SEEING THE WOOD DESPITE THE TREES: INTEGRATING SHORT-TERM AND

LONG-TERM POLICY FORMULATION

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March 1983

Price IR£4

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I INTRODUCTION

Objectives and actions that comprise economic policy have aspects that are both short-term and long-term. Therefore, a necessary requirement for solving an economic policy problem which is long-term in nature is that actions undertaken during the sequence of short-term periods, that make up the long-term, must be sufficiently in harmony with policies which are appropriate for solving the long-term problem. Therefore, in attempting to overcome a complicated set of problems, which may be characterised as short-term, long-term, or both, the key task facing policy makers is the design of a consistent and effective combination of policies

to tackle these problems.   The employment crisis currently facing
Irish policy makers is, by fairly general consensus, one which will
involve resolution over quite a long-period of time and, therefore,
requires suitable long-term policies.   This in turn means that the
context for short-term budgetary and, more generally, economic policy
is one that is severely bounded by these long-term requirements.
This requires an explicit examination of the relationship between
short-run and long-run policy.   Such an examination does not appear
to have been a major feature of policy analysis and decision-making
in Ireland for some time past.   Economic policy decisions are
implemented by means of, first, the annual budget and, second,
legislative and statutory orders.   Without an effective long-term
policy framework to integrate these tools of government action, it
seems reasonable to characterise economic policy as being made in a
short-run context.   The annual government budget is the operational
as well as the conceptual planning framework.   The longer term
consequences of annual budgetary actions are not usually identified
on the basis of an explicit and consistent long-term planning process.
Long-term consequences planned and unplanned, emerge as the result
of the sequence of short-term budgetary actions.   The implicit
assumptions are that at each period in time there is sufficient
opportunity to pursue short-term (budgetary) goals and that pursuing
these is not detrimental to long-term objectives;   in colloquial
terms, that a 'Catch-22' situation does not arise.   But if any simple
phrase characterises the present dilemma about economic, and particularly
employment, policy it is surely that one.

To identify the manner in which long-term objectives constrain
short-term policy options it is necessary to set out in an explicit
manner the short-run and long-run issues involved.   Therefore, another

requirement for solving a problem, i.e. achieving objectives, is the formulation of a view about the relevant economic processes. The term usually used for such a view is _model_ to indicate that no matter how complex or subtle it will, nevertheless, still be a simplification and abstraction from the complexity and subtlety of the real world. Whether a model is stated in mathematical or verbal language, or whether it is stated explicitly at all, is not its most important aspect. The most important point is that, unless achieving policy objectives is to be a matter of luck and flukes, a model is unavoidable. Indeed the very identification and commitment to policy objectives - to something that it is desired to achieve by deliberate action - involves having a model of the workings of socio-economic mechanisms. However, the explicit statement of a model, in verbal or mathematical terminology, is also important in the process of ensuring its internal consistency, and in gaining acceptance for the objectives being pursued and the means proposed for achieving them and overcoming constraints. This facilitates - but the process would occur anyway - understanding what is being sought and how by all involved in the policy process. This understanding is necessary because ultimately economic policy is about politics. Objectives and constraints are not inherently and definitively defined. What, in one set of political preferences, may be seen as constraints (deficits on the government budget or balance of payments) on achieving desired objectives (low unemployment) may, according to a different set of values, be reversed. That is, it may be desired to have a government budget in balance or small government involvement in the economy as a matter of principle, but the constraint on achieving this may be the need to ensure that unemployment is not such as to cause social unrest and instability.

The purpose of this paper is to illustrate the conceptual approach involved in formulating an integrated programme of policies designed to achieve both short-term and long-term objectives. For convenience and brevity we utilise two models stated formally in mathematical terms. Also the particular models used were selected because they are small, the processes involved are transparent and robust, and they are relevant to the current crisis. First we characterise the current (i.e. immediate or short-run) situation by means of a demand-management framework (Table 1); we then outline a framework suitable for longer-term growth planning (Table 2). The eventual comparison and confrontation of the two situations (long and short run) is the methodology for exploring the manner in which the long-run imposes bounds on the short-run.

