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METHODS OF BUDGETING

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A paper that presents different approaches to budgeting in the public sector along with case studies of their application by various organisations internationally.

SUMMARY OF KEY POINTS

- As a budget is a forward plan expressed in money terms, it is unlikely that any refinements to the budgeting process will ever enable budgets to be perfect. By nature they contain a level of assumption about uncertain conditions.

- Budgeting in the public sector can be viewed as more problematic than in the private sector. There is no profit or loss bottom line by which the performance of organisations can be measured. Further, measurement of the outcomes of public-spending programmes can be problematic. This makes the alignment of the budget process with intended outcomes a complex task.

- Public sector organisations such as government departments are large and complex. They design interventions across a wide range of policy areas and have to balance competing pressures.

- The current process of incremental budgeting for departments in Northern Ireland has a number of drawbacks. Some of these problems could probably be lessened by moving to alternative approaches to budgeting. But any alternative approach will also have its own drawbacks. And some of the approaches outlined in this paper can be very resource-intensive.

- It is often difficult from the budget documents presented to see how departmental spending is aligned with the priorities of the Programme for Government. For example, the tables presented following the quarterly monitoring rounds indicate departments' reduced requirements. They also show proposed reallocations. But there is no explicit link between the reallocation of money and departmental objectives or performance.

- Alternative approaches to budgeting outlined in this paper attempt in various ways to make more explicit the link between budgets and performance and outcomes.

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INTRODUCTION

In June 2007 consultants PKF published a review of the forecasting and monitoring of financial information in the Northern Ireland Civil Service on behalf of the Department of Finance and Personnel (DFP). The report highlighted examples of good financial management practice in departments but also made a number of recommendations for improvement.

Recommendation 4 of the report was that in the medium term:

> ***the planning and budgeting process should move away from the existing incremental approach***.*[emphasis added] This would first involve the development of a more transparent link between inputs and outputs, and would require, and indeed facilitate, greater challenge by Board members based on historic performance, thus enabling the setting of budgets that are better linked to performance targets. Performance would be subsequently monitored on a monthly basis through an effective monitoring and forecasting regime. This would ensure that Departmental budgets are more realistic and more closely managed, which in turn would facilitate, as a minimum, a significant reduction in the extent of the existing over commitment process which currently leads to budgets that are inherently overinflated and creates a climate within which there is increased pressure to seek to claw-back funding in-year.*[1]

In the Republic of Ireland, a report by a Special Group on Public Service Numbers and Expenditure Programmes was released in July 2009. Similar to the PKF report on NICS departments, the McCarthy report recommended a more explicit link between spending by public bodies and outcomes. It particular it recommended that:

> *Every proposed new spending programme should be accompanied by a* Public Service Performance Charter, *which sets out clearly the business case for the programme, the resources that will be required and output/impact indicators that can be used to measure success or failure of the programme.*

Further, these proposed Public Service Performance Charters are to be linked into other existing publications:

> *The annual Estimates of Expenditure should be produced on a programme-by-programme basis, fully consistent with the* Annual Output Statements *and our proposed* Public Service Performance Charters *with full allocation of administrative and staffing costs.* [2]

[1] PKF Review of Forecasting and Monitoring (2007) available online at http://www.dfpni.gov.uk/07_0614_dfp_update_v.2.2__final_-2.pdf (see page 10) (accessed 06 January 2010)

[2] Report of the Special Group on Public Service Numbers and Expenditure Programmes Volume I (2009) available online at http://www.finance.gov.ie/documents/pressreleases/2009/bl100vol1fin.pdf (see section 2.13) (accessed 06 January 2010)

DFP officials indicated in evidence given to the Committee for Finance and Personnel on 15 October 2008 an aspiration to move towards linking performance management with what is known as zero-based budgeting:

Dr Farry: I turn to the issue of the PKF report. What is the status as regards the implementation of the report's recommendations? Bearing in mind the wider discussions on budget processes, could consideration be given to starting from the current baseline and making adjustments up or down, setting goals and working out what resources to allocate against them, rather than starting the budget processes every three years?

Mr Pengelly: The PKF report contained a series of recommendations. The Department appointed an individual from its financial management directorate — which is the other side of the house from us — to work specifically on that matter. Much good work has been done and continues to be done. A short-term issue has arisen in that that individual has been promoted and moved to another Department — fortunate for him, but not for us. His promotion is perhaps an indication of his success in dealing with those recommendations. Therefore, some progress has been made, but more remains to be done. It is one of our key objectives, and we continue to focus on it.

Essentially, your question is whether we should carry out zero-based budgeting. Ideally, yes, we should. The scale of the task for public services is huge. Equally, incremental budgeting takes one into some very bad places. The combination of the enhanced performance-management framework and system, and better information about delivering on targets, will go a long way towards bridging the gap.

Separately, the central finance group wants to start a programme of rolling-baseline reviews. It would be a task beyond us to carry out a zero-based review of everything as part of every Budget cycle. Over a period of three or five years, I would like to subject 100% of each Department to that sort of zero-based analysis — that could mean doing 20% a year in a five-year cycle or 33% in a three-year cycle. That would fall very much to Jack's side of the house as part of the normal supply dialogue. We want to build an information base to do that.[3]

DFP's Central Finance Group's Balanced Scorecard for 2009-10 includes targets in relation to baseline reviews. Objective 1 in its Business Results Quadrant ('To secure, plan, manage and monitor public expenditure, including EU Programme expenditure, in line with the priorities set by the Executive') was underpinned by the following target:

No less than 15 per cent of departmental baselines to be reviewed (as first step towards full coverage over 5-year period)

[3] Official report 15 October 2008: http://www.niassembly.gov.uk/finance/2007mandate/moe/2008/081015.htm

The associated action was to undertake a rolling programme of baseline reviews. It should be noted, however, that the Department has confirmed[4] that **the process of baseline reviews does not indicate a move towards zero-based budgeting.** The baseline reviews are intended to give DFP a better understanding of departments' positions to enhance Central Finance Group's challenge function.

The purpose of this paper is to describe in this context the theoretical approaches to budgeting that may be applied in the public sector. Analysis of the advantages and disadvantages of different approaches is also presented alongside some case studies. Some considerations for the efficiency agenda are also presented.

