Report

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authoritative analysis

Core cities

Collaborating for growth: International experience

NZIER report to LGNZ and MBIE

4 September 2012

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Key points

We have been asked by the Ministry of Business, Innovation, and Employment (MBIE) and Local Government New Zealand (LGNZ) to look at the scope for a collaborative city network in New Zealand, with a specific focus on:

- the experience of collaborative networks internationally
- policy questions that require answers to determine the role of city networks in New Zealand
- city competitiveness and cities' place in the national economy
- research options that will produce a database to assess the regional economies.

This report focuses on the first two areas of focus. The remaining two follow in an accompanying report.

In short, while there appear to be some sensible theoretical reasons why city networks could make a contribution to lifting regional and national economic outcomes, we have found little hard evidence of them actually doing so.

Our review of international networks shows that there are few common themes. Some networks have added value over time, while others have folded before their effectiveness could be observed. Some networks are top down, central government driven and others are bottom up, local government driven. Some focus on contiguous regions, while others are dispersed. Some focus on a specific task, such as lobbying central government, while others coordinate various back office functions and interventions.

International city networks aim to improve economic performance mainly by improving institutional settings. There are some examples of networks directly investing in proximate causes of economic growth (human capital, physical capital and technology), but these drivers of growth are usually addressed first and foremost by central government policy.

New Zealand may lack the scale for successful city networks – especially regionally focused networks. The populations covered by the international examples are significantly larger than the populations in the New Zealand core cities. Conversely, this could instead be seen as an opportunity, as collaboration may result in greater scale and efficiency benefits.

The lack of a ready international city network template to adopt in New Zealand combined with the heterogeneity of New Zealand's cities means the first research/policy step will be to:

- agree on the specific problem(s) that a network would be designed to 'fix': economic distance, scale or efficiencies from policy coordination?
- establish if there are likely to be realisable economic gains from a city network in the New Zealand context. It is not clear from the international literature that such networks lead to measurable gains in productivity.

If this research determines that a network is expected to deliver net benefits, then the network needs to be defined across:

- Institutions – establish whether the tools required to make the necessary changes are best delivered through a bottom up (driven by local government) or a top down (driven by central government) institutional structure. They have different goals, tools, funding arrangements and constraints.
- Funding – city networks which go beyond central government lobbying require continuous and long term funding, because economic policies often take years to bear fruit. Funding should be commensurate with the aims of the network.

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1. Introduction

New Zealand is slipping in global economic ranks. This is because our productivity performance is poor. Can collaboration among cities bolster our economic performance?

At face value, New Zealand looks destined to succeed, regularly ranking as one of the best and easiest places to do business and live. The fundamental institutional structures like rule of law and property rights are working. To improve our economic standing, we need to look deeper.

The Ministry of Business, Innovation, and Employment (MBIE) and Local Government New Zealand (LGNZ) have formed a partnership with the local governments of six cities. This partnership aims, amongst other things, to develop:

- a better understanding of the actual and potential contribution of city-regions to national economic priorities
- a common indicator framework across the six city regions that will allow consistent comparison between cities, and to identify potential areas of collaboration.

In this project, we have been asked by MED and LGNZ to look at:

- the experience of collaborative city networks internationally
- policy questions that require answers to determine the role of city networks in New Zealand
- city competitiveness and cities' place in the national economy
- research options that will produce a database to assess the regional economies.

This report focuses on the role of cities in economic growth, the international experience of city networks, and associated policy questions. The analysis of city competitiveness and data needs follows in a separate report.

Broader goal of more growth

Our interpretation of the purpose of such a network in New Zealand is for the six largest cities[1] to collectively understand their role in the national economy, their comparative advantages, the economic constraints they face, and potential policy solutions to answer the broader question of "How do we lift New Zealand's economic performance?" Recent efforts by organisations to collaborate, such as the Upper North Island Strategic Alliance (UNISA)[2], KiwiNet[3] and Local Government Funding Agency suggest there is an appetite for collaboration already and a role for central government in some cases.

[1] Auckland, Hamilton, Tauranga, Wellington, Christchurch and Dunedin.

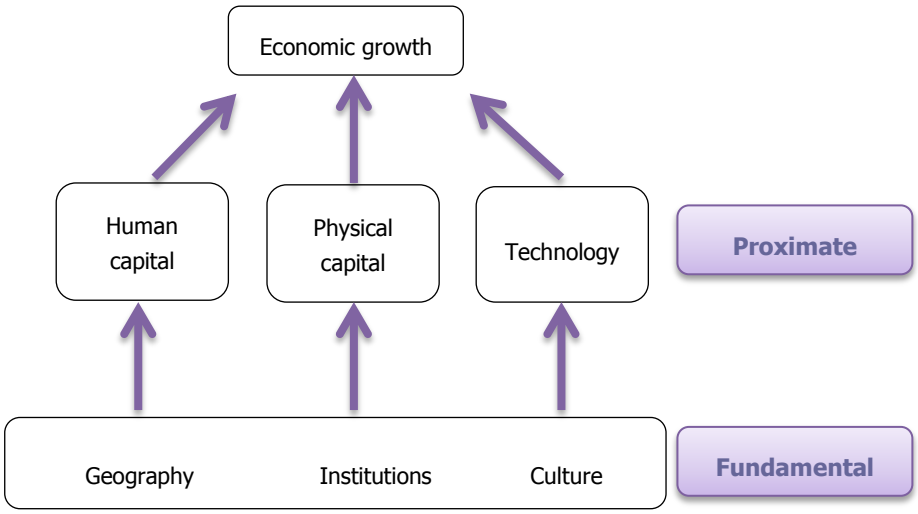
[2] UNISA looks to establish a long-term collaboration between the Auckland Council, Bay of Plenty Regional Council, Northland Regional Council, Waikato Regional Council, Hamilton City Council, Tauranga City Council and Whangarei District Council for responding to and managing a range of inter-regional and inter-metropolitan issues.

[3] The Kiwi Innovation Network (KiwiNet) is a consortium of Universities and Crown Research Institutes who aim to take a collaborative approach to research commercialisation.

2. General theory of growth

Economic growth is driven by the level of physical and human capital in the economy as well as how they work together, which is influenced by the level and application of technology in the economy. These are the proximate sources of economic growth. The underlying determinants of these proximate sources are more complex and revolve around the geography, institutions and culture within an economy. These fundamental drivers determine the level and types of production within an economy.

Figure 1 Drivers of economic growth



Source: Adapted from Acemoglu (2009)

Drivers of city growth

The influence of cities on national economic growth is largely explained through economic geography and the settings of city specific institutions. That is, cities play a role in determining the fundamental drivers of economic activity in the diagram above. Specifically, cities contribute to growth by reducing transport costs for goods, people, and ideas, as well as delivering agglomeration benefits. Agglomeration benefits take a number of forms, such as co-locations for firms, which make them more productive and allow for specialised input firms. Similarly, firms will have lower labour searching costs when they are experiencing productivity gains, and workers will be able to find better matches for their skill sets. Finally, cities will enable faster transfer of information, a higher rate of innovation and allow workers to accumulate greater levels of human capital.

Please refer to Appendix A for additional detail.