II POLICY ANALYSIS FRAMEWORKS

Short-Term (Demand) Framework

The framework we outline in Table 1 is based on the standard textbook model for short-run demand management:

Equation (1) - defines gross domestic product by expenditure in terms of its domestic (private and public) and foreign components, in value terms; for a given exchange rate the value of exports is exogenous.

Equations (2a) - (2c) - determine private consumption and private investment expenditures in real terms, as functions of income, taxes and transfers;

Equations (3a) - (3d) - define public expenditure, as made up of current and capital components (which in turn comprise portions that are pre-determined by existing commitment (exogeneous) and variable as a result of current activity), and determine the budget deficit as the difference between tax revenue and spending on new goods and services and transfers;

Equations (4a) - (4b) - determine imports as a function of expenditure and define the balance of payments deficit as the sum of the trade deficit, net factor income, and other international transfers;

Equation (5) - defines national income as the sum of domestic expenditure and net factor income;

Equations (6) - (7) - determine employment as a technical relationship in terms of domestic expenditure and the capital stock (assumed fixed in the short-run), and defines unemployment as the difference between labour supply (LF) and labour demand (L).

Using this short-run framework we can now highlight the areas of current economic policy concern. As we will see, the issues involved center around three "gaps" which pose constraints on current freedom of action, i.e. unemployment (U), the government deficit (D), and the overall balance of payments deficit (BP). Four points are highlighted here:

(i) The immediate prospects for employment, and hence, closing the unemployment gap, are conditional on the level of expenditure on real domestic product (EV/P). The prospects for expansion of expenditure are limited by constraints on both the domestic and foreign components.

(ii) The immediate constraint on exports arises from weak international demand. Imports, while declining as overall activity stagnates, may not fall sufficiently to bring about any significant improvement on the trade balance portion of the balance of payments. This combination results in a poor immediate outlook for both unemployment and the balance of payments.

(iii) The two elements in domestic expenditure, private and government, are both subject to constraints. First, the private component is restricted because of a low real income growth (Y/P), high taxation (t) and limitations on income transfers (T_r). Second, government expenditure on goods and services (AV_g) is constrained by the budget deficit (D) which necessitates borrowing to finance it. The immediate ability of the government to resolve this is limited because of what is widely regarded as the already high level of taxation (t) the low level of income (Y), and the high level of foreign borrowing.

(iv) One of the consequences of a sequence of past short-term decisions has been an accumulation of foreign liabilities, the interest payments on which have reversed the direction of net factor income (YFN). This is the combined result of

    (a) production with the significant involvement of external factors, e.g. foreign portfolio and direct investment.

TABLE 1: Short-Run (Demand Management) Framework

Equations

(1) $\quad EV = AV_p + AV_g + \overline{XV} - MV$

(2a) $\quad \dot{A}V_p = CV_p + IV_p$

(2b) $\quad \dfrac{CV_p}{P} = f_1 \left[\dfrac{(1-t)Y + T_r}{P} \right]$

(2c) $\quad \dfrac{IV_p}{P} = f_2 \left[\Delta(\dfrac{Y}{P}); \dfrac{T_R}{P} \right]$

(3a) $\quad AV_g = \overline{CV}_g + IV_g$

(3b) $\quad CV_g = \overline{CV'}_g + CV''_g \, (Y)$

(3c) $\quad IV_g = \overline{IV'_g} + IV''_g \, (Y)$

(3d) $\quad D = t.Y - (AV_g + T_r)$

(4a) $\quad \dfrac{MV}{P_f} = f_3 \left[\dfrac{EV}{P} \right]$

(4b) $\quad BP = (\overline{XV} - MV) + \overline{YFN} + \overline{T_{r,f}}$

(5) $\quad Y = EV + \overline{YFN}$

(6a) $\quad L = f_4 \left[(\dfrac{EV}{P}); \overline{K} \right]$

(6b) $\quad U = LF - L$

Legend

(Variables in nominal values unless stated)