1. BUDGETING BASICS

1.1 Definition of a budget

A budget can be defined as **a quantitative economic plan in respect of a period of time.**[5]

1.2 Functions of a budget[6]

Budgets can fulfil one or more of the following functions:

1. **mapping**. A budget can be used to detail the road to be travelled in fulfilment of an organisational objective. It details all the steps to be taken, and therefore can act as a check on the overall viability of the organisation's objectives.
2. **controlling**. The budget can ensure the achievement of objectives by placing a planning control framework over the steps to be taken.
3. **co-ordinating.** By spelling out the linkages between parts of the organisation's plan, the budget can help to co-ordinate activities.
4. **communicating.** The budget is a means for management to explicitly inform staff and the wider public what the organisation will be doing.
5. **instructing.** A budget is often just as much a form of executive order as an organisational plan since it lays out the requirements of the organisation – it may therefore be regarded as a managerial instruction.
6. **authorising.** As well as an instruction, the budget is an authorisation to take action within the specified limits. In that respect, the budget performs a delegating function.
7. **motivating.** Budgets can act as a motivational tool to encourage managers to perform within targeted limits.
8. **performance measurement.** A budget may provide a benchmark against which actual performance can be measured.

[4] Source: personal communication
[5] Harper *Cost and Management Accounting* Pitman, London (1995) page 318.
[6] Harper *Cost and Management Accounting* Pitman, London (1995) pages 321 to 322

9. **decision-making.** A well-designed budget can be a useful tool in evaluating the consequences of proposed changes in actions, since it should be possible to track the effect of any change throughout the organisation.

Different budgeting methodologies allow the budget to perform these roles in different ways and to differing extents. For example, the planning programming approach (see section 4.3) can be clearly seen as underpinning the decision-making function. Conversely, one of the criticisms of the incremental approach is that it does not allow for full consideration of proposed changes in action as it is a more backward-looking method; it could be argued that incremental budgeting does not support decision making very well.

1.3 Economic theory and budgeting

Economists have developed various tools and concepts for considering the allocation of resources in the public sector. These include analysis of when and how the public sector should intervene in failing markets; measuring marginal utility and cost effectiveness; allocative efficiency and cost-benefit analysis.[7]

Ultimately, however, all the economic techniques have their problems. For example, how to measure the benefits of decreased mortality as a result of a public health programme. One way of approaching this might be to try to value a lost human life in terms of potential income that is forgone.

One difficulty of using such an opportunity-cost approach is that it would value the life of a healthy male in his mid-thirties over that of a healthy female in her mid-thirties because the income not earned by the male if he dies is likely to be higher than that of the female – simply because male earnings tend to be higher as a result (at least in part) of gender-income inequality. What if the male had a severe disability? His potential earnings are then much reduced.

In public policy terms, is an intervention aimed at reducing a disabled males' mortality 'worth' less than a healthy female because his earning potential is lower?

This is just one instance of the difficulties of applying economic theory to budgeting. In 2001, Fozzard concluded:

> *After a search of sixty years for a comprehensive theory of budgeting that would resolve the basic budgeting problem, it is somewhat disappointing to arrive at a conclusion that no such theory exists and it is unlikely that such a theory can ever be formulated […] nevertheless, considerable progress has*

[7] For a helpful summary of these techniques, see Fozzard, A *The Basic Budgeting Problem: Approaches to Resource Allocation in the Public Sector and their Implications for Pro-Poor Budgeting,* Overseas Development Institute (2001) available online at: http://www.odi.org.uk/resources/download/1395.pdf (accessed 12 January 2010)

> *been made in the development of analytical techniques that support the appraisal of public expenditure decisions. Individually these techniques do not provide a satisfactory basis for resource allocation decisions, though they are more powerful when combined so that spending decisions are subject to an analysis of the underlying rationale for public intervention, the relative costs and benefits of alternative interventions and the distributional impact of spending.*[8]

If, then, economic theory is imperfect in resolving the budgeting problem, what remains is to look at different approaches that have been used in the public sector and consider the advantages and disadvantages of different models.

2. INCREMENTAL BUDGETING

2.1 What is incremental budgeting?

Public sector budgets in Northern Ireland and elsewhere in the UK typically rely on the incremental approach (although the Comprehensive Spending Review 2007 process did involve a series of departmental baseline reviews). The previous year's budget for a department or division is carried forward for the next annual budget. It is adjusted for known factors such as new legislative requirements, additional resources, service developments, anticipated price and wage inflation and so on.

It is known as incremental budgeting because the process is mainly concerned with the incremental (or marginal) adjustments to the current budgeted allowance. In that respect it is rather similar to the NI block funding: any changes are up or down from the existing funding for particular activities.

According to the Chartered Institute for Public Finance and Accounting (CIPFA), a key characteristic of the approach is that budget preparation is a process of negotiation and compromise. "Incremental budgeting is therefore based on a fundamentally different view of decision making than more rational approaches."[9]

This is because negotiated settlements between interested parties require a willingness to compromise. If consensus breaks down, compromise cannot be reached and the incremental process becomes invalid. According to CIPFA, use of this model, therefore, requires a relatively stable form of representative government.

[8] Fozzard, A *The Basic Budgeting Problem: Approaches to Resource Allocation in the Public Sector and their Implications for Pro-Poor Budgeting,* Overseas Development Institute (2001) available online at: http://www.odi.org.uk/resources/download/1395.pdf (accessed 12 January 2010) (see page 44)

[9] Budgetary Models, CIPFA (2009)

The process itself is straightforward. The key stages are:

- establishing the base: decide what is committed expenditure and then make adjustments to reflect unavoidable changes, for example:
    - I. full-year effects of staff appointments;
    - II. full-year effects of the capital programme;
    - III. salary increments;
    - IV. non-recurring items which should be removed;
    - V. external factors e.g. changes in legislation or government funding regimes;
    - VI. changes in price levels for labour, goods and services;
- adding to the implications of the development budget to reflect proposed savings and growth;
- aggregating and producing the new budget.

2.2 Advantages of incremental budgeting

- easily understood (as it is retrospective), makes marginal changes and secures agreement through negotiation;
- administratively straightforward (and therefore cheap);
- allows policy makers to concentrate of the key areas of change. Ministers, elected representatives and senior officials are not required to study long and detailed budgetary documents;
- particularly useful where outputs are difficult to define/quantify; and,
- stable and, therefore, changes are gradual.

2.3 Disadvantages of incremental budgeting

- backward looking – focus more on previous budget than future operational requirements and objectives;
- does not allow for overall performance overview;
- does not help managers identify budgetary ‘slack’;
- often underpinned by data or service provision which is no longer relevant or is inconsistent with new priorities;
- encourages systemic inertia and ‘empire building’;
- tends to be reactive rather than proactive; and,
- assumes existing budget lines are relevant and satisfactory.

2.4 Further considerations

Certain characteristics of public service organisations mean that the incremental budgeting system fits quite well into the overall public finance system. Departments and their agencies are often large and complex and fulfil a range of functions in different policy areas. Decisions can, however, sometimes be made very quickly. It can be easier to accept the distribution of most expenditure as given and to concentrate on deviations from the existing pattern. This approach, therefore, reduces the need for Ministers and senior officials to frequently spend large amounts of time dealing with reviews of budgets.

