

# *Devolution and the Resource Management Act*

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## ***Introduction***

Many past and potential New Zealand reforms involve significant devolution, i.e. the transfer of authority to make decisions on behalf of society from a higher to a lower level of government. In particular the Resource Management Act (RMA), the health and education reforms, and decisions about the institutions for addressing Maori issues have led to significant devolution of authority. Employment policy and social welfare are areas where devolution is an important policy option. The role and function of local government also is inherently an issue of the appropriate level of devolution. Many of these reforms have now been in place for a number of years, so it is appropriate to review our experience of devolution, identify the successes and attempt to address the problems that have arisen.

This paper is the first in a two part series that addresses issues of when and how we should devolve authority from central to local government. It looks at devolution both from a general theoretical standpoint and from the perspective of the New Zealand Resource Management Act 1991 (RMA), with residential land use as an illustration. Although the RMA is discussed throughout both papers, the framework developed applies to any area of policy for which devolution decisions are being considered. The second paper, (Claridge and Kerr, 1998) applies the framework to the optimal pattern of devolution for policies relating to kiwi protection.

The Resource Management Act 1991 is the principal legislation governing the use of New Zealand's land, air, water, ecosystems, soils, geology and built environment. It also controls noise, pollution and geothermal activities. The RMA integrated resource and environmental management by combining 59 separate statutes.

The RMA is based on a highly devolved framework. A central underlying assumption is that governing bodies closest to resources are the most appropriate to govern the use of those resources. The RMA was related to local government reform. The Local Government Act 1989 laid the foundation for the amalgamation of over 800 local authorities, boards, boroughs, etc. into the 86 local authorities existing currently. Although the RMA specifies a role for central government, in practice most decisions and implementation occur at the level of regional and local government. In this paper we simplify our analysis by considering only two levels of government, central and local, but the same principles could be applied to any size of jurisdiction including neighbourhoods and regions.

The RMA has been promoted internationally as a leading example of integrated, enlightened resource management.<sup>2</sup> Its structure contrasts significantly with systems such as that in the United States that combines federal and state level regulation, and with many European systems that are heavily centralised within nations and are to a certain extent Europe-wide through the EU.<sup>3</sup> Understanding the effects of New Zealand's chosen form of regulation has implications within and beyond New Zealand.<sup>4</sup>

When should we devolve authority to regulate externalities and public goods from central to local government?<sup>5</sup> Three questions need to be answered.

1. What level of government should make social and political decisions about policy objectives?
2. What level of government should bear the costs of these decisions?
3. What level of government should implement them?

Devolution of authority must be considered together with arguments for and against decentralisation of implementation because they are often inseparable. Decentralisation occurs when a lower level of government acts as an agent implementing central government's objectives. In a pure decentralised system, local government merely carries out the instructions of central government in a non-discretionary way. In practice, political authority and implementation responsibility are not usually clearly distinguished and implementers often make real social decisions. Nevertheless, political/social decisions and implementation are conceptually distinct, and to understand the optimal allocation of authority and responsibility and the trade-offs involved in choosing them, we must keep them clearly separate in our analysis.

Devolution issues are complex and there are seldom 'pure' results, particularly in the case of such a wide-ranging policy area as resource management. Our conclusions about the RMA offer a mixture of solutions, from complementary policies that support the current structures to legislative adjustments to change the level of government.

With regard to the RMA, this paper concludes that the overall institutional structure is broadly appropriate for core land use, built environment and air and water quality issues. However, for some issues the current level of devolution and the concomitant funding and implementation structures create serious problems that need to be addressed by changing the level of government that addresses the issue. In many other cases either no optimal, problem-free structure exists, or achieving it would damage the cohesion of the overall regulatory structure. In these cases we can identify the inevitable conflicts and problems and propose policies complementary to the RMA to encourage the flow of information, skills and resources, reduce duplication of effort, and improve accountability and cooperation.

### ***Why do we regulate resources?***

The fundamental problem with resources is that many of the property rights associated with them are not fully defined. Property rights need to be defined, transferrable and enforceable for efficient markets to function. Whenever property rights are incompletely defined or enforced, externalities and public good situations arise and resources will be allocated inefficiently without intervention. In addition, some actors will be able to claim the unallocated resources for their own use. This is an undemocratic, inequitable way to allocate resources that were previously held in common.

In many instances private solutions are possible. Where transaction costs are low the Coase Theorem suggests that all that is necessary is for the State to define and enforce property rights then negotiation and the common law system will allocate resources efficiently (Coase, 1960). This is a very unintrusive form of regulation although defining previously uncertain property rights can be contentious. For example, regulation of non-public externalities (e.g. obstruction of private views) could be limited to defining property rights and reducing the transaction costs of negotiation among affected parties - also relatively unintrusive. On these issues local government can reduce transaction costs by certifying the credibility of information, recording and enforcing agreements and providing a forum for discussion.