AV_g	:	Public Sector Domestic Absorption
AV_p	:	Private Sector Domestic Absorption
BP	:	Balance of Payments on Current Account
CV_g	:	Public Sector Consumption Expenditure
CV_p	:	Private Sector Consumption Expenditure
D	:	Public Sector Budget Deficit
EV	:	Gross Domestic Product/Expenditure
IV_g	:	Public Sector Investment Expenditure
IV_p	:	Private Sector Investment Expenditure
K	:	Stock of Fixed Production Assets (deflated values)
L	:	Employment (numbers)
LF	:	Labour Force (numbers)
MV	:	Imports
P	:	Domestic Price Level
P_f	:	Foreign Price Level ($) Adjusted by Exchange Rate (£/$)
t	:	Average Tax Rate
T_r	:	Public Sector Transfers to Private Sector
$T_{r,f}$	:	Net International Transfers
U	:	Unemployment (Numbers)
XV	:	Exports
Y	:	Gross National Product
YFN	:	Net Factor Income

$-$	:	over variable indicates exogeneous or fixed in short-term
f_i	:	functional relationship, $i = 1,2,3,4$
Δ	:	change/first difference operator

9.

(b)   a substantial foreign borrowing element in State
Sector Financing of current and capital spending.

(c)   factor incomes from abroad being insufficient to
offset the outflow.

For the entire economy, the consequence is a widening
gap between earnings from current domestic production (EV)
and income retained domestically (Y). The former drives
employment, while the latter drives spending. The
immediate consequence for government is that spending,
previously financed by foreign borrowings, cannot be
expanded at the same rate or even maintained at the same
level.

This brief examination using a short-run framework has
highlighted various aspects of the current economic crisis. In
particular, the interconnectedness of the three gaps - unemployment,
balance of payments and government deficit - poses the policy dilemma.
This dilemma arises because policies proposed to eliminate one gap
e.g. government deficit, may aggravate another, e.g. unemployment.
This is the standard assignment problem of policy design, and arises
because instruments to achieve a particular target may not be, and
for the broad instruments usually available are not, neutral with
respect to other targets.

Although the BP and D gaps may, and indeed must, be tackled
over a short-term horizon, the magnitude of the employment problem is
such that the issue can only be resolved over a longer period. If
our policy objective is to close the unemployment gap but simultaneously
any approach is constrained by having to address the balance of payments
and government deficit gaps, then the range of policy options available
are likely to be seriously circumscribed. Conversely, in devising
short-run strategies to resolve balance of payments gaps and government
deficit problems, we must take cognisance of the consequences for
unemployment. Thus, short-run policy options are bounded by the
requirements of long-term policy.

In order to identify the longer-term policies to close
the unemployment gap it is necessary to set out a long-term framework
where the necessary conditions to attain this objective are fulfilled.
The short-run situation and proposed policies can then be confronted
with this in order to identify the balance between short-term and
medium-term problems, policies and outcomes. In particular, as one
example, we need to consider whether and to what extent there may
be scope for special temporary schemes while longer term policies
mature.   For ease of understanding, and in order to highlight a
limited number of major points, any such long-term framework must of
necessity be at a very stylised level, just as in the short-run framework
of Table 1.

