

# Creating a weightless economy: Positioning New Zealand to compete in the global economy

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## EXECUTIVE SUMMARY

### **1. A strategy for competing globally**

To succeed in an intensely competitive global economy, New Zealand must determine how it wants to compete. New Zealand is more likely to succeed in weightless goods and services: adding knowledge-based value to physical products, developing business models that locate the production process offshore, as well as producing services that can be transported virtually.

### **2. New Zealand's current position**

New Zealand has traditional strengths with good prospects, particularly in the primary sector, but has not developed new areas of significant international competitive strength. In particular, New Zealand's weightless economy is small.

### **3. Some ideas for action**

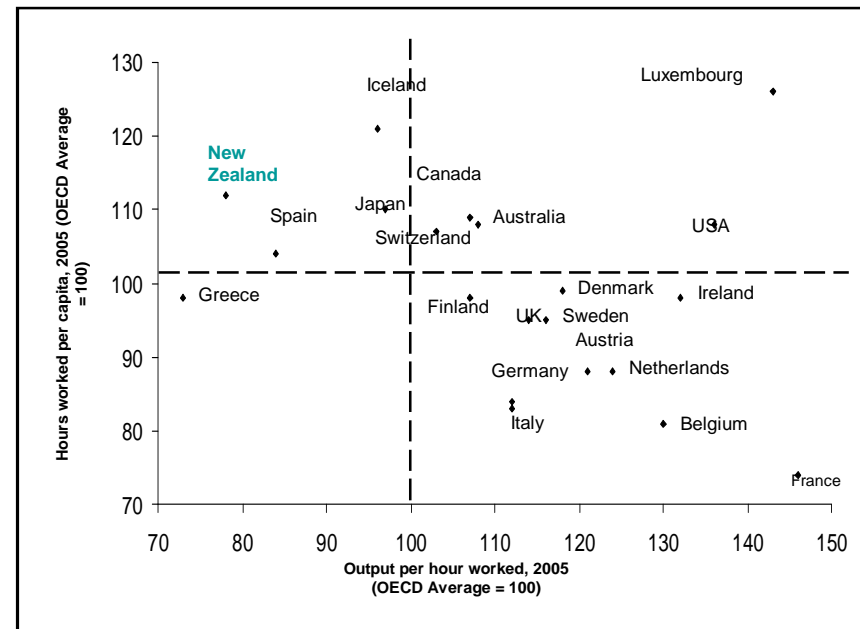
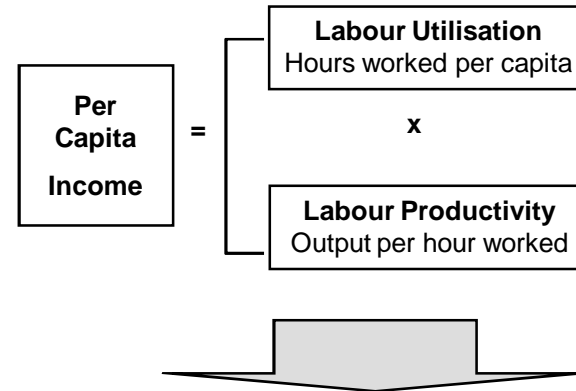
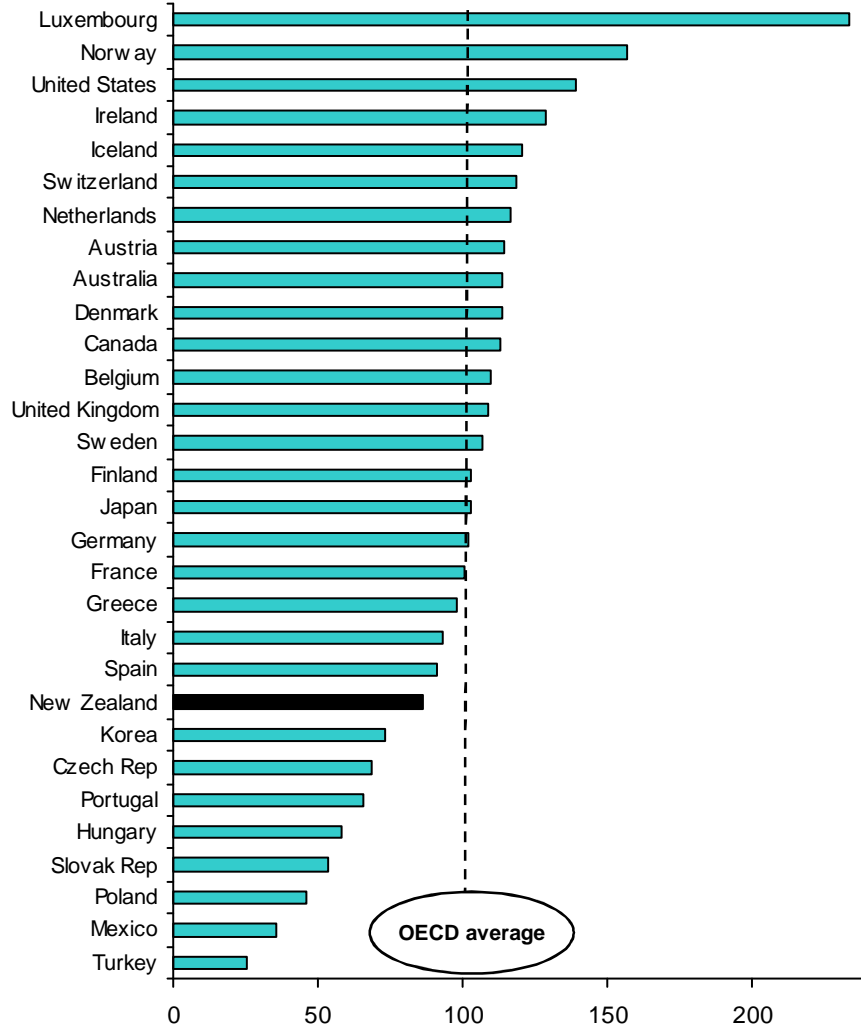
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### **4. Concluding remarks**