There are, however, limits to private solutions to externalities that call for more invasive regulation by government. For which issues are the failures of these solutions sufficiently great that further government regulation is needed? Theory suggests that government should focus on regulating externalities that affect public goods and common property resources, particularly those that have the following characteristics:

1. Transaction costs are high due to information asymmetries or costs of coordination. This is often the case when an externality affects a large number of people, comes from several sources, or has effects over a number of years. Air pollution or community-wide amenities such as access to open space close to residential areas are good examples. In these situations it is unreasonable to expect all the affected parties to negotiate successfully.
2. Property rights cannot be allocated or enforced adequately. Some goods are inherently difficult to allocate, e.g. fish that migrate.<sup>6</sup> Some property rights are difficult to enforce, e.g. limited liability companies, dealing with risks of pollution rather than actual pollution may not take adequate precautions.
3. Some interests are not represented. This occurs with high coordination costs and large imbalances in resources for negotiation (it is likely to affect environmental groups, Maori, community groups, etc. who are negotiating with business).<sup>7</sup> Furthermore, future generations are unable to represent themselves and government may need to act as their agent.

In situations where private solutions are likely to fail, we need to consider public regulation to provide public goods and protect common resources.

### ***Social Decision Making and Cost Bearing***

Efficient public good provision is difficult because government is unable to reveal private preferences for public goods. The values of many consumption goods, both public and private, are largely subjective, and dependent on individual preferences rather than having objective productive value. However, in the case of private goods, consumers reveal their private preferences and marginal valuations through their purchases. The level and allocation of private goods is Pareto efficient in a well-functioning market. No equivalent market mechanism exists to provide public goods, which makes it difficult to decide the efficient level of public goods.<sup>8</sup> In addition, no market forces provide incentives for efficient production.

People can reveal their preferences in two ways:

*1. Through social choice mechanisms*

People express their preferences through voting or direct involvement in political processes, submissions, lobbying etc.<sup>9</sup> Social choice mechanisms are imperfect.<sup>10</sup> The democratic processes we use are inherently flawed. They are not always fair; concentrated interests, richer or more powerful groups are over-represented; minority opinions often receive no weight. Nor are democratic processes efficient; in voting, intense preferences are equally weighted with weak ones, and the 'median voter' determines the outcome.<sup>11</sup>

*2. Devolution allows people to 'vote with their feet'*

If bundles of public goods and taxes vary among jurisdictions, people can reveal their preferences by choosing where they live. This form of preference revelation is captured in the Tiebout model (Tiebout, 1956).<sup>12</sup> It puts pressure on local authorities to offer public goods people want and to be efficient. The mechanism is limited by the costs of mobility, the limited number of choices available and the many other limitations on location choice, such as job locations.

Does devolution improve social choice mechanisms and lead to better preference revelation? What effect does mobility have on the efficacy of devolution? We have identified four principles for deciding when devolution of decision making is appropriate.

*1. Informed decision-making*

The best decisions reflect all the relevant subjective and objective information; those who experience the effects should make the decisions. People with the skills and resources to access objective information should also be involved in decision making. The jurisdiction should ideally include all people who receive benefits.

*2. Balanced decision making*

If people within the jurisdiction that makes the decision bear all benefits and costs, there are no interjurisdictional externalities that could lead to over or under-provision of the public good. Externalities could be environmental or they could be tax externalities, i.e. where one jurisdiction is able to impose financial costs on another.<sup>13</sup> Decisions should therefore be located, where possible, within the jurisdiction of effects and costs. People who make decisions should be those who receive benefits, and who bear costs.<sup>14</sup> Decision-making jurisdictions should ideally not be greater than the area that bears costs.

*3. Appropriately diverse decision-making*

If the decision-making jurisdiction is larger than the area where physical effects are felt, preferences can be revealed and no environmental externalities occur but another problem arises.<sup>15</sup> If central government makes policy it tends to have one policy, which applies to the entire country even where multiple policies are possible.<sup>16</sup> Central government has a heterogeneous constituency, so if preferences are also heterogeneous, few people will be highly satisfied by the level of tax and public good chosen. If people have very different preferences they will prefer very different policies. Matching the level of decisions to the level of benefits allows appropriate diversity in policies; it permits heterogeneous local policies where effects are local and preferences are heterogeneous and avoids them where they are inappropriate because effects are felt beyond the local level.

*4. Cost-effective decision making*

Where costs of decision making are high and preferences are relatively homogeneous, national policies can save considerably on duplication costs without much cost from having standardised policies. The location of decision making must be informed by considerations of cost effectiveness.

The Tiebout model suggests that having multiple jurisdictions better reflects heterogeneous preferences and improves accountability; devolution allows people to vote with their feet. The possibility of mobility makes it more important, however, to match costs and benefits within a jurisdiction so that people cannot avoid costs while still receiving benefits by moving out of the jurisdiction. Mobility also has implications for the role of government at the local level. For example, local governments cannot effectively redistribute income without inducing out-migration by rich people and in-migration by the poor.

Up until now we have implicitly assumed that each level of government is equally accountable to its constituents in terms of social decision making. If, for example, we consider local government to be inherently unaccountable, or irredeemably inefficient, we may prefer central decision-making despite the other advantages of local government. In addition, we have only concerned ourselves with the outcomes of the political process, not the process itself. In spite of the many arguments in favour of centralised decision making and implementation in some situations, we may still choose to bias toward devolving decision making to local communities if the social importance of local identity and control outweighs the social choice and efficiency benefits of more centralised control.