Long-term Growth Framework

There are many possible approaches or models which characterise
the long-run ideal situation of closing the unemployment gap by means
of a "virtuous" circle of growth.   One in particular, the export-led
growth model, is of relevance to Ireland and is often used to interpret
growth and development in Ireland (Kennedy and Dowling, 1975;
Whitaker, 1982)[1].   In summarising their treatment of the role of
exports in generating growth, Kennedy and Dowling comment as follows:

"The 1960s, in contrast with the 1950s, offer us an example of the
virtuous circle where growth feeds on growth - at least up to near
full employment.   Faster growth of exports and expansionary fiscal
policy created adequate pressure of demand, rapid growth of output,
a rising investment ratio, a faster growth of real income per capita,
reduced emigration and a rising savings ratio.   In turn, the rising
savings ratio permitted an increasing investment ratio without unduly

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1.Bradley and Fanning (1983: 3.38 - 3.45 and 4.4-4.9.) discuss the export-led growth
  model in some detail and provide references to the relevant literature.

large balance of payments problems, thereby increasing capacity and potential for further growth". (1975: 248-249). The central role for exports is, of necessity, still very much the position for Ireland today; on the basis of the constraints emerging from the situation as discussed above, the growth-inducing role of exports must be a key element of demand for output in a sustained economic recovery.

Table 2 sets out the long-run framework and, in setting out this as a model for a cumulative process of export-led growth, it is crucial to note that it is not entirely a behavioural representation of an economy. This contrasts with the short-term model set out in Table 1 which was intended as a _positive_ or _descriptive_ model representing or explaining _actual_ structural relationships. This is also the case with a number of the relations in Table 2. However, a number of other relations in this model are _normative_ or _prescriptive_ and state relations that _should_ hold to obtain a desirable outcome according to the underlying theory for the model. In other words _they are_ _statements of the appropriate conditions, on the basis of the theory_ _of export-led growth, which must hold for this process to be a_ _'virtuous circle'_. These then provide the means by which policies proposed in the context of the short-run framework can be evaluated in terms of their impact on the growth process outlined as necessary to resolve the employment problem. If this theory of growth is accepted then the task facing policy makers is to bring about these appropriate conditions.

Equations (1)-(3) state the theory of export-led growth; equations (4)-(6) are the statement of the conditions necessary for the process to be cumulative; equation (8)-(9) are the labour supply aspects of the unemployment gap defined in equation (7). We now consider each of these aspects:

TABLE 2: LONG RUN GROWTH FRAMEWORK

Equations	Legend

Equations:

$$(1) \quad \dot{E} = (\dot{X} - x\dot{X}) + (\dot{A} - a\dot{A})$$

$$(2) \quad \dot{X} = \alpha_0 + \alpha_1 \left(\frac{\dot{P}}{eP_f} \right) + \alpha_2 \dot{WT}$$

$$(3) \quad \dot{M} = \beta_0 + \beta_1 \left(\frac{\dot{P}}{eP_f} \right) + \beta_2 \dot{E}$$

$$(4) \quad \dot{W} = \dot{q} + \dot{P}$$

$$(5) \quad \dot{P} = \dot{W} - \dot{q}$$

$$(6) \quad \dot{L} = \dot{E} - \dot{q}$$

$$(7) \quad U = LF - L$$

$$(8) \quad \dot{LF} = \gamma_0 + \gamma_1 \dot{POP} + \gamma_2 \dot{NMA}$$

$$(9) \quad \dot{NMA} = \delta_0 + \delta_1 \dot{RA}$$

Legend

(Variables in deflated values where appropriate)

A   : Domestic Absorption

E   : Gross Domestic Product/Expenditure

e   : Exchange Rate (£/$)

L   : Employment (numbers)

LF   : Labour Force (numbers)

M   : Imports

NMA : Net Migration Abroad (numbers)

P   : Domestic Price Level

P_f : Foreign Price Level ($)

POP : Population (numbers)

q   : Average Labour Productivity

RA   : Relative Advantage of Foreign/Domestic Employment

U   : Unemployment (numbers)

w   : Real Wage Rate

W   : Money Wage Rate

WT   : World Trade

X   : Exports

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x   : Import Content of Exports

a   : Import Content of Domestic Absorption

α, β

$\gamma \; \delta$: Behavioural Parameters

•   : Proportionate Rate of Growth

Equation (1) - defines the rate of growth of domestic product/expenditure (E) in terms of the foreign (X) and domestic absorption (A) components, less their respective import contents;

Equation (2) - relates exports performance to the competitive strength of the export sector (P/eP_f) and the level of world trade (WT).