3. International experience

There are international examples of cooperative networks of cities and regions that work together to in an effort to improve national outcomes. Informed by discussions with MED and LGNZ, we have selected eight examples of international networks and reviewed them to distil the key lessons for New Zealand. The networks we have included are[4]:

- Core cities – England
- The Northern Way – England
- Scotland's cities – Scotland
- Randstaad – the Netherlands
- Centres of Expertise – Finland
- EUROcities – Europe
- The Greater Pearl River Delta (PRD) – China
- Gulf Cooperation Council (GCC) – Arabian Gulf

We reviewed the networks in three ways to identify:

- their characteristics
- their intended actions
- how they impact economic growth.

3.1 Summary of review

No single international example is best suited to the New Zealand context. The international networks tend to be much larger, tend to focus on contiguous regions and focus on a specific task, such as lobbying or creating centres of excellence.

The networks primarily contribute to economic growth by adjusting city related institutional settings, developing best practice guidelines, sharing research and experiences and representing regional interests to the central government in a coordinated fashion.

New Zealand may lack the scale for successful city networks – especially regionally focused networks. The populations covered by the international examples are significantly larger than the populations in the New Zealand core cities. Conversely, this may be an opportunity, as collaboration will give greater scale and efficiency benefits.

Finland's *Centres of Expertise* is a relevant example of a regionally dispersed network.[5] The *Centres of Expertise* network involves a significant role for central government. This role includes both the selection of regional centres and contributing funding to the centres.

With the exception of the *Centres of Expertise*, the Core city networks tend to focus on 'back office' functions – forming collaborative development strategies, best practice guidelines for city functions, and disseminating city focused research. Perhaps the most important of these back office functions is the goal of working with central Government to ensure that policy settings are appropriate for cities to thrive.

[4] More detailed summaries of each network are presented in Appendix B.

[5] Of the other three reviewed, two (core cities and EUROcities) are essentially lobbying agencies. Scotland's cities is a new endeavour with no projects undertaken yet.

3.2 Characteristics

Table 1 summarises the characteristics review of the international city networks. We found that, in most cases, the city networks:

- focus on specific areas and did not have a wide brief of operations
- are usually funded by local government members, although central government sometimes also contributes funding
- are heavily influenced, in terms of scope and nature of activities carried out, by the extent of central government involvement
- cover a significantly larger population base than the New Zealand core cities.

The examples we reviewed were an equal mixture of geographically centred and dispersed networks.

Table 1 Characteristics of International city networks

Characteristics	Core cities	Northern way	Scotland's cities	Randstad	Centres of expertise	EUROcities	Greater PRD	GCC
Focus	A collective voice to promote the interests of 8 regional cities	To close the output gap between Northern and rest of England	To improve performance of the Scottish cities	No specific regional development focus	To develop regional areas of expertise To create clusters of complementary expertise	To represent members' views to EU To develop best practice guidelines To facilitate sharing of experiences across members	To explore joint development opportunities To integrate Hong Kong and Macau into PRD	To cooperate or collaborate in areas of common interest
Funding *Bottom up (local)* *Top down (central)* *Mixture*	*Bottom up:* Members	*Top down:* Funded by 3 Regional Development Agencies (which were at least part funded by central government) and a £100m invest. fund from central government	*Mixture:* Members and a £5m investment fund from central government	No specific regional development funding	*Mixture:* Members and central government	*Bottom up:* Members	*Bottom up:* Members	*Bottom up:* Members
Outcome	Influenced central government policy	Tightened focus to ind. innovation, private sector invest. and transport	N.A.	N.A.	Coordinated development of regional areas of expertise across Finland	Delivers along lines of its focus	Regional govt. development plan	Region wide investment programmes
Duration	1995 -	2004 – 2011	2011 -		1994 -	1986 -	2004 –	1981 -
Role of Central Government	None	Funding	Investment funding	None	Appoints committee for the Centre of Expertise Programme – coordinates work amongst the clusters and centres of expertise Partly funds clusters and centres	None	None	To participate in intra-regional cooperation
Geographic connection	Dispersed across England	3 regions of Northern England	Dispersed across Scotland	Single geographic region of the Netherlands	Dispersed across Finland	140 member cities across Europe. Generally with population >250k	Part of a single Chinese province	6 neighbouring countries in Arabian Gulf
Population (million)	16.0	14.5	2.6	6.7	N.A.	N.A.	47.9	42.1
Relative size (network to NZ core cities)	16.8	15.2	2.8	7.0			50.2	44.1

Source: NZIER

3.3 Intended actions

Table 2 summarises the intended actions review of the international city networks. We found that:

- nearly all networks intended to influence central government policy
- most networks focused on back office functions
- at a sub-national level, networks undertaking direct action are rare.

Table 2 Intended actions of reviewed core city networks

	Core cities	Northern way	Scotland's cities	Randstad	Centres of expertise	EUROcities	Greater PRD	GCC
Collaborative back office functions								
Strategy development	✓	✓	✓	✓	✓	✓	✓	✓
Addressing information barriers			✓					✓
Development of best practice guidelines for city-specific functions	✓	✓				✓		✓
Policy research	✓	✓			✓	✓	✓	✓
Enhancing links to education sector			✓		✓			
Influencing central Government	✓	✓	✓	✓		✓	✓	✓
Collaborative direct intervention								
Coordinated development projects		✓	✓		✓		✓	✓
Infrastructure investment		✓			✓		✓	✓
Other investment								

Source: NZIER

3.4 Growth impacts

We reviewed the actions of the international city networks against the growth framework in Section 2. Table 3 summarises this review of the international city networks. We found that the international networks impact on economic growth mainly by adjusting the institutional settings within their cities and regions. These settings can include what kinds of policies are employed and how councils/local government implement them.

The framework discussed in section 2 suggests that city networks could play a role in improving economic geography and culture. However, our review provides little evidence that they actually attempt to do so.

Table 3 Core cities' impact on economic growth

	Proximate causes			Underlying causes
	Physical capital	Human capital	Develop of tech	Institutions
Core cities				Policy best practice guidelines and central Government lobbying ensure city level policy settings enable growth. Research (including development of new funding mechanisms); intend to improve the reward structure from capital investment in cities.
Northern Way	Responsible for £100 million fund for direct investment			Policy best practice guidelines and collaborative strategy development ensures city level policy settings enable growth. Reviewing reward structure in the cities to investigate methods to attract private investment.
Scotland's Cities			Working with academic institutions intends to facilitate the adoption of technology	Collaborative strategy development and working with central Government ensures city level policy settings enable growth.
Randstad				Lobbying European institutions and developing region-wide advice on city specific issues will assist city level policy settings.
Centres of Expertise	Centres can lead to investment in new infrastructure	Focuses on enhancing links between business and research institutes	Focuses on complementary innovation across regions	Allows for complementary institutional innovation settings across regions.
EUROcities				Policy best practice guidelines and central Government lobbying ensure city level policy settings enable growth.
Greater PRD	Local and regional Government cooperate on infrastructure development			A number of cooperative institutional initiatives, such as coordinated planning processes, are in place to enhance the performance of the region.
GCC	Members have undertaken investment such as in electricity grid			Technical committees work to harmonise regulations across the region.

Source: NZIER

4. Coordinating

International experience shows central government-run networks tend to have a different structure and focus to those driven by local governments. This suggests that determining the focus of the network is important in determining the appropriate type of network.

