit systems explored above. Three features define them.

(B) The tax and benefit unit is always the individual.

(C) For eligibility-for-benefits to be applied, the population covered by the scheme must be defined and is often based on citizenship, with gross income being means-tested for tax purposes. Certainly, eligibility is not dependent on past or present paid employment status or performance, or on a willingness-to-work-test, nor on desert or worth, or on the past contribution record of the insurance principle.

(G) The benefit system can be administered separately from the tax system, enabling each individual to receive a gross benefit (the basic income), rather than a negative income tax or tax credit system of administration. A CI system ensures that people with no other source of income, or with low or fluctuating incomes, receive their CIs at regular predictable intervals. The CI would be paid automatically, probably into a financial account of the recipient's choice, very much like the current Child Benefit.

TABLE 6. THE MAIN FEATURES OF PERSONAL INCOME TAXATION AND BENEFIT SYSTEMS

	FEATURES	OPTIONS	FOR A CI
A	METHOD OF DETERMINATION	MPs & civil servants Focus groups or citizens' juries Periodic referendum Constitutional rights Party manifestos Local discretion	
B	TAX & BENEFIT UNIT	Individual Legal couple Any cohabiting couple Family Household	*Individual
C	ELIGIBILITY	Citizenship, presence Actual means (<i>ex post</i>) Unfulfilled needs Potential means (<i>ex ante</i>) Worth or desert Dependency principle Insurance principle, MISUR Charity Capacity Merit Birthright	*Citizenship, & means for taxation
D	CONTINGENCY	Personal attributes Household association Activity status Expenditure and savings decisions	Unconditional or Age & disability No cohabitation rule No work tests
E	LEVEL OF BENEFIT (Benchmark Group)		FCI or PCI
F	STRUCTURE OF INCOME TAX/TAPER RATES	Progressive Proportional (flat tax) S-shaped Z-shaped Regressive	Progressive or Proportional
G	ADMINISTRATION	CI paid to all Negative Income Tax Tax credit	* CI paid to all
H	COMPLIANCE		

* these options define a CI

The other features do not define a CI, but most CI advocates agree to a large extent about the shape of the tax structure.

(F) The design of the tax and benefit system is integrated, and the effective combined tax and taper rate is always less than 100%. Most CI advocates recommend either a proportional tax (flat tax), or a progressive one.

Contingency (D) and the level of the CI (E) are still areas where advocates lie on a range between two extreme viewpoints:

(D) Most advocates would like to see contingency or selectivity minimised, and all agree that it should not be based on gender, marital status or the detestable cohabitation rule. Some recommend selectivity based on age. Most would want the costs of disablement to be met in full, in addition to the CI, and that it will be available to all people with physical and mental disabilities, chronic illness or the frailties of old age. It would cover the costs of care and special housing, the costs of mobility, safety, and other special aids, of special diets and clothing, extra heating and laundry.

However, there has been debate among the advocates of CI as to whether the CI should be in the form of a **universal, unconditional ‘social dividend’**, based on the principle that all citizens of a community or nation are shareholders in the economy, and are thus entitled to a dividend from the economy. The dividend would be the same for all men, women and children, would not necessarily be related to any concept of adequacy. It would be extremely unlikely that it would be sufficiently generous to meet the basic needs of all members of society. The alternative is to distribute a **selective, needs-based CI**. The more criteria that are used for varying the level of the CI between different groups of beneficiaries, (especially where the criteria are employed to ensure that no-one gets more than the absolute minimum), the more it departs from the simple essence of a CI. Eligibility changes from citizenship and means, to citizenship, means and unfulfilled need.

(E) It is important to distinguish between a **Full Citizen’s Income (FCI)**, which would be expected to be sufficient to meet the basic needs of the recipient, and a **Partial Citizen’s Income (PCI)**, which would be insufficient. Even different levels of FCI to meet the needs of different groups would be very costly, (Miller (2) 2009). A problem then arises with a PCI scheme for those who, for reasons of youth or old age, disability or chronic sickness, will be unable to earn sufficient extra income to meet those needs. How should society address the problem?

Thus, advocates of CI range between a purist, universal, unconditional, social dividend, and the compromised, selective, needs-based CI scheme. In a forth-coming paper, “Minimum Income Standards: A Challenge for Citizen’s Income”, using the recently published Minimum Income Standards data (2008), I propose a hybrid scheme for the tax year 2009-10 with just two levels of CI. These are a PCI of £88.23 pw, (£4,601

pa), for the comparison or benchmark group, (working-age adults, with no day-to-day caring responsibilities, etc), and an FCI of £190.04 pw, (£9,909 pa), for those whom I consider that society should not force into working to earn income to top up a PCI, (these include the elderly aged 65 and over, those with disabilities and chronic ill-health, parents-with-care including lone parents, and carers-of-last-resort for adults). Children would receive a Child CI, which in this scheme happens to be the same as the PBI.

* * * * *

VI. CONCLUSION

In the previous section, the influences of the various features of personal income tax and benefits systems on the main objectives were analysed. It has confirmed that **the features and objectives are interrelated in very complex ways**. It would have been much more convenient if each feature had been related to only one objective. This emphasises the importance of designing all the features of the system as a whole to meet explicit, clearly specified objectives, rather than relying on piecemeal changes to an existing system. However, as De Wispelaere and Stirton (2005) point out, some institutions are embodied in a culture, or existing attitudes and policies take a generation to change, and so have to be absorbed as a constraint into the design of the system.

This analysis has not considered explicitly the leakage of tax revenues out of the personal taxation system to finance government expenditures rather than transfers, nor the injection of tax revenues from other types of taxation to finance cash benefits. However, it is not expected that the questions relevant to, and the analysis necessary for, the design of the direct personal taxation or benefits system would be substantially different. Similarly, the analysis has not concentrated on the macroeconomic effects of the tax and benefit systems, but these are influenced directly by the objectives chosen for the system.

Personal taxation and income maintenance policy are so intimately bound up with other areas of economic and social policy, that clear statements about these policies are necessary pre-requisites for the successful design of consistent personal tax and benefit (income maintenance) systems. While a good income maintenance system is a necessary condition for underpinning society, it is not a panacea for all ills. It is not a substitute for sound policies about involuntary unemployment, or for a comprehensive housing policy, or for a policy about children, childcare and population growth. However, a program that reduces poverty substantially should lead to a reduction in the costs of other public services, such as health, housing, social services and crime prevention.

The start of any policy-making process should be the question, ‘What sort of society do I wish to be a part of and help to create?’ For me, a guiding principle would be to make sure that the needs of the least advantaged are catered for. Specific, feasible policies are required for income maintenance, paid (and unpaid) employment, housing, education

and health (Beveridge's five giant evils of want, idleness, squalor, ignorance and disease, WISID), together with a clear policy towards children and childcare.

It is hoped that the framework presented here provides a ready reckoner, or checklist, of the most important questions about the objectives and features that must be considered when designing a tax and benefit system. The relationships in the framework are a crude precursor to more sophisticated modelling, where particular systems can be simulated. It should certainly be possible, given the appropriate data base, to estimate the quantitative effects of any proposal, including the redistributive effects, how divisive it is, whether it meets estimated levels of adequacy for any group, its labour supply effects, costs of administration, and compliance costs. It can also provide a taxonomy for tax and benefit systems, to facilitate the comparison and analysis of various schemes.

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