***Illustration:***

***Social choices about residential land use***

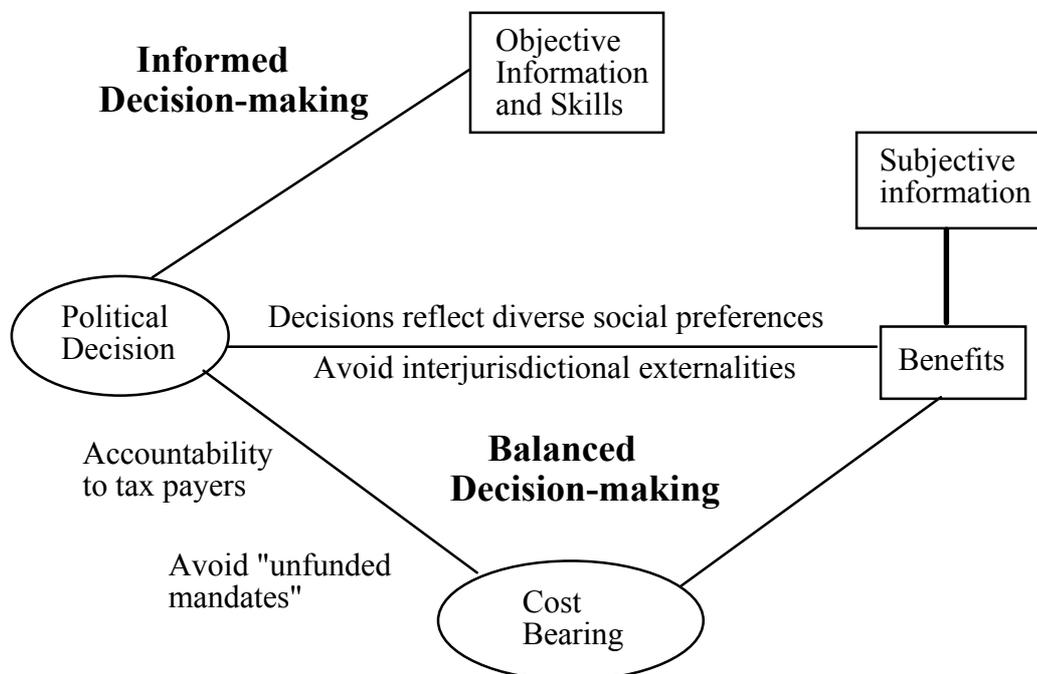
Society needs to allocate property rights to amenities from residential land use (e.g. does the home-owner have the right to build a fence or the neighbour have the right to light and a view) and in some cases decide the optimal level of amenities (e.g. the level of historical character to be protected in a town). To analyse the appropriate level of decision-making for a particular issue, we first need to identify the community that directly benefits from regulation. In the case of the residential land use question, this is people in the vicinity of the proposed change. These people will have unobservable subjective preferences about the value of the benefits of the regulation. People care about the physical effects of residential land use, e.g. view, light, trees, aesthetics, historical character, and have strong views about the appropriate definition of property rights. Some people believe communities have significant rights to control private land use because it affects the community as a whole, whereas others believe in the predominance of private property rights. For issues such as residential land use these subjective preferences both about amenities and about the way property rights are allocated are critical information for decision making that truly reflects community preferences. For other issues they may be less important.

The other fixed characteristic of the issue we need to determine is the location and importance of observable, objective information. In the case of residential land use, objective information relevant to social decisions, such as knowledge about good road design, local light conditions, local habitats, protection of local trees, history of dwellings and so on, is available locally, partly because of the history of local government land use regulation; it could also be gained at the national level. The boxes on the right side of Figure 1 represent the fixed characteristics of the issue. Both the importance and location of benefits and information are relevant.

Once we have established the nature and location of the fixed aspects of the residential land use issue we can turn our attention to the variable elements. The bubbles indicate the location of social/political decision-making and cost bearing. In the case of residential land use under the RMA, both political decisions and costs are local. Matches or links between the boxes and bubbles i.e. where the location of both is the same, bring improvements in the efficiency of social decision making.<sup>17</sup> In the case of residential land use, the critical information for social decisions is the local people's preferences about the nature of the community they live in.<sup>18</sup>

Thus the match between local political decisions and strong local preferences is valuable for making decisions that reflect the local area's interests. Local information is also available to inform these decisions. There are few interjurisdictional externalities. Costs are borne within the same jurisdiction as benefits and political decisions, so decision making will be relatively balanced although within the jurisdiction there may be imbalances.<sup>19</sup> If citizens think decisions are poor, they can vote against council members or be more directly involved in influencing local policy. For this issue, the level of devolution is appropriate.<sup>20</sup> Possibly decisions should be made at an even more local level, the neighbourhood. In New Zealand we do not currently have formal institutions at this level. If we believe, as McShane (1998) does, that local governments do not represent local preferences, we may want to limit their role in decision making. He essentially proposes reintroducing some central government control over residential land use decisions.