CIPFA argues that business area managers “find it easier to communicate a few changes to politicians within the annual decision making process. Slow adjustments to budgets are often easier to implement than sudden shifts in priorities.”[10] From a business-management perspective it’s generally better to introduce change gradually; it can therefore be argued that the incremental approach is rational for public services as the effects of changes can be monitored and alterations made as the need becomes apparent.

The biggest difficulty is that it can be problematic for managers and Ministers to get an overall picture of performance. Also, the potential for inertia is a source of possible concern; the inefficient and ineffective use of resources can be perpetuated and creative thinking could be stifled.

3. ZERO-BASED BUDGETING

3.1 What is zero-based budgeting?

Zero-based budgeting – unlike the incremental approach – starts from the basis that no budget lines should be carried forward from one period to the next simply because they occurred previously. Instead, *everything* that is included in the budget must be considered and justified.

According to CIPFA, zero-based budgeting in its purest form “involves the preparation of operating budgets on the assumption that the organisation is starting out afresh in the new planning period – it as is the life of the organisation exists as a series of fixed-term contracts.”[11]

The approach relies upon the involvement of all executive managers. It requires the organisation’s objectives to be clearly stated – as with any budget process – but also considers and assesses different ways of delivering those objectives *before* the budget is allocated. It is, therefore, less ‘how should we deliver this service with the money available’ and more ‘here’s what we have to achieve, different options for achieving it and the budget required for each of those options’.

The process requires specification of minimum levels of service provision, the current level, and an ‘incremental’ level – either between the minimum and the current or an improvement over the current level. Options for delivering at each level can then be evaluated and a justification put forward along with the request for resources.

Essentially, this is a process of providing business justification for each activity undertaken by an organisation. According to CIPFA, ”the analysis should also extend to considering the benefits of the activity, alternative courses of action, how to measure

[10] Budgetary Models, CIPFA (2009)
[11] Zero-based budget briefing, CIPFA (2006)

performance, and the consequences of not performing the activity."[12] Activities are then ranked in order of priority and this is where resources are focused.

3.2 Advantages of zero-based budgeting

- allows questioning of the inherited position and challenge to the status quo;
- focuses the budget closely on objectives and outcomes;
- actively involves operational managers rather than handing them down a budget from above;
- can be adaptive to changes in circumstances and priorities; and,
- can lead to better resource allocation.

3.3 Disadvantages of zero-based budgeting

- more time consuming than incremental budgeting (i.e. it may become overly bureaucratic and produce excessive paperwork);
- need for specialised skills/training;
- difficulties can arise in the identification of suitable performance measures and decision/prioritisation criteria (if there is insufficient information in some areas ranking them could also be problematic);
- the specification of a minimum level of service provision (if below the current level) may demotivate managers;
- questioning of the inherited position can be seen as threatening to organisations and their people (so careful management of the people element is essential); and,
- may be difficult to cost and estimate resource requirements for options different from the current practice (giving rise to greater uncertainty).

3.4 Further considerations

According to CIPFA, the key benefit of a zero-based approach is that it focuses attention on "the actual resources that are required in order to produce an output or outcome, rather than the percentage increase or decrease compared to the previous year."[13] Clearly the time/resource-consuming nature of the approach is a major consideration for DFP.

CIPFA argues that the technique is usually used most effectively when applied to activities that are wholly or mainly discretionary in nature – and therefore can be ceased. In many areas of public-sector activity this will not be the case because of legislative and regulatory obligations. But CIPFA also cautions that "it is very easy to fall into the trap of assuming that something is non-discretionary for no other reason than the activity has been carrying on at a similar level for a number of years."[14]

[12] Zero-based budget briefing, CIPFA (2006)
[13] Zero-based budget briefing, CIPFA (2006)
[14] Zero-based budget briefing, CIPFA (2006)

So, there is a need to identify first what the discretionary areas are. Then there is a need to define in measureable terms the outputs and outcomes that are required. There are parallels here with the debate over the efficiency-savings agenda. The public sector traditionally has difficulty in focussing on outcomes rather than inputs (see, for example, Arthur Midwinter's written submission to the Committee for Finance and Personnel in relation to Efficiency Delivery Plans).

CIPFA recommends a phased introduction to a zero-based approach. Initially focus should be on the less complex areas – this is to allow for budget practitioners skills and experience to be built up. Secondly, the approach should be contained to activities that are truly discretionary. Thirdly, it is suggested that the approach should be adapted so that it "becomes a consideration of the impact on service delivery of step changes up or down in resource provision."[15]

Given the current focus on efficiency savings and the difficulties associated with establishing service-delivery baselines against which to measure the impact of proposed savings, it seems that more wide-spread use of zero-based budgeting techniques could be helpful. There seems to be considerable cross-over between the requirements of the budgeting approach and the requirements for proper efficiency delivery plans.

For example, part of the zero-based budgeting process requires the identification of activities with clearly measurable inputs and outputs which should then be ranked in terms of priority. This is similar to the need to prioritise activities to establish where efficiency savings could be made in the lower-priority programmes.

3.5 Zero-based budgeting in action: case studies

In 2007, the Swedish Institute for European Policy Studies (SIEPS) advocated the use of a zero-based approach for reviewing and setting the EU budget:

> *After some experiments in various countries [zero-based budgeting] soon disappeared from the budgetary tool-box, but the same reasons that made it unwieldy in the yearly budgetary process should make it much more attractive for the longer budgetary cycle of the European Union.*[16]

In 2005, the Treasury announced the Comprehensive Spending Review 2007 would use a zero-based approach.[17] But as hinted at in the SIEPS comment above, the methodology has been around much longer than that.

[15] Zero-based budget briefing, CIPFA (2006)

[16] Tarschys, D *Agenda 2014:a zero-base approach* Swedish Institute for European Policy Studies (2007) available online at: http://ec.europa.eu/budget/reform/library/news/20071026_zero_based_approach.pdf (accessed 11 January 2010) see page 4

[17] See HM Treasury press release *Treasury announces second Comprehensive Spending Review* 19 July 2005. Available online at: http://www.hm-treasury.gov.uk/press_65_05.htm (accessed 11 January 2010)

Case study: zero-based budgeting in the United States in the 1970s

In 1979, the US Comptroller General reported to Congress under the title *Streamlining Zero-base Budgeting Will Benefit Decisionmaking.*[18]

Zero-based budgeting (ZBB) was used in the late 1970s in putting together the President's budget documents before submission to Congress. The report examined the experiences of Federal agencies, State and County governments and private industry.

The report found that:

Despite popular expectations, some organisations, including the Federal agencies contacted, had an overall sense of disappointment with zero-base budgeting… ZBB has created little change in the Federal budget process and generated limited optimism for the system in the agencies we studied.[19]

It was argued that the administration was anxious to get ZBB implemented. There was, as a result, no attempt to tailor ZBB concepts to agencies' needs or implementing the methodology in a way that would integrate it with all budget processes: A "strict process" approach to ZBB was used for the executive portion of the Federal budget process, but all other parts (at the lower levels) remained unchanged.