Equation (3) - relates the import content of domestic activity to domestic competitiveness (P/eP_f) and output/expenditure (E), and is analogous to the export equation.

Equations (4),(5),(6) - state the necessary conditions which must hold in the wage-price-productivity nexus in order that the process of expansion stated in equations (1)-(3) can be cumulative. The basis for these relationships comes from the underlying identity for real wages.

$$\dot{w} = \dot{W} - \dot{P}$$

where w is real wages, W is money wages and P is the domestic price level. If, over the long run, income shares are to remain constant as between wage and non-wage incomes, then the rate at which real wages grow over the long run should be the rate of growth of labour productivity $(\dot{q})$ ie.

$$\dot{w} = \dot{q}$$

Hence, from the definition of real wages, we have

$$\dot{W} = \dot{q} + \dot{P}$$

which is equation (4). Given the constancy of income shares, this means that prices should be set by an unchanging mark-up on unit labour costs as stated in equation (5). Equation (6) is an identity relating employment growth to growth of output less growth of productivity.

Equations (7)-(9) - define unemployment as the difference between labour supply (LF) and labour demand (L), and provide simple models of the labour supply process and migration abroad.

The necessary conditions (Equations 4-6) for an export-led growth process to be possible and cumulative, as stated in Table 2, are not sufficient, in themselves, either to ensure that the process will start or, when started, that the process will be self-sustaining. The key to this is productivity growth for which a relationship was not included in the explicit statement of the growth model framework. The explanation

of productivity growth is a very complex task.   This would have to be addressed in any process of formulating actual long-term policies but does not affect the exercise undertaken in this paper.

III APPLICATION: POLICY OPTIONS AND CONSTRAINTS

The long-term framework of Table 2 has set out the
necessary conditions permitting, according to one widely used theory,
an export-led growth expansion to occur.   Economic policy has to be
operationalised in the short run.   The long-run necessary conditions
indicate the constraints which place bounds on short-run policy options.
The major conceptual difference, as emphasised already, between the
short-term (Table 1) framework and the long-term (Table 2) framework
is that while all the relationships explicit and implicit in Table 1
are positive in nature, i.e. what actually happened or are accounting
identities, a number of the relationships in Table 2 are normative
in nature, i.e. indicate relationships which have not necessarily held
historically, but are desired to bring about certain objectives and,
therefore, have to be brought about by suitable policies.   In the
case of relationships that have held historically, the policy issue
then becomes one of altering the relationship.   For example, in the
case of the sensitivity of exports to relative prices, the policy
issue becomes understanding the factors that have given rise to the
estimated sensitivity.   In other words a model such as the types
used here do not explain the relationship but merely reflect it.
We now proceed to illustrate the use of the model-based approach
outlined as a method for identifying the balance between short-run
and long-run policies.

The focus of the present policy dilemma on resolving
the unemployment problem, i.e. removing the gap defined in equation 7
of Table 2.   There is a supply side and a demand side aspect, but it
has to be borne in mind that policies proposed to alleviate the
unemployment problem along one line, say, reducing the supply of
labour, may have adverse consequences for unemployment arising on the
demand side.

From equations (6) and (7) we can identify three broad groupings of factors involved in generating unemployment i.e.

$$U = LF - E/q$$

and our discussion will be organised around these three areas.

Productivity and the Wage-Price Nexus

Productivity growth is the key unemployment problem in the model specified in Table 2. On the one hand a high productivity growth reduces the demand for labour, but on the other hand, productivity growth improves competitiveness and output demand and thereby increases the demand for labour. This is the pivot about which employment policy revolves and has particular implications for short-term, temporary or special employment schemes. For example, if labour sharing schemes and manpower policies have as a consequence, a reduction in the growth of labour productivity, then the implications for competitiveness and sustained expansion may be negative.