**Figure 1: Devolution and Political Decision-Making**



## *Implementation*

We define implementation as activities aimed at achieving non-discretionary goals set by social decision-makers.<sup>21</sup> Implementers may need to make decisions about the most efficient approach to achieve the goals but these decisions will be based purely on objective criteria, not preferences. If society has preferences about the type of instruments used to achieve outcomes, these should be specified as part of the goals given to the implementers.

The first question when choosing an appropriate implementer is simply who is most able to perform the function. The two basic options for implementation considered here are local government and central government. Either could contract out to a private agency. The relative advantage of central versus local implementers depends heavily on the balance between local and central information. Local government can most easily access local information, such as monitoring of compliance and knowledge of specialised conditions. General technical information may be most available to central government. Central government use of general technical information avoids costly duplication of information collection and analysis. Where both local and technical information play important roles, an additional factor is the ease of communication of either local or technical information. Finally, the ability of an actor to implement decisions effectively depends on the resources available to them, and the ease with which they can contract for outside resources. A contract can transfer financial resources, but cannot easily transfer human resources and infrastructure.

Second, the RMA focuses on outcomes rather than fixing rules. This flexibility, which recognises that a variety of behaviours may all achieve the desired objective, is crucial. It allows tailor-made solutions to local conditions. If there are diseconomies of scale in the number of different decisions an authority must make, a smaller jurisdiction, which deals with fewer situations, can make more diverse, outcome-oriented decisions. A larger authority may resort to fixed rules that cover a range of situations. Of course the price of flexibility can be uncertainty for businesses and individuals about how regulations will affect them. A balance between certainty and flexibility can be achieved if the jurisdiction sets up general guidelines in advance to reduce uncertainty, but then deals with individual situations as they arise.<sup>22</sup>

Third, economies of scale may exist for provision of some public goods. For example, in Auckland, sewage management, landfills, and transportation management are all more efficiently provided in a regional scale rather than very locally.<sup>23</sup> Some regulatory instruments may be available only to central government. This could be because of links to other central government institutions; for example, central government could implement environmental taxes through the existing tax structure. Local governments cannot effectively regulate transportation of hazardous waste because many jurisdictions are affected by one load. The obvious monitoring points are at the points of loading and unloading which could be in different jurisdictions. Arbitrage can limit the use of some instruments at a local level. For example, a petrol tax in one jurisdiction will be ineffective if people are easily able to drive to a neighbouring jurisdiction to buy petrol.

Finally, the effects of innovation and diffusion of new regulatory ideas may be as important for effective implementation as static characteristics of central and local government. Effective innovation requires high levels of capability but may not intrinsically require scale. Small units may be more flexible. On the other hand large organisations can capture the benefits of innovation internally so have stronger incentives to innovate; also they tend to

have greater resources.<sup>24</sup> If small units do experiment and discover effective new regulatory techniques, communication between units is essential for effective learning.

Adoption and diffusion may be more effective in larger governments. Empirical evidence suggests that small companies (and hence small jurisdictions?) are less likely to adopt new technologies.<sup>25</sup> This is probably due to lack of technical capacity, higher risk aversion in small companies, lower profitability of a given innovation because of smaller scale, and possibly lack of access to the necessary capital. Although this literature has developed in the context of private sector activities, many of the lessons probably also apply to government.

Central government may have more capability and incentive to innovate and diffuse new ideas, but may not want to risk applying a new untested idea to the whole country at once. Maybe an appropriate compromise is for central government to facilitate experimentation and diffusion at the local level. One example where this has occurred is with the development of tradeable water markets in Taranaki where a number of central government officials have provided assistance in the design of a locally administered system which is seen as a pilot for possible broader implementation.<sup>26</sup> Where policies must be locally differentiated, the central government cannot effectively innovate but may still have a role in facilitating local innovation.

***Illustration:***

***Implementation of social choices about residential land use***

Let's continue with the residential land use example. To implement residential land use decisions, objective information such as knowledge about road design, siltation problems, and drainage is important for good design. Most local governments have access to this information because residential land use regulation has always been one of their core functions. Local information, such as on specialised land conditions, is necessary for appropriate design of regulation to deal with environmental effects. Local officials have relatively easy access to this information and have experience in dealing with similar land nearby. Monitoring information to ensure that developers and home-owners have followed the regulations is essential to good enforcement. Because local conditions and social decisions are widely varied, the flexibility to match residential land use designs to specific situations rather than use broad rules is valuable. In this case the local advantages clearly outweigh what central advantages may exist in implementation.<sup>27</sup>

However, to the extent that experimentation with new residential land use patterns, or new procedures for processing applications within given rules are important, for example to allow more flexibility and more rapid resolution, central government facilitation may be valuable. Even if a local government does successfully innovate, it will not easily transfer its experience to other local governments. In particular, the central government may have backed too far out of the implementation of the new mandate for outcome-based rather than rules-based regulation. Local governments are having trouble developing and adopting new practices.