Problems encountered in implementing "strict process" ZBB included inadequate planning, which in turn led to:

1. excessive use of resources, such as staff, paper and automatic data processing systems;

2. useless data and duplication of effort due to unresponsive information systems; and

3. frustrations created when, despite ZBB, management did not cut expenditures, follow proposed priority rankings or adjust programmes.[20]

But the study also found that, outside the Federal arena, some organisations *did* manage to incorporate ZBB concepts into their budget systems:

They did not make the mistake of considering ZBB little more than a process. They looked at themselves and they looked at the concepts, and only then did they devise a

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[18] *Streamlining Zero-base Budgeting Will Benefit Decisionmaking* United States General Accounting Office, 25 September 1979

[19] *Streamlining Zero-base Budgeting Will Benefit Decisionmaking* United States General Accounting Office, 25 September 1979, page 47

[20] *Streamlining Zero-base Budgeting Will Benefit Decisionmaking* United States General Accounting Office, 25 September 1979, page 47

process – a process to suit their special needs. This spelled success. It can be successful in the Federal Government too.[21]

The successful organisations did not attempt to apply all the ZBB concepts during the budget cycle. Rather they were introduced in phases: planning, budgeting and reassessment. The analysis of alternative approaches should become part of the planning phase. Decisions made in the planning phase should feed into the budgeting phase – which should incorporate the alternative funding levels and the determination of programmes priorities. Comprehensive information should only be created for those programmes that are scheduled for in-depth review. For others, only minimal information should be produced. The reassessment phase should include the programme effectiveness reviews that feed information into the next planning and budgeting phases.

The report observed that Federal agencies were "not handling the process in phases and are having problems. For example, they are not able to identify realistic, alternative ways of carrying out the programs and activities, and evaluations are not being effectively fed into the process."[22]

Despite difficulties at the Federal level, a number of US authorities persisted with zero-based budgeting. ZBB was used in Texas from 1973-1991 when it was replaced by a performance-based budgeting system.[23]

Further, there appears to have been a resurgence in confidence relating to zero-based approaches in recent years. The **City of London Police** policing plan for 2009-12 describes zero-based budgeting as one of four interlinked key strategic processes – the other three being control strategy, risk assessment and business planning.[24]

Further afield, on 31 March 2009 the **Latvian Cabinet of Ministers** agreed to institute a zero-based approach to develop amendments to its 2009 state budget.[25] The aim was to reduce the Latvian budget deficit to 3% of GDP – one of the Maastricht criteria for membership of the Euro. The decision was taken against a background of falling GDP and average earnings, a decline in the balance of payments and reducing tax revenues.

Case study: the Idaho Department of Water Resources

The Idaho Department of Water Resources is responsible for managing water resources in the state, including the development of hydro-electric power, management of river basins and regulating the use of water.

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21 *Streamlining Zero-base Budgeting Will Benefit Decisionmaking* United States General Accounting Office, 25 September 1979, page 47

22 *Streamlining Zero-base Budgeting Will Benefit Decisionmaking* United States General Accounting Office, 25 September 1979, page 53

23 See http://www.lbb.state.tx.us/The_LBB/Agency/History.htm

24 See http://www.cityoflondon.police.uk/NR/rdonlyres/F16EDF4F-FB30-4209-B24A-D63F7A656713/0/City_of_London_Policing_Plan_2009.pdf page 5

25 See http://www.li.lv/images_new/files/2009_04_06__LI_FS_Nr_26_zerobudget.pdf

It began a zero-based budget review in summer 2008. This included review of the statutory basis of each programme and analysis of the impact that an increase or decrease of twenty percent in funding would have.

Following this initial assessment, additional ZBB analysis was carried out, focussing more on individual business processes and cost centres. Managers were directed to critically evaluate each of their business processes using evaluation questions and guidelines developed by the Department's Division of Financial Management.

The aim was to enable managers to evaluate the individual cost centres and identify potential areas of improvement, through streamlining or modifying the approaches taken. Some cost centres put forward for modification while others were put forward to be eliminated. Where streamlining measures or alternative approaches were identified within the Department's authorities, cost-saving measures were implemented and resource savings reallocated to priority work.

Coupled with this assessment was the development of spreadsheets showing the amount of personnel time devoted to each business process. This is intended to allow managers to monitor and then manage the resources necessary to deliver the organisations objectives.

According to the Department's website:

Zero-based budgeting has proven to be a valuable management tool for assessing program requirements systematically, to help managers indentify work efforts to achieve desired results.*[emphasis added] The Department's Senior Management Council (SMC) will continue to review progress and implement necessary course corrections on a periodic basis to ensure that we continue to meet requirements in a logical fashion with overall best use of available staff resources. Savings have been applied to priority programs within the Department and this approach should result in gradual elimination of the considerable backlogs in several of our programs. With respect to backlog reduction, we anticipate it will take several years of continued high intensity performance to draw-down current backlogs to an acceptable level.*[26]

So, the zero-based approach is not seen simply as a means of better budgeting alone, it is viewed as a means to driving better achievement of business objectives. It appears to have enabled the Department to reprioritise and reallocate funding to non-discretionary duties.

But, importantly, the measurement of performance, and accountability for that performance, can be viewed as crucial to the zero-based budgeting approach. The right information has to be presented to decision makers and this doesn't seem to necessarily follow if ZBB is implemented as a stand-alone initiative.

[26] *Zero-based budget process memo* Idaho Department of Water Resources (2009) available online at: http://www.idwr.idaho.gov/AboutIDWR/ZeroBasedBudget/PDFs/Process%20memo.pdf (accessed 11 January 2010)

Case study: Oklahoma

In 2003 the State of Oklahoma passed a zero-based budgeting law. In an attempt to control government spending, ZBB was mandated for the whole budget and every agency covered by its requirements.

In that first year, budget appropriation hearings listened to the Oklahoma Department of Human Services (DHS) describe increases in child support collections. However:

What zero-based budgeting didn't require DHS to report was that if Oklahoma's efficiency at collecting on these deadbeats would have merely matched the 50-state average, DHS would have collected 44 percent more for Oklahoma children. Instead of the $143 million in deadbeat dad collections in 2003, DHS would have secured $206 million, or an additional $63 million for Oklahoma children.[27]

Oklahoma's legislature then required each agency to design performance measures. However, some performance measures "were at best measures of inputs and outputs and at worst a mockery of the concept." The Energy Resources Board, for example, submitted a measure that required it to "increase the number of positive media stories".