4.1 Two types of networks

A city network that is directed by government (top down) will be very different from one directed by local governments (bottom up) because of the differences in their goals and tools available to them. Two contrasting examples are a government directed centres of excellence scheme and a local government lobby group.

Local governments have discretion in the tools that they can use to improve the social, economic, environmental and cultural well-being of their communities (Local Government Act 2002 [LGA 2002]). This is not fully consistent with the central government's aim of boosting national economic growth, which may favour one region over another such as by funding an industrial initiative in only one region. This is a failure of coordination of objectives.

The central government's goal is to use various economic policies to maximise national economic growth, subject to social, equity and fiscal constraints. The central government essentially has a portfolio of districts and regions that are economically distinctive in many ways. It is seeking to maximise returns from this 'portfolio' subject to its constraints.

Role of local government

Local government has only a few direct regulatory roles in New Zealand, as the bulk of the government and regulatory services are provided centrally. The LGA 2002 empowers councils to promote the well-being of communities.

Local authorities are able to decide the services and activities that they undertake to promote their community's well-being. Local authorities are obliged to carry out these activities in a transparent and democratic manner, to consult and take into account the views and priorities of its community.

Role of central government

The central government has key roles in setting economic and regulatory policy. As such, defining the role of central government in a core cities network is important. The role it tends to play in the networks is to act as a co-ordinator and referee.

The literature suggests that networks without central government involvement tend to act as a coordinated lobby group to influence national level policy. Whole is greater than the sum

Coordination across regions is not a zero-sum game – working together can create greater national benefits than working separately. The regions can play an important part in lifting New Zealand's economic performance. There are three key areas of potential gains:

- increasing scale through collaboration
- improving efficiency of policy through coordination
- reducing the economic distance between regions through collaboration.

Concepts of economic geography and agglomeration benefits are particularly applicable to New Zealand. Not only are we small and far away from the world, our cities and regions are often small and far away from each other. Even our largest city is small in an international context. Bringing the cities closer together to promote innovation, scale and efficiency may be an important aspect of improving national economic performance.

Cities face a prisoner's dilemma, from game theory, in developing their economic policy. Uncoordinated economic policies at regional centres can lead two cities to compete for the same resources, for example, to set up biotech hubs in neighbouring cities. This may dilute the impact of both hubs or lead to the failure of one, with wasted resources that would have been better used elsewhere. This is a coordination failure. For example, US studies have shown that inter-state competition on investment tax incentives and research and development tax credits is a zero-sum game.[6] While these incentives boost investment and R&D in the home state, the studies find that investment and R&D in other states falls by the same amount.

If the cities coordinate then investment could occur in complementary sectors, potentially growing both the regional and national economies.

International core city networks contribute to national economic growth by identifying and implementing the best practice in institutional settings that affect city performance. The main tool is coordination, by focussing on 'back office' functions such as developing best practice guidelines for city roles and disseminating city focussed research. Perhaps the most important of these back office functions is the goal of working with central government to ensure that policy settings are appropriate for the cities to thrive.

Working with strengths

Procter (2011) suggests that New Zealand's productivity can be improved by developing higher-value products based on our existing areas of strength.[7] The government can increase the speed of this transition by implementing facilitative policies. Procter states that these policies could focus on:

- supporting the development of businesses that produce these higher-value products, especially by ensuring they have access to capital
- providing access to foreign markets
- facilitating access to new technology and knowledge
- retaining developing businesses in New Zealand until they are at a point where government support is no longer needed.

Cities provide an incubator to develop these new products. The agglomeration returns to labour and technological development that occur in cities can boost the development of these products.

The risk with New Zealand cities is that, with the exception of Auckland, they lack the scale to enable this sort of development. McCann (2009) considers all of New Zealand's

[6] Wilson, D (2007), *Beggar they neighbour? The in-state, out-of-state, and aggregate effects of R&D tax credits,* Federal Reserve Bank of San Francisco Working Paper 2005-08. Available at: [http://www.frbsf.org/publications/economics/papers/2005/wp05-08bk.pdf]
Chirinko, R, and Wilson, D (2008), *State investment tax incentives: A zero-sum game?,* Federal Reserve Bank of San Francisco Working Paper 2006-47. Available at: [http://www.frbsf.org/publications/economics/papers/2006/wp06-47bk.pdf]

[7] Procter, R (2011), *Enhancing Productivity: Towards an Updated Action Agenda,* Ministry of Economic Development Occasional Paper 11/01.

regions to be important exporters.[8] Low connectivity and high transport costs between them and the rest of the world can damage the economy as a whole. He suggests that lowering the transport costs between the regions will bring them closer and could allow agglomeration benefits to accrue.

He also suggests that development in some policy areas, such as tertiary education, could be considered cooperatively at a national level taking into account the strengths of each region.

By extending this kind of cooperation to other areas, smaller cities could overcome some of the barriers to agglomeration.

Continuous and long-term

Networks of cooperation, like the core cities network, are known as Interest-Based Networks.[9] Members within these networks come together due to a similar interest, in this case the on-going development of cities and their contribution towards national economic growth. Because these changes will often take time to bear fruit and may inflict short term pain on some members, the success of such reforms and networks hinges on their long term continuity.[10]

Long term continuity depends largely on trust and cooperation amongst members. The network fails when a member reneges on its obligations. Dollery and Wallis (2001) suggest that a member reneges when it assesses the benefits from reneging are greater than the costs. Reneging provides a member with free-riding benefits from the rest of the network's actions in the short term. Costs of reneging include loss of reputation and restricted future access to the network.

Increasing the long-term benefits of membership will make the network less likely to fail. Long-term plans across a range of issues that require frequent interaction amongst members highlight the long term benefits from network membership. Long term benefits increase the costs of reneging in the short term, so members will be more likely to meet their obligations.

Putting in place a dispute resolution mechanism will allow members to review unfavourable decisions. Such a mechanism will improve the equity in the network and will lower the likelihood of a member wishing to renege on their commitments.

This all suggests that an ad hoc or half-hearted approach to developing such an initiative in New Zealand is unlikely to be effective. Any New Zealand network will need to have clear objectives, a high degree of commitment from members, agreed plans to move towards goals and an analytical framework for assessing progress and performance.

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8 McCann, P. (2009), *Economic geography, globalisation and New Zealand's productivity paradox,* New Zealand Economic Papers, Vol. 43: 3, pp 279-314.

9 Dollery, B., and Wallis, J. L, (2001), *The Political Economy of Local Government,* Edward Elgar Publishing, Massachusetts, USA.

10 An example of short-term pain could be from a co-operative decision to invest in a specific in one region, at the expense of another.

5. Collaborative next steps

5.1 Framework for future research

Future research will need to address policy questions related to the New Zealand Core Cities network. In this section we develop some policy questions. These could be researched and reported using a framework similar to that presented in the Treasury's Regulatory Impact Analysis Handbook.[11]

This framework considers the following aspects of any project:

- problem definition
- status quo
- project objectives
- range of policy options
- relevant stakeholders
- conclusions and recommendations from option analysis
- implementation
- monitoring, evaluation and review.

5.2 Suggested research/policy issues

We have identified a set of policy options and research questions below. These are not exhaustive, but arise directly from the literature and international experience.