New Zealand needs to make a decision to compete globally on the basis of weightless strengths, and then invest systematically across a range of areas to develop these strengths.

# NEW ZEALAND HAS RELATIVELY LOW PER CAPITA INCOME DUE TO LOW LABOUR PRODUCTIVITY

**GDP per capita (PPP)**  
Indexed to OECD average, 2005

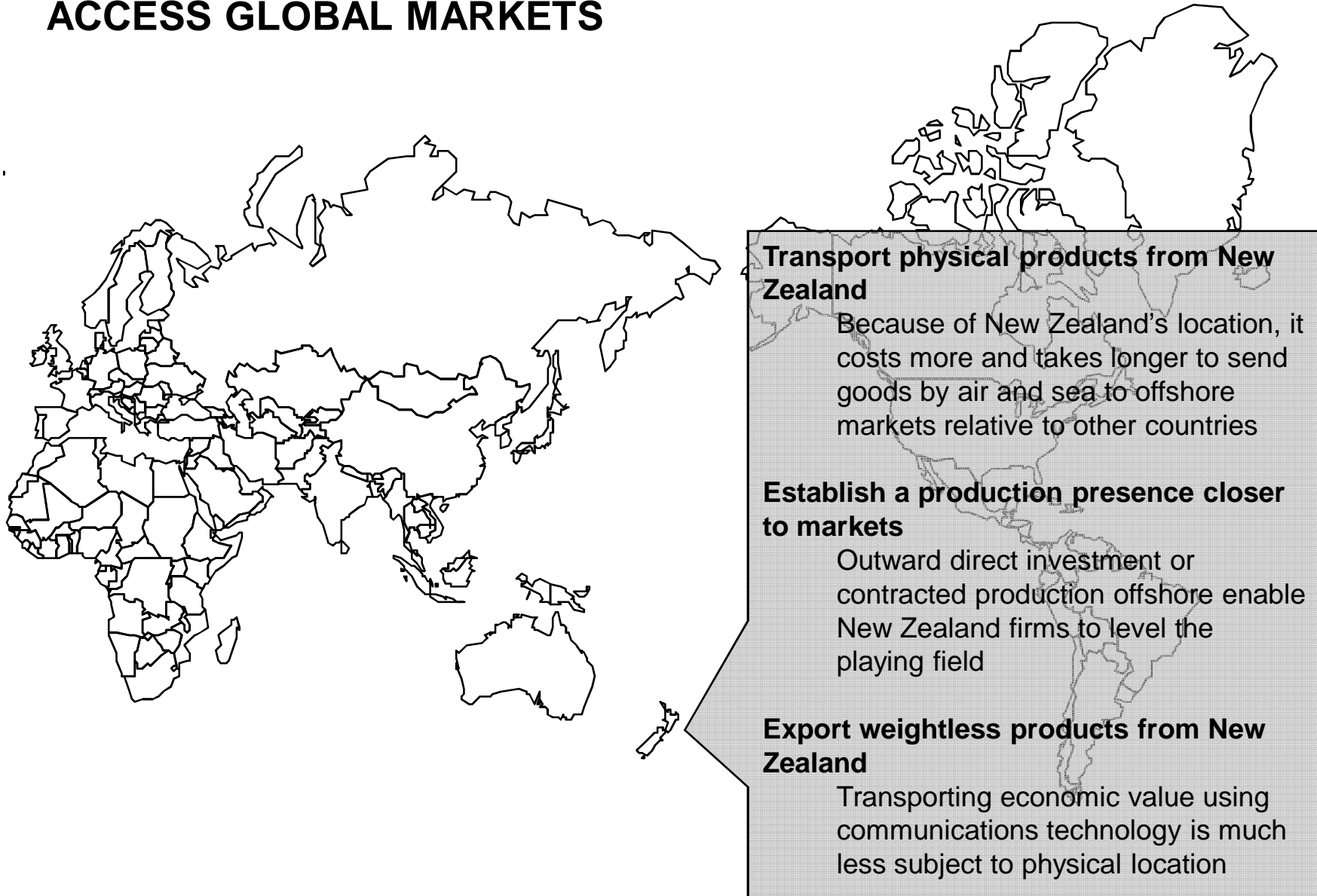


Source: OECD.