It has been argued that the failure of the state authorities to penalize the failure of agencies to meet their own performance measures further undermined accountability. Also in the first three years since the inception of ZBB, Oklahoma state budget appropriations rose by nearly 20%.

So the lesson from this example appears to underpin the assertion by CIPFA that full business justification is need for each area – not simply in terms of alternative levels of service, but also in respect of benchmarking performance with comparable agencies.

4. ALTERNATIVE BUDGETING TECHNIQUES

What follows is a brief summary of alternative budgeting techniques that may also be of some use or interest in the public services.

4.1 Priority-based budgeting

Priority-based budgeting is a modification of the zero-based approach. It focuses on corporate priorities and allocates growth and savings in budgets accordingly. It is based

[27] *Viewpoint: Why Zero-based budgeting had Zero effect in Oklahoma* The Buckeye Institute for Public Policy Solutions (2006) available at: http://www.buckeyeinstitute.org/article/704 (accessed 11 January 2010)

on a thorough on-going review of departmental services. According to CIPFA, the review requires a statement of:

1. the objectives/purpose of the service;
2. targets/standards the service is trying to achieve, and;
3. various thresholds at which the service could operate.

Based on analysis of these statements, elements of spending by each business unit could be classed as essential/highly desirable/beneficial and this information would be presented to decision makers.

4.2 Decision conferencing

This approach is computer-software aided. It allows participants in decision-making conferences to identify key service areas and the resources committed. Costs and benefits of levels of activity are given scores and plotted on a graph – these can be varied to allow the implications for service delivery to be evaluated. While it can be an effective tool, CIPFA suggests that the focus is largely at service level and is more difficult to apply across services. Also, it is time consuming and expertise with the associated software is required across organisations.

4.3 Planning Programming budgeting system

This system is primarily associated with corporate management and identifies alternative policies, the implications of their adoption and provides for their control. The key difference from traditional approaches is that it relates cost estimates to programmes using a cross-cutting method rather than attributing costs on a traditional departmental basis.

This approach was first used by the US federal government half a century ago. In the UK the Ministry of Defence and a number of English local authorities also experimented with the system. However, according to CIPFA, from 1970s it became apparent that the model was flawed with the following criticisms:

- it is costly and time consuming;
- it is difficult to identify and quantify objectives in the public sector;
- it can depoliticise the budget process by taking decisions away from elected representatives; and,
- outcomes from activities can be difficult to measure (for example the populations increased wellbeing from reducing crime) as they may be intangible;

Also, there are difficulties with developing budgeting systems on a programme basis because departments contribute to more than one programme at a time:

> *For instance, a police authority could have objectives such as accident prevention and crime prevention. The provision of a police patrol car in an area could contribute towards both of these programmes, but how should the costs be split between two objectives? The problem is that two budgeting systems would be required:*

1. departmental – for expenditure control in relation to departmental responsibilities e.g. controlling the cost of the police car fleet, and;

2. programme – the budget for crime prevention.[28]

4.4 Performance-based budgeting

The main aim of this approach is to connect performance information with the allocation and management of resources. Performance-based budgets need to contain information on the following elements:

- inputs (measured in monetary terms);
- outputs (units of output);
- efficiency/productivity data (cost per activity);
- effectiveness information (level of goal achievement).

Similar to zero-based budgeting, the performance-based approach should begin at a policy level with the organisation developing goals and explicit policy objectives. Managers then must develop relevant performance measures which will track the achievement of these objectives.

These performance objectives are then integrated with budget preparation to allow for the alignment of spending plans with performance reporting at the time the budget process is initiated. At the end of each budget period performance-based audits can be completed, which measure the results of programmes using the same performance measures produced in the budgeting process. In this way, the approach seeks to avoid the problems associated with trying to establish baselines after the event which gives rise to difficulties in the measurement of delivery of efficiency savings, for example.

A fundamental question arises though. To what extent is performance information available? Secondly, is that performance information used at each stage of the budget decision-making process (i.e. preparation, approval, execution and audit evaluation)? Research in the United States where the approach was pioneered found that many states reported performance measures *alongside* their budget, but this is not the same thing as using the information in decision making.[29]

The UK Government put in place a system of public service agreements in 1998 (and this has been replicated in Northern Ireland) which also sought to align objectives with spending. At local government level, a duty of best value was placed on authorities to secure continuous improvement in the economy, efficiency, and effectiveness of services. This has forced authorities to give prominence to performance information by publishing best value performance plans. Again, however, according to CIPFA, the evidence suggests that authorities published these documents alongside separate budget documents – which does not suggest that the processes of budgeting and performance management are fully integrated. CIPFA acknowledges that there has been insufficient research in this area to draw full conclusions.

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[28] Budgetary Models, CIPFA (2009)

[29] Andrews M (2004) *Authority, Acceptance, Ability and Performance-based Budgeting Reforms* The International Journal of Public Sector Management, vol 17, no.4 pages 332-344

CIPFA identifies the following issues as possibly contributing to the slow development of performance-based budgeting:

1. *public entities need to be clear about what they are trying to achieve. Therefore, there needs to be clear strategic direction in the organisation (which may not always be the case);*
2. *translating strategic goals and objectives into performance measures can be very difficult. In many public services, outcomes are difficult to measure and there is a tendency to fall back upon less appropriate output and input measures;*
3. *systems for collecting cost and performance information may need to be developed. Costing out services can be difficult and in particular decisions on how to deal with overheads are problematic;*
4. *problems may exist in respect of presenting this information to those making decisions on budgets. Information may need to be presented in appropriate formats to a variety of users. If information on performance is separated from accounting operations then this will hinder the ability for it to penetrate decision-making processes associated with the operations;*
5. *there may be procedural problems caused by failure to change existing budgeting rules and processes. Organisations continue to publish budget and performance in separate documents;*
6. *a lack of political acceptance of reform may prevail. Performance information represents a threat to the 'political' aspect of budgetary decision making since its explicit measurements tend to limit the discretion politicians can exercise. It has to be said, however, that in a complex environment of competing interests it is difficult to see how any rational, planning-based system can be expected to totally replace political decision making, and;*
7. *management may not accept a performance budgeting process. There are often problems in defining who is accountable for performance and managers may fear that they will be reprimanded for failure to achieve published performance targets, and thus may try to avoid being accountable.*[30]

Once again, many of these issues have been aired previously, in this paper and elsewhere, and seem to present fundamental difficulties with public sector budgeting. Others, in relation particularly to the reduction of political control over budgeting, are different considerations from those identified with other budgeting approaches.

The case study presented below addresses, amongst other things, CIPFA's observation at point 4 in the above list about the need for the appropriateness of information that is presented.