If the same level of government makes political decisions and implements them, no arms-length contract is required. In the previous section we presented a framework for determining the appropriate level to make political decisions independent of implementation considerations. What happens when our analyses of the best political decision maker and the most efficient implementer leads us to different actors making political decisions and implementing them?

### *Separability of Implementation from Decision-Making?*

How should the contract be written between the political decision-maker and the implementer if they are not the same? Using local government as an implementer of national policy raises special issues because local government has a different political accountability structure and limited accountability to central government. Similarly, local government has few established mechanisms for demanding services from central government. Any contract between central government and local government is an arms-length contract, which exacerbates any contracting problems.

Clear objectives and lines of accountability are essential. If they are unclear, it is impossible to effectively reward and punish because of ambiguity. It is normally difficult to directly observe effort to achieve objectives. Politically desired outcomes are ideally achieved by contracting for specific non-discretionary outputs. Unfortunately, measurable outputs that relate clearly to outcomes are frequently not available. A contract that rewards some outputs without incentives for the other essential but non-measurable outputs tends to lead to serious misallocation of effort toward measurable, rewarded outputs.<sup>28</sup>

Another pervasive contracting problem is that rewards and punishments are limited. In general, the RMA does not provide central funding for the activities it requires of local authorities. The punishments for non-compliance through the Environment Court are uncertain, slow and limited. The informal punishments, e.g. risk of local government reform, are extremely uncertain. Local government is extremely limited in its ability to reward central government agencies for their assistance. They have limited financial resources and very little political power. When incentives are limited, expectations should be limited accordingly.

We can separate political authority from implementation responsibility only when contracting difficulties can be overcome to a reasonable extent. A contract does not, however, need to be a written, strictly enforceable document. A contract in many cases is more of a relationship. Personal relationships between officials at central and local government levels, concern by implementers for their reputation, promotion incentives, and publicity for successes and failures all provide more diffuse incentives for good performance. Building a good "corporate culture" may be as important for encouraging pride and high productivity as the formal rules. These aspects cannot be created overnight but they can be destroyed. Any reform should pay attention to preserving beneficial relationships and practices and maintaining good aspects of corporate culture, such as morale and team spirit. These aspects are less amenable to hard analysis but become critical when other forms of contract are weak. Non-financial incentives are an area that, in the New Zealand public sector reforms, may have been under-exploited.

On the other hand, combining the political and implementation roles can also create problems. For example, local governments may face a conflict between their decisions under the RMA and their provision of infrastructure. Local government provides local infrastructure services. It is difficult for them to plan the management of these assets (as required under the Local Government Act) when they cannot control where new development takes place. They therefore have a tendency to over-control commercial activity. This illustrates the advantages of a regulator / provider split.

In some situations, if decisions are made by those dealing on a day to day basis with the landowners and industries they regulate, the regulator might be 'captured' and represent the industries' or landowners' interests rather than the wider interests of society.<sup>29</sup> The problem of 'capture' may be less acute in the RMA because we are dealing with directly politically accountable bodies, although given the failures of the democratic process similar problems may arise. In addition, the problems of regulatory capture may sometimes be overstated relative to the advantages, trust, cooperation and good information flows that close relationships can generate.

If contracting is difficult, should either the implementer or the political decision-maker be altered to avoid the need for an arms-length contract? The necessary compromise here depends on the relative advantages of the different potential decision-makers and implementers and on the degree of difficulty in contracting.

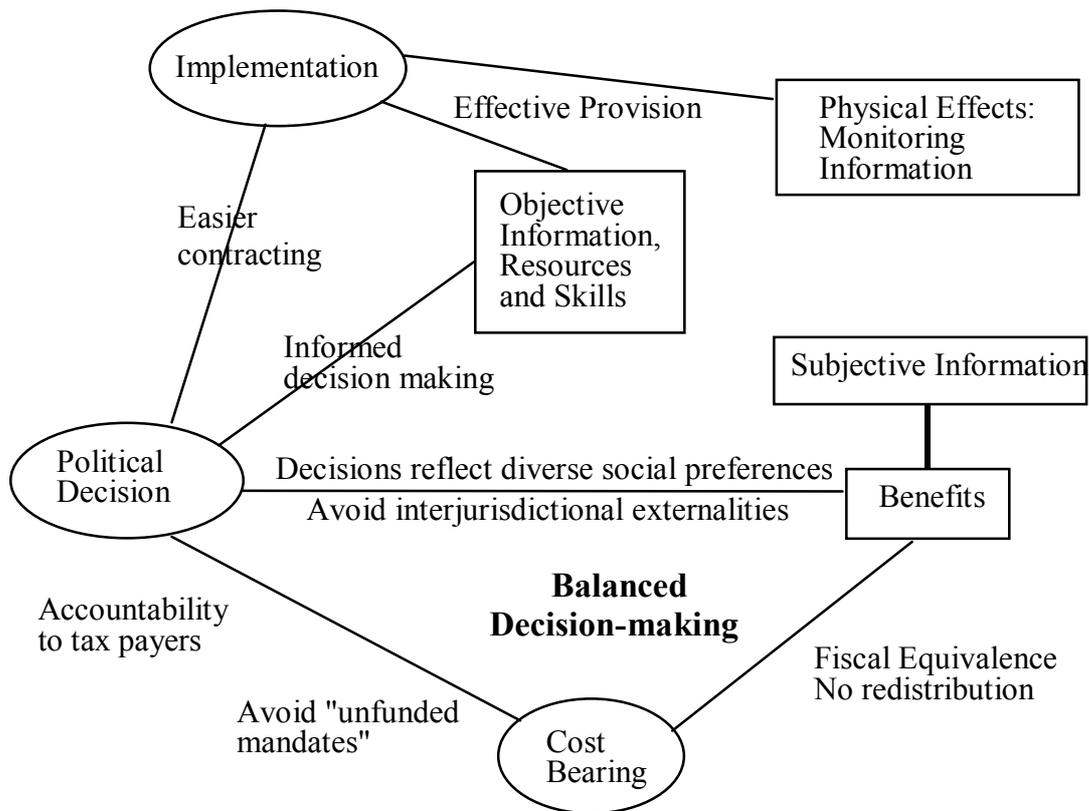
### ***Framework for Analysis of Devolution***