5.2.1 Should we collaborate?

- **What economic problem is to be addressed?** Until the precise problem definition is agreed on, and a clear objective for the network stated, discussions about the scope and design of any collaboration or formal network will lack cohesion.
- **Are policies uncoordinated?** If co-ordinated city collaboration or network is the best way to resolve the economic problem, then we recommend you commission research to identify if city and regional policies are coordinated and to quantify the potential economic impacts of different types of city networks. The results will quantify the merits of any partnership, collaboration or network.

[11] Further discussion of this framework is provided in Appendix C. The handbook is available at: http://www.treasury.govt.nz/publications/guidance/regulatory/impactanalysis

5.2.2 What would collaboration look like and do?

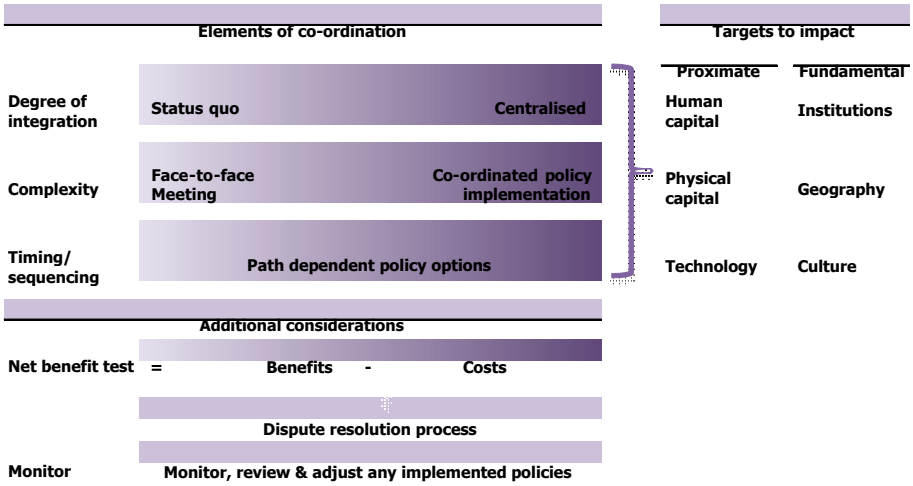
Collaboration can be in various shades, degrees and guises. It is important to consider collaboration options across a number of dimensions:

- degree of integration: status quo to full centralisation
- complexity: data sharing to co-ordinated policy setting
- timings and sequencing: some policies will have to follow others

For the collaboration to be successful, a number of additional mechanisms should be considered:

- net benefit test: any policy option needs to deliver a net benefit
- clearly identify costs or negative impacts and who bears the cost of adjustment
- dispute resolution mechanism to maintain the long term integrity of the collaboration
- monitor, review and adjust: important to do this for any implemented policies.

Figure 2 Aspects of co-ordination



- **What type of collaboration?** You need to agree on why you want to collaborate, through projects or a network and what type of network this will be: whether it will be led top down by the central government or driven bottom up from local government. You should agree on the key aspects of project scope, institutional responsibility and goals, funding arrangements and monitoring.
- **Identify the policy boundaries for collaboration.** With the recently proposed changes to local government roles[12] there needs to be clarity on what levers the network and its members have available. We recommend the group commission research on this topic to clearly define the policy boundaries. This will define the role, relevance and direction of such collaboration.
- **Agree on the definition of geographic region.** We were commissioned to look specifically at the six core cities. However, these city political boundaries

[12] http://www.beehive.govt.nz/release/better-local-government-reforms-announced

do not necessarily define economic boundaries. Economic regions can be much broader. We recommend increasing the scope of the analysis to broader economic regions because of clearly visible complementary industry structures in contiguous districts (such as Wellington, Upper Hutt, Lower Hutt and Porirua).

- **Develop a pilot coordinated development strategy.** We suggest piloting a coordinated economic development strategy, perhaps among a small number of cities or districts with complementary economic structures. This would be an important acid test to see if such collaboration is politically and practically feasible.
- **Role of connectivity.** Commission research to quantify the role of infrastructure (broadly defined across road to ICT) in city/regional performance. The data shows that road density and ICT concentrations are higher in the large cities. How could a network reduce the economic distance between and within smaller cities through improving these connections?
- **Identify barriers to regional business performance.** Commission research to identify region specific barriers to economic performance. This should draw on earlier work to identify the key policy levers available to the network participants. This research could include questions on the role and effectiveness of regional Economic Development Agencies. This will likely be survey based, which will ask a series of questions of businesses. We recommend piggy-backing on an existing survey to reduce costs (for example the MYOB MSE survey).
- **Clusters of like and complimentary firms.** Statistics New Zealand is set to publish updated supply and use tables (for 2007), which summarise the transactions between industries. We recommend commissioning research to identify the economic linkages among and between industries and map them across regions to identify potential gaps or areas of opportunities.
- **Agree to undertake joint research.** We recommend pooling resources to commission research on common issues that are likely to have district/regional implications. This will reduce costs and duplication and improve the comparability and consistency of advice being received. There are various research topics that will be common to councils, such as:
  - risks and opportunities of an ageing population
  - role of education in retaining prime working age population in the region
  - improving fiscal prudency, governance, etc.
  - funding mechanisms for key areas of spending
  - earthquake strengthening of buildings
  - disaster preparedness
  - impact of climate change.

Appendix A Growth framework

A.1 Causes of economic growth

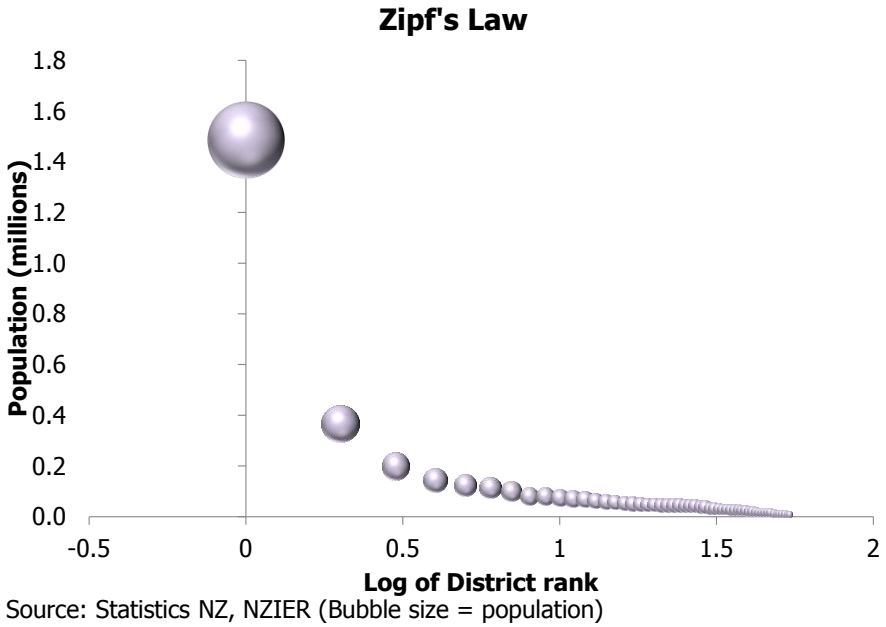
We look at economic growth through two lenses: general economy and local city economy.

At the general level, economic output is a result of the level of physical and human capital in the economy as well as how they work together. The level and application of technology is a key driver of the 'how they work together'.