Case study: performance-based budgeting in Arizona

Arizona […] uses a budgeting system that combines strategic planning, performance measurement, and program evaluation. The system, called Program Authorization Reviews (PAR), requires all agencies to submit a one-page overview of its performance

[30] Budgetary Models, CIPFA (2009)

measurements for the upcoming fiscal year along with its regular detailed budget request. The recent FY 1998-1999 budget also required an extensive PAR budget submittal from 14 select agencies that included complete performance information and data on 30 programs and subprograms.

More specifically, PAR required these 14 agencies to answer four main questions in their budget submittals. One question addressed how programs and their objectives related to their agency mission statements. Another question asked was how efficient and effective programs were in carrying out their activities and in attaining their objectives. The two remaining questions inquired as to how well programs measured up in comparing expected to actual results and, additionally, as to the use of cost-effective alternatives.

Arizona's PBB approach has been applauded for not "overloading" its budget document with superfluous performance information and data. Providing decision-makers with a manageable, yet thorough, set of performance data for making good spending choices is a time-consuming and hard won endeavor. Arizona appears to have proven that this can be done.[31]

A further case study illustrates how the problem of aligning performance and budgets may be addressed. The approach used in Oregon also integrates a considerable element of participatory budgeting, which is discussed further in section 4.5.

Case study: performance-based budgeting and strategic planning in Oregon.

Oregon is recognized, arguably, as the most sophisticated or highly evolved state in terms of model strategic planning and PBB initiatives. Called "Oregon Benchmarks" – and alternately "Oregon Shines" – the model system was introduced in 1989 when over a hundred citizens and policy-makers came together to develop a multi-year strategic plan for the state. The state legislature also created that year the Oregon Progress Board to maintain, revise and oversee the implementation of the state's comprehensive strategic plan "well into the twenty-first century."

In 1991, with plentiful input from all levels of government and the people of Oregon, the Progress Board adopted 158 indices or "benchmarks" that they considered of the greatest priority to the progress of the state. These measures were oriented to performance and not effort. The Progress Board was interested, for example, not in measuring or monitoring school expenditures to assess school performance, but rather, in measuring student achievement as predicated on standardized testing.

In 1994, the Progress Board implemented a program to facilitate performance by restructuring many of the state's intergovernmental and programmatic relationships. For

[31] Source: Young R D *Performance-Based Budget Systems* USC Institute for Public Service and Policy Research (2003) available online at: http://ipspr.sc.edu/ejournal/assets/performance%20based%20budgets.pdf see page 16

instance, it managed to relax federal guidelines and restrictions to implement more efficiently and effectively programs dealing with child services, disabled employees, wildlife preservation, juvenile justice, and welfare recipients. As of 1997, 32 agencies were participating in the Progress Board's "restructuring" program.

In 1997, Oregon's legislature mandated that the Progress Board's strategic planning/PBB process be a permanent fixture of the state's government. The law required that the Progress Board report to the state legislature as to the general status of efforts in strategic planning and PBB among Oregon's agencies. A detailed and "complete update" of Oregon Benchmarks is to be completed and reported to the legislature every six years.

Today, agencies in Oregon's state government are required to develop "results-oriented" performance measures that are tied directly to both agency strategic plans and budgets. Input is encouraged not only from internal agency personnel but also from other state agencies, elected officials, service delivery clients, interest groups, and the public at-large. Participants and observers alike believe that this input is invaluable to the planning and budgeting process and ultimately reflects the values and priorities of all Oregonians.[32]

4.5 Participatory budgeting

This approach is used by primarily by local government in Great Britain and elsewhere (it originated in Brazil in the mid-1980s) and attempts to give local groups ownership of the budgetary process. Local communities have a say in prioritising services or projects through activity such as community-led debate, neighbourhood votes and public meetings.

Participatory budgeting is based on the following principles:

- *citizens' groups have as much power as possible in the decision-making process.*
- *representation must be fair and equitable.*
- *appropriate training is given to participatory groups. This may require a dedicated council team.*
- *there is some commonality/theme in the type of budget/grant being allocated e.g.*
    - *regeneration;*
    - *neighbourhood development;*
    - *project based;*

so that decision making can be made by reference to some benchmark or standard.

- *the process is linked directly to the council's budget-making process.*
- *it is generally targeted at 'hard to reach' groups not otherwise involved in decision-making processes – thus making the biggest gains.*[33]

[32] Source: Young R D *Performance-Based Budget Systems* USC Institute for Public Service and Policy Research (2003) available online at: http://ipspr.sc.edu/ejournal/assets/performance%20based%20budgets.pdf see page 18
[33] Cross-Sectoral and Corporate Governance Issues, CIPFA (2009)

It can be seen clearly from these principles why this approach to budget setting is more common at the local tier of government. In Northern Ireland, where many functions that are delivered by local government in Great Britain are delivered by central government departments (and will continue to be even after local government reorganisation in 2011), there may be scope for departments to use a more participatory approach in certain areas. For it to be possible, selected projects and programmes would have to be localised in nature: trying to organise true community participation in budgeting at the regional level would appear to be problematic (see case study below for an example of using technology to facilitate participatory budgeting).

Potential advantages of the approach include:

- *improved decision-making;*
- *better understanding of budgeting processes;*
- *people will take ownership of actions where they have been involved in the decision-making process;*
- *projects more likely to be delivered;*
- *democratic, and transparently so;*
- *commitment to further development of PB;*
- *less cynicism or apathy towards the local authority;*
- *reducing the 'democratic deficit';*
- *reaching parts of the community otherwise excluded from decision-making.*[34]

Possible disadvantages are:

- *the council may be seen as abrogating its responsibilities;*
- *participation may be low;*
- *decisions may be biased towards those groups who can articulate their need over true need;*
- *it is limited generally to grant-type budgets rather than core activity;*
- *budget allocations may be one-off and give rise to problems of continuity of funding;*
- *it is not a substitute for true community budgeting and is a long way from neighbourhood controls over local services;*
- *it may be seen as undermining the council;*
- *many key local services, of community interest, are outside local government control (e.g. doctors' surgeries, policing) and may need formal partnership arrangements to make progress;*
- *it could potentially be seen as bypassing the democratic process;*
- *organisations which benefit from additional funding may not necessarily adhere to the same budgetary/financial disciplines and procedures as other public bodies*[35]*.*

In some respects, certainly, participatory budgeting has potential to empower communities and raise the level of democratic input to decision making. However, its nature limits the scope of functional areas to which it can be applied.

[34] Cross-Sectoral and Corporate Governance Issues, CIPFA (2009)
[35] Cross-Sectoral and Corporate Governance Issues, CIPFA (2009)

Case study: participatory budgeting in Cologne, Germany

Participatory budgeting was introduced in Cologne as part of a wider agenda in the city of 'services for citizen participation'. The municipal administration recognized that to put citizens at the centre of governance it is necessary to give them a say over public funds.