Figure 2 incorporates into Figure 1 the issues related to implementation. Implementation, political decisions, and cost bearing can be borne in different "locations", i.e. different jurisdictions or levels of government. Matches in terms of location, between bubbles, and between bubbles and boxes generate benefits: more efficient implementation, reduced contracting difficulties, more balanced decision making, and more equitable cost bearing.

The framework can be used in several ways. The first is to analyse the sources of success and failure in current policies. For a particular issue, identify the location of benefits, and the location and importance of subjective and objective information and skills. Then from the policy, identify the location of political decisions, implementation, and cost bearing. Draw lines between the nodes where the location is the same. The lines indicate the advantages of the current policy structure. Where lines do not connect nodes, we might expect that problems will arise. We can compare these predicted advantages and problems with observable experience.

The second use would be to design new policy structures. Here we would start with the issue-specific location of benefits and information, and the importance of different types of information, and then try to choose the optimal location for each bubble, making trade-offs between the matches that are formed. The menu of locational choices for the choice nodes is limited in reality by our existing structures of government. We do not have separate government bodies, or even separate laws for every issue, so it is rare that the area of effects exactly matches the jurisdiction of political decision making or the area where costs are borne. Most decisions are a compromise among various concerns. Figure 2 helps clarify the necessary choices and the trade-offs.

The third use arises when there are unavoidable conflicts in choice of location. If a link cannot be achieved, a problem arises. The framework helps us identify the causes of problems and hence identify potential solutions. Alternative approaches may exist for achieving the benefit that the match between levels of jurisdiction achieves. If, for example, implementation is local but there is significant objective information and need for specialised skills which are held centrally, implementation may be inefficient. If we develop effective means of communication between central information holders and local implementers, this conflict can be reduced.

**Figure 2 Devolution Framework****Conclusions and recommendations**

"God grant me the serenity to accept the things I cannot change,  
courage to change the things I can,  
and the wisdom to know the difference"

*The Serenity Prayer,  
By Reinhold Neibuhr.*

The appropriate level of devolution varies depending on the characteristics of the issue and the nature of the institutions involved. When devolution decisions relating to a large number of issues are made simultaneously, trade-offs inevitably arise among issues. For a given set of institutions and jurisdictional boundaries options are more limited still. Nevertheless, by understanding the nature of the trade-offs we gain insight into the situations where it is worth challenging the status quo, the ones where we should endeavour to improve the functioning of existing structures, and those where some degree of poor decisions and inefficiency are not worth addressing.

The RMA has been used to illustrate how the devolution framework may be applied to a particular area of policy. In many ways, the 1991 New Zealand Resource Management Act

is a bold policy experiment. It is an integrated, relatively comprehensive piece of resource management legislation. It emphasises local public participation and has, on an international scale, a very high level of devolution.

Many problems have arisen since the RMA's inception. Many of these existed under prior legislation, and the amalgamation of many Acts has simply concentrated them, while others have arisen since 1991. The problems have three basic sources:

- (i) a mismatch of the jurisdictions of political decision making, benefits, cost bearing and implementation,
- (ii) poor relationships among levels of government, and
- (iii) poor institutional structures within jurisdictions.

This paper has focused on the first two. New Zealanders have a tendency to deal with problems through legislative and fundamental institutional reform. We conclude that the legal/institutional structure of devolution in the RMA is basically sound. Where devolution issues do arise there is a trade-off between the value of comprehensive legislation and the costs of legislation that forces many very different issues to be addressed within the same structure.

The analysis in this paper suggests that effective devolution requires attention to the relationship between central and local government as well as to the ideal location of decision making. The recommendations below are likely to be helpful in guiding future policy on devolution:

*(i) Clarify responsibilities*

Problems can arise when central government intends local government to make decisions but does not make this clear. Where it does want to influence local government, it should provide sufficient guidance. Lack of clarity over responsibilities leads to situations where local government does not feel empowered, and neither local nor central government regards itself as fully accountable.