Economic growth occurs when the amount of physical or human capital or the amount of labour in the economy increases. New technology allowing for capital and labour to work better together also drives growth. The level of technology in an economy is affected by domestic (NZ-wide), local (city-specific), and global factors. The importance of each of these factors on technology in an economy is different across every economy.

The underlying determinants of these causes are more subtle and complex. These revolve around the geography, institutions and culture within an economy. These fundamental drivers determine the level and types of production within an economy. The impacts of these fundamental causes are dynamic. This supports the idea that production in an economy will change over time as these fundamental causes change.

Figure 3 Larger cities are exponentially larger



Source: Statistics NZ, NZIER (Bubble size = population)

An additional aspect at the regional level is economic geography. For example, Zipf's law states that the size and rank of a city is exponentially linked (or linear when shown in logs, Figure 3).[13] This suggests that as cities get bigger there are additional productivity gains. Smaller cities need to find ways to reducing the impacts of being small.

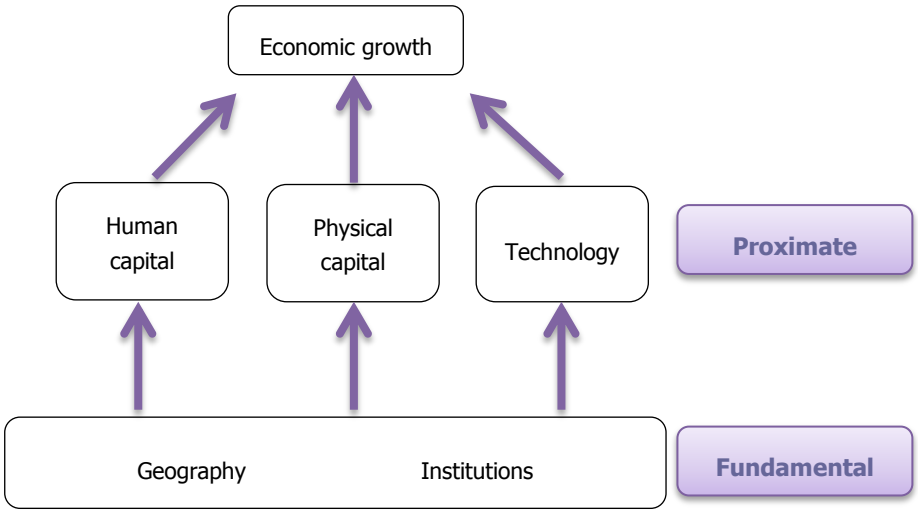
The economic benefits of organising as a city are from the reduction of transport costs (at the broadest sense) for goods, people, and ideas. Co-locations of firms make them more productive and lead to clustering and other benefits. Larger workforces increase labour mobility, which lowers labour search costs for firms when they are experiencing productivity gains, and workers are better able to find matches for their skill sets. Finally, cities enable faster transfer of information, a higher rate of innovation and workers accumulate greater levels of human capital.

A.2 General drivers of growth

Acemoglu (2009) provides a useful framework to review the causes of economic growth.[14] There are two groups of growth drivers (Figure 4):

- Proximate causes: those that have a direct impact on growth
- Fundamental causes: those that affect the development of the proximate causes.

Figure 4 Causes of economic growth



Source: NZIER based on Acemoglu (2009)

A.2.1 Proximate causes

Using the same number of resources in the same production methods will produce the same level of economic output. The economy has to change for economic growth to occur. These changes could be in a range of shapes and sizes such as new factories or

[13] Here size refers to the population of a city, and rank is based on population size. Auckland has the largest population and is ranked first. Christchurch city has the second largest population and is ranked second.

[14] This general review of the proximate and fundament causes of economic growth draws on Acemoglu, D. (2009), *Introduction to modern economic growth,* Princeton University Press, New Jersey.

machinery, staff training programmes, the application of a new production technique that could allow existing human and physical capital to work better together.

The difference in economic performance across countries and over time is related to differences in the level and type of human and physical capital and technology in each economy. In this instance technology covers new production techniques, efficiency gains from developments in production organisation, and new knowledge.

An economy accumulates human and physical capital through investment. It also either develops its own or applies technologies developed overseas. The decisions related to the type and scale of investment or technology adoption is influenced by a range of factors. As an example, consider the influence of reward structures. Decisions to invest in capital or to develop or apply new technology occur when funding is available and the future benefits of the investment outweigh its costs. This suggests that the rewards associated with capital accumulation provide an incentive for investment.

An economy's institutions design the rewards framework for investment in human and physical capital, as well as the development of new technologies. An example of reward structures would be the intellectual property rights associated with technological developments. How people respond to this rewards framework will influence the level of capital accumulation and technology absorption in the economy and therefore its performance.

Rewards are not the only influence on the investment decisions within an economy. Naturally occurring factor endowments will influence the type of capital or technology that is developed, as will market structures, regulation and culture. The role and impact of these are discussed in more detail in the next section.

A.2.2 Fundamental causes

Deeper drivers of growth influence whether capital (or technology) is accumulated (or developed) in an economy. The nature of these fundamental drivers is not static, they change over time, and economies need to change and transform with them to keep growing.

Geography

Geography is important in understanding growth because it has a role in explaining the path countries followed to arrive at their current situation, and where they might go to next. Countries invest in capital and develop technologies that take advantage of their geographic situation, such as climate, natural resource endowments and location. As an example, a land abundant economy is likely to accumulate agricultural equipment and technology.

A concrete example of the role that geography plays in economic development has been explained as part of the 'new' economic geography, as explained by Paul Krugman and Anthony Venables.[15] 'New' economic geography explains the location of industrial production. It suggests that location will be determined by the interactions and trade-offs

[15] A number of papers began the discussion on this topic, including:
Krugman, Paul. 1979. "Increasing returns, Monopolistic Competition, and International Trade." Journal of International Economics 9: 469-79.
———. 1981. "Intra-industry specialization and the gains from trade." Journal of Political Economy 89: 959-73.
———. 1991. "Increasing Returns and Economic Geography." Journal of Political Economy 99 (3): 483-99.
Krugman, Paul, and Anthony Venables. 1995. "Globalization and the inequality of nations." Quarterly Journal of Economics 110: 857-80.

between economies of scale, agglomeration effects and transport costs. Countries that face high transport costs are distant from markets, which 'new' economic geography suggests is vital in determining production and trade decisions.

The effects of a country's geography are not fixed. The impact of geography can change in response to technological advances - the impact of distance on a country will diminish as technologies lower transport costs. This type of advance would encourage investment in different production capability, changing the capital make up of an economy and putting it on a different development path.

Technological advances can change the development path of an economy, but the existing production and trade decisions also determine that path. Procter (2011) suggests that an economy's on-going prosperity rests on continuously upgraded traditional sectors.[16] This historical impact suggests that as technological advances are realised, an economy will produce similar products better as opposed to establishing brand new sectors. At the country level, New Zealand is therefore likely to be reliant on agriculture in to the future. At a city level, it suggests that the current mix of industries is likely to be the source of on-going city development.

The influence of cities on national economic growth is best explained through economic geography. Specifically cities contribute to growth by reducing transport costs and delivering agglomeration benefits. The next section discusses how cities contribute to national growth.