Participatory budgeting has been piloted in the city through an e-participation internet platform. The platform empowers citizens to participate in planning the budget by submitting proposals, comments and assessments, and submitting votes for or against specific proposals. The system encourages ongoing online discussions, rather than dialogue always being part of a tightly time-limited event. To manage the flow of conversation and to target contributions, the interactive website was carefully and transparently overseen by forum facilitators.

The success of the project is due, not least, to its high profile across the city – the project was publicly advertised and information leaflets were sent to each household. The levels of involvement in Cologne surpass comparable projects elsewhere in Europe – around 5,000 proposals were submitted during the first trial and more than 52,000 votes were entered. There were around 120,000 unique visitors to the website. The pilot phase of the project cost approximately €300,000 to set up and run. The initiative is now developing towards the introduction of improved systems in 2010.[36]

Other innovative methods have been used in the UK as forms of participatory budgeting:

Case-study: empowering communities in South Somerset

The South Somerset district area is divided into four sub-district areas, each serving around 40,000 residents.

Forums are held in these sub-district areas. These give a voice to community aspirations and a local dimension to the delivery of services. They also provide the link between community needs and decision making through building consensus among representatives.

Area forums are currently being used for:

1. prioritising of projects
2. funding of projects
3. planning

[36] Source: *Power in People's Hands: learning from the world's best public services,* Cabinet Office (2009) available online at http://www.cabinetoffice.gov.uk/media/224869/world-class.pdf (accessed 12 January 2010) see page 34. See also http://s3.amazonaws.com/connected_republic/attachments/15/Cologne_the_participatory_budget.pdf to view a presentation on the process. (accessed 12 January 2010)

4. buying in enhancements to service delivery, should the community desire them.

They are also being used as the mechanism for operating the 'community kitties' and community 'calls for action'.

Each area has been allocated £40,000 for buying in services. Area forums can then engage with the public to agree what the money should be spent on.
Area forums help to give a voice to community aspirations. They give the delivery of services a local dimension, which provides a link between community needs and decision making.

An independent doorstep budget 'trade off' exercise was undertaken to feed into the budget setting process. Residents were allocated a set number of points that they could 'spend' on their preferred services. They were presented with a list of services and had to make choices and trade-offs using their points. This helped members to make budget decisions based on community preferences. It also sent the message to residents that councils had limited funds.

Some area forums have taken it further. They are empowering their communities to make decisions about 'small pots of money'. However, these are often significant in the eyes of the community. Area committees are given an additional £40,000 to begin the process of better aligning service need with service delivery.[37]

4.6 Resource-restricted budgeting

Resource-restricted budgets are similar to cash-limited budgets (see section 6.4 below). Limits are applied to particular resources (i.e. staff or equipment) and works rather like the incremental approach but in reverse.

It begins with the supply aspects (for example the number of staff that are available to meet future needs) and it is assumed fundamentally that these are fixed. From this point it works backwards to the required incremental change.

According to CIPFA, "the process offers control over resources in question and provides clear unambiguous direction but tends to ignore the practicalities of service delivery and may make the service unmanageable because of the restrictions imposed."[38]

[37] Source: *Empowering Communities in South Somerset*, IDEA (2008) available at: http://www.idea.gov.uk/idk/core/page.do?pageId=8341306 (accessed 12 January 2010)
[38] Budgetary Models, CIPFA (2009)

5. BUDGETING IN UNCERTAIN CONDITIONS

5.1 Rolling budgets

A rolling budget can be defined as "a budget constantly updated by adding a further period, e.g. a month or quarter and removing the earliest period."[39] A quarterly rolling process, therefore, would mean that a budget would be prepared every three months, each time rolling forward for one year. The first quarter would be planned in great detail and remaining quarters less so, reflecting the uncertainty about the long-term of the organisation. According to CIPFA, " on the control side the budget will provide a more reliable standard against which to judge performance."[40]

The potential advantages of using rolling budgets are that:

- they reduce uncertainty in budgeting which is important in highly volatile industries where sales levels and prices may fluctuate;
- managers need to reassess the budget frequently;
- more realistic budgets will aid motivation;
- planning and control will always be based on up-to-date information which covers a significant period into the future.

The disadvantages of rolling budgeting are that:

- it is time and resource intensive;
- managers may find the constant revision of budgets disruptive and unsettling;
- continuous updating may not be justified where the changes are not continuous.

There are fairly evident problems with attempting to introduce rolling budgets in the public sector. Public bodies usually have fixed limits over the budget period, and unless the overall system of budgeting was changed, it would be difficult to introduce for certain departments or business units. CIPFA states that in the public sector, rolling budgets could be "somewhat pointless".[41]

5.2 Contingency budgeting

Contingency budgeting is useful for new organisations where detailed budgeting is difficult because there is no past experience to draw upon. The absence of reliable detail is compensated for by a contingency budget to cover as many areas as required.

According to CIPFA:

> *The use of contingency budgeting ultimately assists in ensuring best practice as it requires organisations to evaluate alternative scenarios and develop contingency plans to ensure that project implementation risk is minimised. Sophisticated*

[39] Budgetary Models, CIPFA (2009)
[40] Budgetary Models, CIPFA (2009)
[41] Budgetary Models, CIPFA (2009)

techniques using contingency budgeting are increasingly being used to deliver IT projects where up to 50% of allocated budgets may be set aside after the essential or minimum expenditures are determined. This means that alternative strategies can be used in the event of project failure or delay. In these scenarios budgets are viewed more as a guide to an efficient expenditure pattern.[42]

Case study: contingency budgeting in New York State[43]

Contingency budgeting models have become increasingly prevalent in the public sector within the US where annual budgets are subject to direct approval by district or state electors. Under the 1997 Education Law introduced by the State of New York, school boards are required to place a contingent budget as well as their preferred budget including proposed growth and savings items to the electors to enable them to make informed decisions about tax levies.

The initial stage of contingency budget preparation is to determine what is contingent or mandatory expenditure. In the New York case these are considered to be expenditures which are deemed to be absolutely necessary to maintain and operate schools, as well as any statutory items prescribed by law. This minimum expenditure would include all expenditure associated with:

1. the maintenance of the education programme including appropriate extra-curricular activities;

2. preserving property;

3. salary increases for contracted employees who have a negotiated increase; ensuring the health and safety of all staff and students.

It would exclude items such as:

1. subsidised cafeteria services;

2. non-recurring items of expenditure in prior year budgets;

3. costs related to increases in school enrolments;

4. relative increases in the proportion of the overall budget incurred on administrative costs;

5 capital improvements and equipment purchases other than those necessary to preserve property and the health and safety of all staff and students.

[42] Budgetary Models, CIPFA (2009)
[43] Budgetary Models, CIPFA (2009)

The mandated spending cap for the contingency budget would be linked to the retail price index applying in that financial year. The contingency budget would then function as a fall back budget should the proposed budget be rejected.