*(ii) Improve formal and informal contracts between central and local government.*

Where the political decision-maker is separate from the implementer of policy, or the implementer is separate from the holder of critical skills and objective information, the effectiveness of policy depends critically on the quality of the contract between the two. Attention needs to be paid to the incentives of each level of government to cooperate with the other and meet their needs. Central government agencies may need to be proactive in providing support to implementers who may not know what help they need and hence may be unable to contract for it. One aspect of the contract is the formal, written specification of expected outputs, monitoring responsibilities and rewards. Perhaps an equally important, and currently under-appreciated, component of contracts is the informal contract that arises through long-term personal relationships, corporate culture and morale, trust and concern for reputation. These aspects develop through repeated interaction, information sharing, participation in decision-making, and consistent, open honest behaviour on both sides. Some attention to preserving and developing these aspects of contracts may be rewarding.

*(iii) Reduce duplication of objective information and technical skills*

Central government can also contribute to effective devolution by retaining a role in providing easy access to technical information and best-practice techniques. In the case of the RMA, for example, one approach would be to provide standardised 'plans' for local councils that can be adjusted to local needs and interests. Make these simple and close to current practice rather than very ambitious. This would reduce the cost of council compliance with the Act and allow them to focus on specifically local concerns. It would allow incremental change and would help move the 'status quo' from Town and Country Planning Act type planning toward RMA based regulation. It would also make changes and variations in policy across councils more transparent.

*(iv) Facilitate communication*

Communication of experiences and practices between central and local government and among local governments will enhance learning and reduce the costs of experimentation. This can be done by focusing on developing relationships among key people, and by developing consistent information systems.

The central government may also have a role in improving the functioning of local institutions to make them more efficient and more responsive to local preferences.

*(v) Strengthen the political accountability of local government*

The key argument for local government's existence is that it represents local preferences. Any improvements in the local political process will enhance the benefits of devolution. In some cases central government may decide that the poor political accountability of local government, or their limited capacity, makes it inappropriate for them to make certain types of decision. In this case it may be appropriate to limit the scope of local government activity as a last resort.

*(vi) Facilitate innovation in local regulation*

Local governments may not have the skills and resources to innovate and adopt new practices. They may not take into account the benefits their experimentation could have for other districts.

In some situations the mismatches among locations of functions and characteristics are so egregious that the best solution may be to change the level of devolution. One example of this is Significant Natural Areas discussed in the following paper. Central government can reclaim authority over issues by using the provision for National Policy Statements within the RMA. Other issues could be dealt with within the RMA but may benefit from separate treatment.

***Future Directions for Research***

In many ways this paper raises as many questions as it answers. Future research on devolution could usefully take a number of directions. It is inherently difficult to assess the quality of outcomes because part of the point of devolution is to allow heterogeneous outcomes to reflect unobservable preferences. Thus we can most effectively explore the efficiency of devolution in general, and the RMA in particular, by indirect methods. A number of empirical and theoretical ideas could be explored further. We list a few questions below.

1. How heterogeneous are New Zealanders' preferences on different issues?
2. How well does local government reflect local preferences?
3. Can local government be made more politically accountable?
4. What compensation mechanisms could be developed between central and local government, and within local jurisdictions?
5. What are the capability limitations of local government? Should we try to improve their capability, limit their activities or accept the inefficiency?
6. What incentives do central government agencies have to provide proactive and reactive assistance to local government?
7. How appropriate is the split in the current RMA between regional councils and territorial local authorities?

Finally we emphasise that effective policy making and implementation require more than correct levels of devolution. Many aspects of the RMA were beyond the scope of this paper. Other key issues for any review of the effectiveness of the RMA include the clarity and consistency of the law itself, technical issues of how to integrate different environmental concerns, and the potential of alternative policy instruments for achieving the goals of the Act. All of these issues are important. By clarifying the issues related to devolution we hope that it will be easier to distinguish problems that arise from devolution from problems that would arise in any structure. Analysts will be more able to understand the true causes of problems and to analyse them in the appropriate context. **VEC**