City specific drivers of growth

Cities are groups of people and firms that choose to locate near to each other. The benefits that accrue from this clustering of firms and people are agglomeration benefits. After reviewing the literature in the area, Cuaresma et al (2010) find that agglomeration benefits related mostly to the general cases set out above through to human capital and ideas (technology).[17]

Glaeser (2010) considers that these benefits ultimately come from transport cost savings.[18] Transport costs, in this context, are general and relate to the difficulties involved in trading goods, people, and ideas. The rest of this section will briefly review how reductions in transport costs in each of these three areas can contribute to economic growth.

Cost reductions in transporting goods

The 'new' economic geography, as discussed above, is the dominant explanation for the agglomeration benefits from reduced transport costs for goods. The idea is that a firm will choose its location to minimise the distance to either its inputs or its consumers.[19] Glaeser and Gottlieb (2009) point to examples such as the steel industry in Pittsburgh, which is a

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16 Procter, R (2011), *Enhancing Productivity: Towards and Updated Action Agenda,* Ministry of Economic Development Occasional Paper 11/01

17 Cuaresma, J. C., Feldkircher, M. and Mayerhofer, P. (2010), Regional convergence in Europe and the role of urban agglomerations, In: Mooslechner, P.and Ritzberger-Grüwald (eds) *Focus on European Economic Integration*, Oesterreichische National Bank, available at: [http://www.oenb.at/en/img/feei_2010_q3_tcm16-204826.pdf]

18 Glaeser, E. L. (2010) (eds), *Agglomeration Economics,* University of Chicago Press, available at: [http://www.nber.org/books/glae08-1]

19 Firm location, as explained by 'new' economic geography, is also determined by the role of economies of scale. It is assumed that production faces fixed costs, such as plant costs, which can be overcome with scale. If production did not include fixed costs, then firms could operate in a larger number of locations to face much lower transport costs.

city built around coal, and the garment manufacturing and printing and publishing industries in New York which had high local demand.[20]

Being closer to either group reduces the costs associated with transporting goods, making the firm more productive. Aggregating this productivity over a city can lead to an impact on national productivity.

The effect is amplified when the role of intermediate inputs is taken into account. Firms that locate together are likely to have a range of shared inputs. Covec (2008) notes that a city is able to support firms that provides those inputs.[21] Examples of these types of inputs could include business services such as legal or economic advice. Glaeser and Gottlieb (2009) suggest that specialisation in business services creates increasing returns to scale. As cities grow, more specialised services can be sustained. This allows specialist providers to accrue greater benefits than if the service was provided by generalists.

A negative side-effect of cities can be congested roads. Congestion can be a risk for agglomeration, where transport costs increase in a congested city and reduce the agglomeration benefits that would otherwise accrue.

Cost reductions in transporting people

The large clustering of firms and people that occurs in a city allows for better labour market outcomes. This is because, from a worker's point of view, there is a greater chance of finding work in an organisation that closely matches their particular skill set. This is also true for firms, as they have a greater chance of securing the labour needs that they specifically need. This in itself is not the source of agglomeration benefits.

Glaeser and Gottlieb (2009) note that Alfred Marshall first discussed the role of labour market agglomeration effects in 1890. He noted that benefits arise when a firm experiences demand or productivity shocks. With clustering of firms, workers in a firm that experiences a negative impact can easily shift to firms that are experiencing positive performance. This reduces the costs of finding staff, and allows firms to take advantage of productivity gains. Quigley (2008) refers to this process as statistical economies of scale.[22]

This idea suggests that the gains from co-locating firms will be greatest for firms that use the same type of labour but face different shocks. Glaeser and Gottlieb (2009) note that this indicates that agglomeration benefits can arise when firms within a similar industry cluster or when firms across a number of industries cluster. Henderson (1998) defines the gains arising from intra-industry clustering as 'localisation benefits' and gains from inter-industry clustering as 'urbanisation benefits'.▪[23] Covec (2008) refers to Marè and Timmins (2006) who found that in Auckland localisation increases productivity, while urbanisation led to productivity decreases.[24] This suggests that, for some industries, it is better for firms within the same industry to cluster, instead of clustering firms across a range of industries.

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[20] Glaeser, E. L., and J. D. Gottlieb (2009), *The Wealth of Cities: Agglomeration economies and spatial equilibrium in the United States,* NBER Working Paper Series, Working Paper 14806, available at: [http://www.nber.org/papers/w14806].

[21] Covec (2008), *Drivers of Economic Growth in Auckland: A report prepared for the Royal Commission on Auckland Governance,* Covec, available at: [http://www.covec.co.nz/sites/covec.tst/files/resources/Drivers%20of%20Economic%20Growth%20in%20Auckland.pdf]

[22] Quigley, J. M. (2008), Urban Diversity and Economic Growth, *Journal of Economic Perspectives,* Vol 12, No.2 127-138.

[23] As cited in Glaeser and Gottlieb (2009)

[24] Covec (2008) do note that Marè and Timmins advise caution as their results are not "economically large in aggregate, nor uniform across different firms and industries".

Cost reductions in transporting ideas

Glaeser and Gottlieb (2009) find that cities help with the flow of ideas in three general ways.

- Clustering allows for quicker transfer of information across firms, making them more productive. This is relevant for industries like journalism and finance where having the latest information increases the value of their services.
- Close proximity of firms increases innovation rates. Glaeser and Gottlieb (2009) note that this could occur through the concentration of large firms (suggesting localisation benefits), the combination of old ideas, developments in response to consumer needs, or even discussion of new ideas in social settings.
- Better flow of ideas leads to easier accumulation of human capital. Workers with similar skills learn from each other, as they witness the mistakes and accomplishments of other workers and adapt. Clustering of similar workers provide more teachers for junior workers. This suggests that workers will gain higher skill levels in cities than in non-urban locations, which will contribute to national economic growth.

Institutions

Institutions are important for growth because they set out the rules for economic interaction within an economy. "Good" institutions encourage people to act in a way that enhances growth – they incentivise the accumulation of physical and human capital and the development or adoption of new technologies.

Definitions of institutions can be general and vague. Acemoglu (2009, page 119) cites Douglass North's definition as:

> *"Institutions are the rules of the game in a society, or more formally, are the humanly devised constraints that shape human interaction."*

This definition covers three important aspects of institutions:

- they are designed by humans and reflect the choices they make about their own economic development
- they constrain the behaviour of individuals
- they provide incentives which shape human behaviour.

From a macro-economic point of view, there are two groups of institutions: political and economic. Political institutions set out the way that collective decisions making within a society. Economic institutions set out the incentive arrangements in an economy, specifically they set out the:

- structure of property rights
- presence and functional settings of markets
- types of contracts available to firms and individuals.

By influencing behaviour, institutions set the environment from which an economy can grow. A risk with institutions is that they may not be flexible enough to allow people to take advantage of all new opportunities. New technologies or production methods may not be applied in an economy if its institutions are not supportive. Reform of institutions needs to be considered regularly to ensure that they set the rules the deliver the economic growth that the society desires.

Culture

Acemoglu (2009) considers the role of culture in economic growth to be complementary to the institutional factors discussed above. A country's culture determines how its citizens behave in different situations. This indicates that culture will determine the economic outcome from the institutions that are in place in an economy. The success of some institutions may depend on the cultural state of an economy.

A country's culture is dynamic. As the culture changes the behaviours of citizens will change. This indicates that institutions will need to keep up with the cultural change, as existing institutions may fail and others may become more successful.