The obvious difficulty with contingency budgeting for the public sector in Northern Ireland is that it would be difficult to sustain long term. Contingency budgets lack detail or links to service planning. There would be difficulties therefore in associating contingency budgets with departmental objectives or performance.

6. ADJUSTING THE BUDGET

6.1 Fixed/flexible budgeting

Most public sector budgets can be regarded as fixed budgets as the level of resources often determines the level of activity and service provision. These resource levels are usually established in advance of the financial year. Although described as fixed, they can be varied through revisions made to reflect changing circumstances (i.e. through the quarterly monitoring rounds).

A flexible budget, however, is designed to be changed in line with variations of the level of activity. At the preparation stage, variable and semi-variable costs are identified, changing the budget as activity levels change. Typically, this type of budget is used in manufacturing industries where there may be changes to the planned levels of production; this results in changes to the necessary budgets for raw materials or components, for instance.

Flexible budgets are uncommon in public services; although changes in demand for services do arise, budgets are often fixed. This means that unanticipated demand cannot be catered for, or a department is pressurised to deliver higher volumes of services with existing resources. An example might be a hospital pathology unit budgeting for a given level of activity. But a new government initiative to reduce waiting lists could increase the number of tests being requested, and the budget may not be sufficiently flexible to deal with this.

6.2 Activity-based budgeting

Activity-based budgeting is an approach developed from activity-based costing used in the private sector. Rather than assuming that overheads are related to volumes of production or service, the technique attempts to identify what drives costs by linking overheads to activities. This provides more robust information for budget preparation as planned changes in production or service can be connected to changes in costs.

According to CIPFA, to date ”this has limited application in the public sector due to the lack of detailed work on activity bases and cost drivers.”[44] In theory, nevertheless, budgets can be designed to reflect an activity-based costing approach. In practice, though, it is an under-developed approach as little financial information is currently available on activity bases and the associated cost drivers.

The result is that all costs – including overheads – are allocated to activities on the basis of the characteristics which are felt to drive these costs. CIPFA argues that this is “potentially an effective way of addressing the issue of high fixed costs in a public sector environment.”[45]

The key stages in activity based budgeting are to:

The key stages in activity based budgeting are to:

- identify the organisation's activities;
- determine the cost drivers;
- spread departmental costs to costs drivers;
- calculate budgeted activity levels.

The potential advantages of the activity based model are that:

- it identifies the cost of activities;
- it allows for resource allocation at different activity levels;
- it establishes a link between decision making and cost behaviour;
- it fits in with control systems.

The potential drawbacks are that:

- there may be problems in defining cost drivers;
- it is not possible to monitor on a frequent basis in the short term;
- it requires a total review of an organisation’s accounting and possibly managerial systems.

6.3 November price-base budgeting

This approach was used by local authorities up to the early 1990s, but has mostly now been superseded by cash-limited budgets. The November price base approach takes the current year’s budget and increases it in line with the known pay awards at 31 October of that year, affecting the following financial year, along with the organisation’s own best estimates of price changes up to that date including, where appropriate, local price movements. Known increases in taxation e.g. employers’ national insurance contributions are also included.

This budgetary model does not incorporate assumptions about likely inflation or pay increases which are not known on 31 October in the base service budgets. Instead, a

[44] Budgetary Models, CIPFA (2009)
[45] Budgetary Models, CIPFA (2009)

provision for inflation and unconfirmed pay awards is held back as a contingency and released to services budgets during the course of the financial year as and when pay awards or inflationary pressures become known.

The detailed steps are illustrated below:

- calculate increase in price levels from last year's base budget date up to the current base budget date;
- estimate effects of further price increases to the end of the budget period in overall terms;
- provide contingency for this amount and retain it centrally.

Example: preparing budgets at November 2008, with a financial year running from April–March.

Original budget for 2008/2009 – five employees at £20,000 each at November 2007 price base. Employees then received a 5% pay award in July 2008 and it is estimated that they will receive 4% in July 2009.

Using the November price basis the budgets would be as follows:

2008/2009 revised budget £100,000 + (£100,000 x 0.05 x 9/12) = £103,750

2009/2010 original budget £100,000 + (£100,000 x 0.05) = £105,000

(In contingencies an amount of £105,000 x 0.04 x 9/12 = £3,150 would be allowed, but not allocated to the departmental budget.)

CIPFA explains that the main reasons for authorities moving away from this approach are "because it limits the ability of managers to manage their budgets and is administratively complex requiring constant revision."[46]

6.4 Cash-limited budgeting

Under this approach. Budget holders are required to plan their activities to ensure that their net expenditure does not exceed a pre-set cash limit. It relies on assumptions about inflation and pay awards, for instance, which are not known at the time the base budget estimates are made.

Example: preparing budgets at November 2008, with a financial year running from April–March.

[46] Budgetary Models, CIPFA (2009)

The original budget for 2008/2009 was five employees at £20,000 each at November 2007 price base with the assumption that there would be a 5% pay award in July 2008. At November 2008 it is now known that the staff did receive a 5% pay award in July 2008 and it is now estimated that they will receive 4% in July 2009.

The original 2008/2009 budget would have already included an allowance for effect of the pay award:

2008/2009 original budget £100,000 + (£100,000 x 0.05 x 9/12) = £103,750.
Similarly the 2009/2010 budget will include an allowance for the pay award expected in July 2009.

2009/2010 original budget £100,000 + (£100,000 x 0.05) = £105,000
plus £105,000 x 0.04 x 9/12 = £3,150.

Total 2009/2010 original budget = £108,150.

The advantage of this approach is that managers know what there budgets are going to be from the outset – and there is an incentive therefore for them to deliver within budget. But, it is not directly linked to service planning. Also if the prediction for inflation is too low, it may result in a requirement for reductions in services.

Continuing the example above, if the July pay award were to actually be 7%, then to maintain a steady level of service the actual budget required would be: £105,000 + £5,512 (i.e. 105,000 x 0.07 x 9/12) = £110,512.

7. CONCLUDING REMARKS

This paper has not answered the question of which approach to budgeting will lead to NICS Departments achieving the optimum allocation of resources. As was noted in section 1.3 there may be no theoretical model that will provide the perfect solution.

Nevertheless, it has been shown that a variety of approaches have been employed across the public sector, in the UK and internationally. It seems reasonably clear that NICS Departments could benefit from using the different approaches where the circumstances fit. The main benefit from zero-based, planning programme and performance-based budgeting is the link between budgets and business objectives. Even participatory budgeting, which is quite a radical departure from the incremental approach, appears to offer some strong benefits in this regard.

Clearly, any approach will also have some associated drawbacks. Significantly for the public sector, these tend to revolve around the amount of time and energy that has to be devoted to the analytical exercises to support the budgeting. But this effort could be repaid through improved performance.