The necessary conditions for recovery impose severe constraints on the setting of labour and product prices. Given an existing pattern of income distribution as between wage and non-wage income, and if this pattern is to be preserved, the rate at which real wages can increase is the rate of productivity growth. This means that money wages increase in line with the rate of growth of productivity and prices, as equation (4) shows. Thus if money wage increases exceed that warranted by equation (4), then the profit share is only preserved if price is increased enough to decrease the purchasing power of money wages so that the real wage increase is again equal to productivity growth (i.e. $\dot{w} = \dot{q}$). The mirror image of the wages aspect

is that price increases are based on the present markup on unit labour costs, as in equation (5). The policy problem here concerns the manner in which the income distribution process is resolved over time, without giving rise to inflationary consequences which may lead to deteriorating foreign competitiveness.

The preceding discussion was based on the assumption of a constant price markup, but there are two further aspects concerning the income distribution process which are relevant: the terms of trade and indirect taxation. Changes in the terms of trade alter income distribution between foreign and domestic agents, as well as having consequences for the internal distribution of income. If the domestic income distribution process is inflationary a possible way of preventing loss of foreign competitiveness is devaluation. But for a devaluation to be effective requires wage-income and profit-incomes (markup) restraint. However, if such was the accepted incomes policy, a devaluation would be unnecessary. Hence, the crucial issue is the incomes distribution process.

In our simple framework there is only one domestic price. However, indirect taxation drives a wedge between price, as perceived by wage earners and by producers, and is the second issue relevant to income distribution. Specifically, wage earners as consumers are concerned with real wage income, i.e. money wages deflated by the consumer price level, while producers are concerned with the product wage, i.e. the money wage deflated by the price they receive for their product. Widening the wedge between consumer and product prices in order to close the government budgetary gap may result in a stimulus into the inflationary process, unless there is an incomes policy agreement to neutralise the effect. Thus, a purely "book-keeping" approach to resolving short-term budget problems could result in the "short-run" being around for a long time!

A different perspective on the same issues is given
by the necessity to ensure that sufficient resources are available
for investment in employment-creating and productivity improving
projects.   This may require the change in income distribution away
from wages to investible surplus, whether via an increase in the
profit share of the private sector or the tax share of the public
sector.   But while such a shift may be necessary to address the
long-term unemployment problem, it is occurring at present in order
to resolve the short-term budgetary problems rather than generating
future employment and production capacity.

Demand and Competitiveness

We now turn to the second factor involved in generating
unemployment, i.e. the growth of output/expenditure.   From equation (1)
it is apparent that there are three channels of demand: "domestic demand,
foreign demand and import substitution, i.e. a switch from demand for
foreign supply to domestic production.

As indicated already in discussing the short-run situation,
scope for growth in either of the components of domestic absorption
are limited.   For example, the private sector is caught by declining
incomes and high levels of taxation, which cannot be reduced because
of the need to reduce the government budget deficit.   This last aspect
also constrains public sector absorption.   Furthermore, a government
induced demand expansion will, in the absence of import controls,
dissipate into imports and incur balance of payments difficulties.
This means that, while some public sector employment schemes may have
beneficial immediate, first round effects because of low direct import
content, the longer term consequences may not validate such action.

Turning to export growth as a source of demand, inducing output and employment expansion, the issues here are the level of competitiveness, the level of international trade, and the sensitivities of Irish exports to both of these variables. Competitiveness has already been discussed in the productivity/wage-price section. Obviously the overall state of international demand is outside domestic control. The remaining issue concerns the factors determining the parameters in equation (2) i.e. the price elasticity (α_1) and the world demand elasticity (α_2). These issues relate to entrepreneurship, marketing, quality, design, delivery speed and reliability, etc. Given the current outlook, these are the crucial factors which may be subject to domestic influence.