Appendix B International core city networks

B.1 Core cities – England

The Core Cities is a network of eight of the largest cities in England, and does not include London.[25] The network was formed in 1995 with the intention of providing a collective voice to promote the interests of those regional cities. The eight cities are: Birmingham, Bristol, Leeds, Liverpool, Manchester, Newcastle, Nottingham, and Sheffield.

The group has three main functions:

- to lobby central Government regarding the appropriate policy settings for cities[26]
- to undertake and publish research on economic policy affecting cities – such as transport, innovation, skills and employment, finance and industry, and governance. Examples of this work has included new funding mechanisms for local infrastructure, and outlining the transport infrastructure requirements needed for the members to optimally grow.
- work with member cities to exchange ideas and development best practice advice.

The network does not work on joint development projects across its member cities.

While this group has been established since 1995, there does not appear to be any analysis of the success of the network. There is also no discussion about how the success of this group could be measured.

B.2 The Northern Way – England

The Northern Way was an initiative designed to provide the regions in northern England with an opportunity to close a £30 billion output gap between the north and the rest of England.[27] It was established in 2004 and allowed the three northern Regional Development Agencies (RDAs) to formulate a growth strategy to close the output gap. As part of this strategy, the Northern Way was to identify regional investments to which the central Government would fund £100 million.

The Northern Way identified 10 areas of investment and began work-streams to build evidence in those areas.[28] It also began to develop economic development policies for the

[25] This information has been obtained from the core cities website - http://www.corecities.com.

[26] The core cities group appears to be successful in this area. Recent changes in England have provided regions with more power to develop and implement their own development strategies, in what are known as 'City deals' to be negotiated between the central Government and specific cities.

[27] Information on the Northern Way was sourced from its website: http://www.thenorthernway.co.uk, A 2007 Price Waterhouse Coopers evaluation review of the City Region Development Programmes (available at: http://www.thenorthernway.co.uk/downloaddoc.asp?id=461), The review of the Northern Way from 2004-2008 (available at: http://www.thenorthernway.co.uk/downloaddoc.asp?id=683) and The review of the Northern Way 2008 – 2011 (available at: http://www.thenorthernway.co.uk/downloaddoc.asp?id=850).

[28] Following an evaluation of its work between 2004 and 2008, the Northern Way reduced this to 3 specific areas – Innovation in Industry, Private Sector Investment, and Transport.

north. It focused its work on the 8 northern city regions, which were required to work with the Northern Way to develop City-Regional Development Plans (CRDPs).

Over its lifetime the Northern Way worked in four ways:

- develop evidence to support new investment
- develop new collaboration between public and private investment
- influence decisions across the region and at a national level to ensure that policies complement Northern development
- ensure the CRDPs work across administrative boundaries in the eight northern city regions.

The Northern Way commissioned two independent evaluations of their work, one between 2004 and 2008, and the other between 2008 and 2011. The initial review found that the Northern Way had made limited progress to closing the output gap, the rate of growth in the gap had slowed. It also noted that the impacts of the initiative were likely to be felt over the next 20 years. It recommended that the Northern Way focus its efforts on fewer investment areas to maximise its impacts. This review did review the North's progress across a range of indicators (Table 4).

The second review was a qualitative assessment. It found that the Northern Way represented good value for money, but its impacts were limited as it responded to the global recession, associated funding cuts, and the closure of the RDAs by the current Government. As a result of those closures, funding for the Northern Way was not extended beyond March 2011.

Table 4 Measures of city success used in the 2004-2008 Northern Way evaluations

Measure	Indicator
Output	Gross Value Add (GVA)
	GVA per head
Productivity	GVA per hour worked
Employment	Employment rate (% of Working Age Population)
Skills Attainment	Higher (NVQ4+)
	Intermediate (NVQ2 and NVQ3)
	Basic (NVQ1)
Innovation	R&D spend (% of GVA)
Enterprise	VAT registrations per 10,000 Working Age Population
	Business start-up rates

Source: Adapted from SQW (2009)

The current Government has changed regional development policy in England. Funding for RDAs was removed and has recently been replaced by Local Enterprise Partnerships (LEPs). LEPs are partnerships between the private sector and local authorities that aim to improve regional economic performance. These partnerships can span multiple geographic regions.

B.3 Scotland's Cities – Scotland

In late 2011, the Scottish Government announced a new alliance with the cities of Aberdeen, Dundee, Edinburgh, Glasgow, Inverness, and Stirling, to develop frameworks that would enable collaboration between the cities, and attract investment to finance growth in those cities.[29]

This network is focused on improving the performance of the cities by:

- overcoming information barriers to investment by preparing a clear investment proposal
- maximising the benefits from central Government's planned infrastructure investment
- developing innovative ways for cities to finance new infrastructure investment
- collaborating on projects of scale that take into account each cities competitive advantages
- taking advantage of existing academic strength within each city.

This is a recent development so lacks any assessment of success. The network does intend to measure its success based on increased investment, business growth, and job creation within the cities.

B.4 Randstad – the Netherlands

The Randstad is a poly-centric urban area in western Netherlands with a geographic area that includes Amsterdam, Rotterdam, The Hague, and Utrecht.[30] The governance throughout the region occurs at two levels. The Randstad makes up some 147 municipalities and parts of 4 provinces. Cooperation between these authorities does take place, but the OECD notes that 93 percent of the cooperation between municipalities is undertaken on an issue by issue basis.

Regio Randstad is an agency that focuses on collaboration across the whole Randstad region. Its goal is to increase the appeal of the Randstad as a place to live and to increase the region's international competitiveness. This agency represents the interests of the region at the European Union.

The OECD refers to a 2005 evaluation of Regio Randstad that noted a number of weaknesses in the agency.[31] The main weakness was that the agency appeared to focus on the interests of the governing Board and not the interests of the region. The OECD suggests that focusing on specific programmes instead of a thematic approach would improve the agencies performance.

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29 Information in this section is based on *Scotland's Cities: Delivering for Scotland,* available at: [http://www.scotland.gov.uk/Resource/Doc/365367/0124252.pdf]

30 Information was sourced from OECD (2007), *OECD Territorial Reviews: Randstad Holland, Netherlands,* available at: [http://browse.oecdbookshop.org/oecd/pdfs/free/0407011e.pdf]

31 The evaluation, in Dutch, is available here: [http://www.noord-holland.nl/zoeken/get_url.asp?page=/provstukken/OPENBAAR/PSCIE/DIVERSEN/FBO%20Evaluatie%20Bestuurlijke%20Samenwerking%20Randstad%20%28Teisman%29%20051026.pdf]

B.5 Centre of Expertise programme – Finland

The Centre of Expertise programme has been operating in Finland since 1994.[32] For the first 13 years, the programme initially focused on developing regionally based partnerships, or 'centres' that work in an area of regional speciality. From 2007, the programme shifted focus to create 'clusters of expertise', which required centres with complementary expertise to network together for further innovation gains.

The centres comprise businesses, research institutions, technology centres, and local and regional Government. These partnerships form and then tender to central Government for partial funding. The tender needs to show that the developed expertise would represent the development needs and business opportunities in that region. Central Government funds centres in a coordinated way to eliminate unnecessary competition across regions.