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*Endnotes*

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- <sup>1</sup> This article is based on the report "Devolution and the New Zealand Resource Management Act", by Suzi Kerr (Motu Economic Research), Megan Claridge and Dominic Milicich, prepared for Policy Coordination and Development, New Zealand Treasury. It does not represent the views of the NZ Treasury. The authors take full responsibility for any errors or omissions in the information contained in these working papers.
- <sup>2</sup> Frieder (1997) discusses the effectiveness of the integrated approach to environmental protection that was intended in the Act.
- <sup>3</sup> The US system combines a federal agency, the Environmental Protection Agency, and national environmental legislation such as the Clean Air Act and Clean Water Act, with implementation at several levels, state, region, and local community.
- <sup>4</sup> Many articles have been written on different aspects of the RMA both before and since its implementation. For a basic outline of the Act see Ministry for the Environment (1991) and also their website. In particular see Palmer (1990), Salmon (1991), and more recently Dormer (1994), Pavletich and McShane (1997), Ernst and Young (1997), and McShane (1996 and 1998).
- <sup>5</sup> This paper draws on a broad literature on federalism and the optimal size of jurisdictions. Key theoretical references include Alesina and Spolaore (1995), Olson (1980), Tullock (1980), Rubinfeld (1987) and Peterson (1995). Articles specifically relating to resource issues include Oates (1998), and Dinan and Tawil (1997).
- <sup>6</sup> Hardin (1968) discusses what happens with common resources when they are not regulated. Ostrom (1990) discusses the situations in which local communities can self regulate and gives case studies where local regulation of commons is successful and unsuccessful.
- <sup>7</sup> Since efforts to influence public goods on behalf of a large group are themselves public goods, people free-ride and the interests of large diffuse groups tend to be under-represented.
- <sup>8</sup> Samuelson's seminal 1955 article shows the conceptually optimal level of public good provision. Bergstrom, Blume and Varian (1986) show why private provision leads to under-provision of public goods.
- <sup>9</sup> The environmental economics literature provides some methods for estimating the value of non-market goods. These methods are costly and inexact, and in some cases controversial within the profession, but can complement other processes for determining preferences. For an introductory treatment, see Tietenberg (1996).
- <sup>10</sup> Some theoretical mechanisms will lead to perfect preference revelation. These have problems, however, both theoretically and in reality. Incentive-compatible mechanisms such as the Clark-Grove mechanism yield revenue that cannot be used without violating

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incentive compatibility. They are also vulnerable to manipulation. On the practical side, because of their complexity, they are infeasible for large groups or large numbers of issues. In addition, many empirical techniques are used to estimate non-market values. These can contribute to the political process but not replace it.

- <sup>11</sup> For a basic reference on these issues see Stiglitz (1988). For a more advanced discussion see Atkinson and Stiglitz (1980) Chapter 17.
- <sup>12</sup> See Rubinfeld (1987) for a survey of the literature extending this model.
- <sup>13</sup> When central government requires local governments to provide services but does not provide funding this is known as an unfunded mandate. When individuals or jurisdictions do not bear costs they tend to overstate their valuation of the public good, leading to over-provision (Tullock 1980).
- <sup>14</sup> This concept is sometimes called 'fiscal equivalence' (Olson 1980).
- <sup>15</sup> Of course if the jurisdiction for cost bearing is larger than the area of effects fiscal externalities arise and decisions are unbalanced.
- <sup>16</sup> For perceived equity reasons, it is difficult for central government to differentiate policies. It would be even more difficult for central government to tax differently in different areas. People would not make a clear connection between the variance in tax and that in regulations and public services.
- <sup>17</sup> The diagram captures only three of the four criteria for good decision making. One remaining issue that must be considered is whether the costs of duplicating objective information outweigh the benefits that arise through local control of a local issue. In this case they do not. Subjective preferences are very important and likely to be extremely heterogeneous, so any advantage of lack of duplication through one decision being made centrally is likely to be outweighed by the advantages of maximising preference revelation through localised decision making.
- <sup>18</sup> A contrasting example would be deciding appropriate levels of drinking water treatment. Here knowledge about the costs and physical effects of different systems is more important than variance in preferences about water quality. Preferences are probably fairly homogeneous.
- <sup>19</sup> In particular, costs may not be equitably distributed within the jurisdiction if some groups are more politically powerful than others or if there are no mechanisms for compensating land-owners when regulation imposes very high costs on a few individuals.
- <sup>20</sup> In the case of drinking water quality, benefits are at the regional level and objective information is critical. Under the RMA, regional councils make decisions about drinking water provision. Regional council boundaries roughly match watersheds. Water users and ratepayers bear costs. Again, decisions, benefits and costs are aligned.
- <sup>21</sup> In many cases the social decision makers and implementers will be the same people.

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- <sup>22</sup> This saves up-front costs but does leave some uncertainty and scope for strategic behaviour to alter future decisions. Alternatively, uncertainty could be removed by working out solutions to all future situations in advance. This is extremely costly. Solutions must be negotiated for situations that may not occur for many years if at all. This is the route Northland chose with its plan for Significant Natural Areas. See the paper by Claridge and Kerr (1998), in this issue.
- <sup>23</sup> However, we can only exploit economies of scale if the jurisdiction that provides the good can be expanded without violating fiscal equivalence (Olson, 1980). Sewage treatment in a sparsely populated region will not necessarily be made more efficient by combining that region with another. Sewage still needs to be treated close to its source.
- <sup>24</sup> On the other hand, the Schumpeter hypothesis suggests that large monopolies (and hence large governmental units?) are most likely to be innovative because of their supernormal profitability, and ability to capture the benefits internally. Empirical evidence on this is mixed. For discussion and empirical evidence on the Schumpeter Hypothesis, see Cohen and Levin, in the Handbook of Industrial Organization (1989).
- <sup>25</sup> For details on the empirical literature see Karshenas and Stoneman (1995).
- <sup>26</sup> Personal communication with Ross Phillipson, NZ Treasury.
- <sup>27</sup> A contrasting case is given in the following paper where local governments are trying to protect kiwi habitat.
- <sup>28</sup> In addition, the implementer has private information about costs.
- <sup>29</sup> Formal discussion of the problem of capture is provided in Tirole (1992).