Before leaving this aspect it is worth drawing attention to one further point about using formal models in the process of devising economic policies. This concerns, for example in equation (2), the difference between variables (P, P_f, e, WT) and parameters (α_1, α_2). Obviously for purposes of economic strategy it is not just the values of the variables that are of interest but also the values of the coefficients on variables. The fundamental policy problem is to modify those coefficients or parameters, as well as overall relationships themselves, into policy variables, i.e. bring about structural change, so as to ensure the achievement of desired objectives.

The final element of demand concerns the possibility of import substitution. The issues involved here are analogous to those discussed for exports, but where the variables involved are domestic demand as well as competitiveness and the sensitivity parameters. This area raises a set of questions about whether we have the natural and other (technology, enterprise) resources to replace currently imported goods in a competitive fashion. Besides direct substitution

it could also involve shifting purchasing patterns towards more
competitive domestically produced goods and activities or non-traded
goods and services.

Labour Supply

The third and final factor generating unemployment is
the growth of the labour supply.   The variables driving the growth
in labour supply are population growth and net migration abroad.
The parameters involved relate to labour force participation and its
likely evolution over the next few years, and the age distribution and
sensitivity of migration to foreign relative to domestic opportunities.
While these are not immune to purely economic incentives and forces,
they are more related to sociological factors (i.e. attitudes,
expectations, etc.) which are currently in a state of flux.   Such
forces circumscribe supply side policies aimed at reducing the labour
force.   Thus, the emigration outlet which previously worked towards
reducing unemployment may not now be a socially acceptable aspect of
employment planning.   Attempts to lower the participation rate,
especially in a manner discriminatory against certain groups, may
not only be socially unacceptable but may be illegal.

IV CONCLUSION

This paper has sought to illustrate the conceptual
approach to (i) identifying the interconnectedness between short-term
and long-term problems and policies and (ii) to considering the
efficacy of actions proposed to tackle the short-term problems
(Government budget deficit, Balance of Payments deficit) and long-term
problems (unemployment, growth) in the light of the requirements for
a sustained resolution of long-term problems.   To achieve this we
made use of two simple models of economic activity.   The first,

short-term model, was used to provide a representation of the current situation. Three 'gaps' or problems were isolated. Two of these were short term, in the sense that they could be eliminated over a relatively short time horizon (four years), but the third is not one that could be so easily solved over a short period of time. The magnitude of all three, however, is such that they all have to be tackled immediately and simultaneously. The long-term problem (unemployment) is what we focussed on but the short-term problems cannot be ignored, i.e. policy makers have to try to resolve the long-term problem subject to the constraint of having to overcome the short-term problems. The question which then has to be considered is how to go about devising policies to achieve this, i.e. what policies will address the short-term problems, what policies will address the long-term problems, and how do these two sets of policies relate to each other? The conceptual technique for undertaking this task involves formulating a second model which, unlike the first one, now includes a statement of the necessary conditions for resolving the long-term problem. By means of comparative examination it is possible to identify implications for the range of policies available to tackle the short-term problems which might not violate the necessary conditions for long-term growth and employment expansion.

Although the analysis was based on two particular models, the methodological framework for integrating short-term and long-term policy formulation is not dependent on the details of these models. They could be replaced by others deemed more appropriate and adequate to the task provided such replacements addressed the crucial method-ological issues of short-term and long-term policy constraints and their interaction. In particular, if we take as the objective of employment policy the desire to secure the maximum possible employment

increase that can be attained realistically in the face of other economic constraints, there is a need for a methodology to identify these constraints and, having isolated them, to consider the manner in which they constrain the achievement of maximum progress towards the objective of increased employment. They were used merely for convenience so as to bring to the fore the fact (i) that the statement of policy intentions does not necessarily mean achievement of those objectives and (ii) the need to ensure that one set of aims does not contradict another set.

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