Central Government provides only partial funding. Other funding comes from the businesses, research institutes, and local Government. In the Finnish experience, local Government funds a lot of the infrastructure for the centre of expertise, such as development parks.

The four evaluations between 1997 and 2006 found that the programme's objectives were 'well met'. They noted the 'catalysing impact' of the programme on the retention and growth of businesses, innovation activity and jobs.

B.6 EUROcities – Europe

EUROcities is a network of over 140 large cities across more than 30 European countries. It was first established in 1986.[33] The network is not intended to undertake joint intervention programmes by its members; instead it provides a platform to:

- make city focused representations to the on-going work and development of the European Union
- allow ideas and lessons from previous experiences to be exchanged between members.
- undertake and commission research on city related issues, such as climate change or the impacts of clustering on cities
- collaborate in developing best practice guidelines for city issues

There appears to be no reviews of the contribution of this network to the economic development of individual members.

B.7 Greater Pearl River Delta Region - China

The Greater Pearl River Delta (PRD) is a geographic area spanning a triangular area from Guangzhou to Hong Kong and Macau in Southern China.[34] The area includes nine Chinese regions as well as the Hong Kong and Macau SARs.

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[32] Information was sourced from *Centre of Expertise Programme: 2007-2013,* as provided by MED's Auckland Policy Office.

[33] Information was sourced from http://www.eurocities.eu

[34] Information sourced from: Yeung, Y (2005), *The Pearl River Delta Mega Urban-region: Internal dynamics and external linkages,* Shanghai-Hong Kong Development Institute, Occasional Paper No. 12 available at: [http://www.cuhk.edu.hk/shkdi/OP/OP12.pdf]. Miu, C (2005), *A stronger Pearl River Delta: Government Initiatives,* Research paper in urban Development and Design, Australia-China Chamber of Commerce and Industry of New South Wales, available at: [http://www.accci.com.au/students.htm#koop]. Enright, M. *et al* (2003), *Hong Kong and the Pearl River Delta: The economic integration,* The 2022 Foundation, available at:

The Chinese Government granted the regional and local Governments in region more autonomy in economic decision-making. Subsequent local policies lead to investment and export production growth. The region has been a strong driver of China's economic performance over the last two decades.

Further growth opportunities were expected from greater interaction with Hong Kong when it was returned to Chinese sovereignty in 1997. The outcomes did not meet expectations. Greater competition with other Chinese regions as well as competition and poor coordination within the PRD are some reasons for the poor outcomes. A prime example of the poor coordination is the five large airports within a 100-kilometre radius of each other.

A number of initiatives are now in place to correct this coordination problem. Coordinated five-year plans are regularly developed at both the local and regional Government level. A Pan-PRD Regional Cooperation and Development agreement was signed in 2004. This agreement focuses on:

- exploring opportunities for joint development within the region
- strengthening transport linkages in the region
- integrating Hong Kong and Macau into the region
- developing the western region of PRD

The Pearl River Delta Urban Cluster Cooperative Development Plan 2004-2020 was also enacted in early 2005. This is a planning framework to guide coordinated economic development. Its objective is to ensure that the region's limited resources are best used for the collective good to enhance its competitive edge.

We have been unable to source any English evaluations of the success of these cooperative initiatives.

B.8 Gulf Cooperation Council (GCC) – Arabian Gulf

The GCC is a platform for six Middle Eastern countries to cooperate or collaborate in areas of common interest. The Council formed in 1981 and its members are Saudi Arabia, Bahrain, Kuwait, Oman, Qatar, and the United Arab Emirates.[35]

The Council specifically cooperates across economic and financial affairs, commerce, customs and communication, education and culture. The members intend to apply similar regulations in these areas.

Technical committees develop the harmonised regulations and provide advice and recommendations to a Supreme Council. The Supreme Council decides whether to enact the regulations. Ministers and other officials from the member countries form the membership of the technical committees.

Regulatory cooperation does not always occur, even when a technical committee considers that policy area. Higher education has become a highly competitive sector with

[http://www.2022foundation.com/reports/000001.pdf]. Macau Trade and Investment Promotion Institute (unknown), *The co-operation and development of Pan Pearl River Delta,* available at: [http://www.ipim.gov.mo/en/publication/newsletter/213/213_1.htm].

[35] Information sourced from Patrick, N (2011), *The GCC: Gulf state integration or leadership cooperation,* Research paper number 19, Kuwait Programme on Development, Governance and Globalisation in the Gulf States, The London School of Economics and Political Science.

members outdoing each other in terms of prestige and partnerships with foreign universities.

Cooperative infrastructure investments have taken place. The prime example is the development of a common electricity grid. A joint agency, the GCC Interconnection Authority (GCCIA), developed the grid. Oman is expected to join the grid in 2013, linking all members to the same network. Patrick (2011) suggests that planned rail investments could follow a similar path.

Appendix C RIS framework

The framework used to determine the appropriate policy questions that future research could address is based on Treasury's Regulatory Impact Statement (RIS) framework.[36] This appendix contains the information that Treasury recommends being included in a RIS.

Status quo and problem definition

- Describe the key features of the current situation, including any existing legislation/regulations or other government interventions/programmes, and features of the market, as relevant.
- Explain any relevant decisions that have already been taken.
- Describe the costs and benefits of status quo, i.e., expected outcomes in the absence of any further government action.
- Identify the root cause of the problem (not just the symptoms).

Objectives

- Explain the desired government outcomes/objectives against which the options are assessed, eg, the level of risk reduction to be achieved.
- State whether there is an authoritative or statutory basis for undertaking the analysis, eg, a legislative requirement to annually review the regulation.
- State whether the outcomes are subject to any constraints, eg, whether they must be achieved within a certain time period or budget.

Regulatory impact analysis

- Identify the full range of practical options (regulatory and non-regulatory) that may wholly or partly achieve the objectives. Within the regulatory options, this includes identifying the full (viable) range of regulatory responses.
- For each feasible option:
  - identify the full range of impacts (including economic, fiscal, compliance, social, environmental and cultural) and provide an appropriate level of quantification
  - describe the incidence of these impacts (i.e., who bears the costs and the benefits).

Consultation

- Explain who has been consulted and what form the consultation took.
- Outline key feedback received, with particular emphasis on any significant concerns that were raised about the preferred option, how the proposal has been altered to address these concerns (and if not, why not).
- If there was no limited or no consultation undertaken, the reasons why.

[36] This is available in the Treasury's Regulatory Impact Analysis Handbook, available at: http://www.treasury.govt.nz/publications/guidance/regulatory/impactanalysis

Conclusions and recommendations

- Summarise and present the outcome of the options analysis.
- It is not mandatory for an agency to recommend or reject a particular option. But where an agency does so, it should explain and justify their recommendation in the RIS.

Implementation

- Summarise how the proposed option(s) will be given effect, including transitional arrangements.
- Describe how implementation risks will be being mitigated.
- Describe the steps that are being taken to minimise compliance costs.
- Describe how the proposal would interact with, or impact on, existing regulation, including whether there is scope to reduce or remove any existing regulations.
- Outline the enforcement strategy that will be implemented to ensure that the preferred option achieves its public policy objectives.

Monitoring, evaluation and review

- Outline plans for monitoring and evaluating the effectiveness of the preferred option, including performance indicators and how the necessary data will be collected.
- Explain how it will be reviewed and what the review process will involve (and if no plans for review, the reasons why).