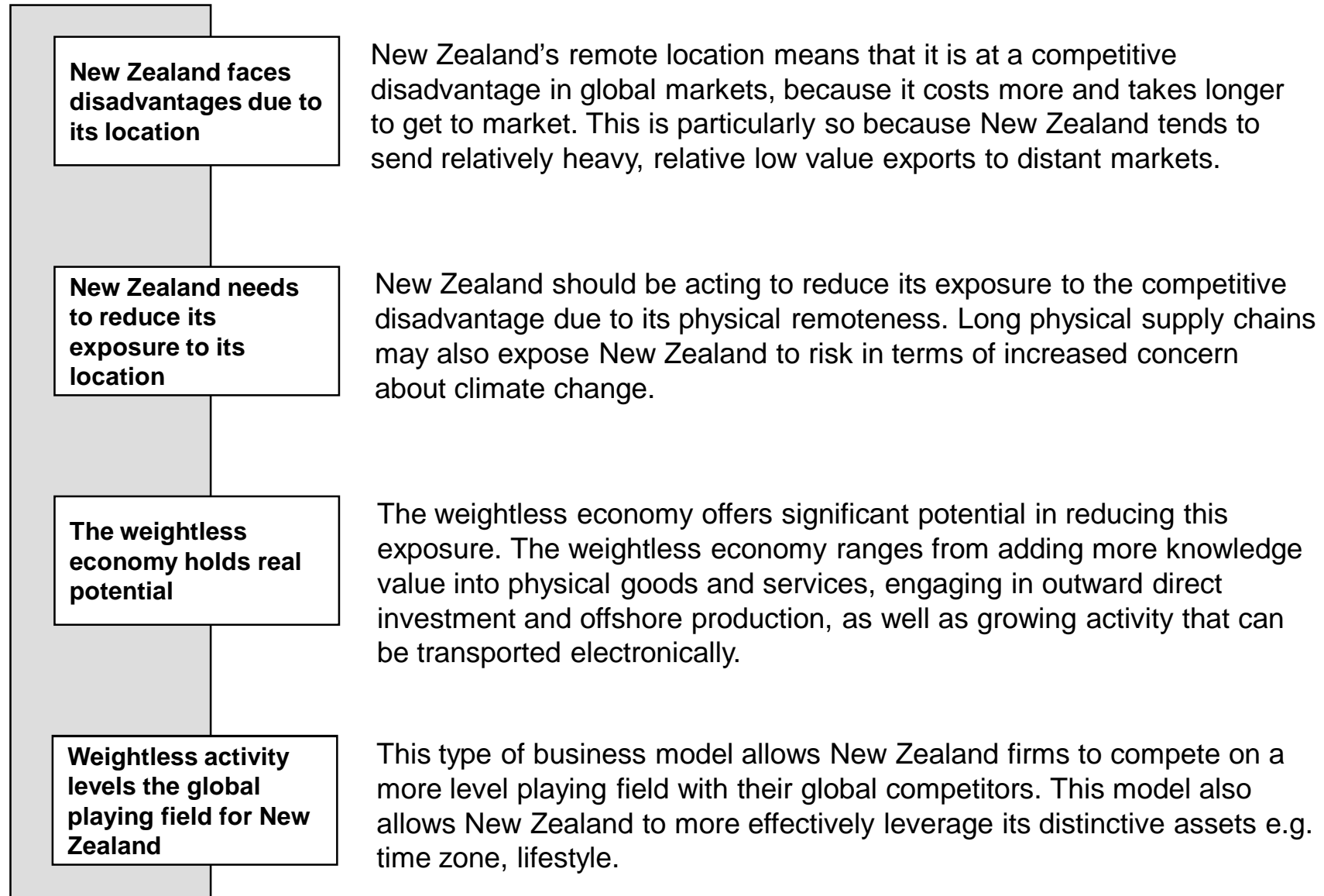
# TO GROW ITS ECONOMY, NEW ZEALAND NEEDS TO GO GLOBAL



## THERE ARE A FEW WAYS IN WHICH NEW ZEALAND FIRMS CAN ACCESS GLOBAL MARKETS



# DEVELOPMENT OF THE WEIGHTLESS ECONOMY SHOULD BE A HIGH PRIORITY FOR NEW ZEALAND



# THIS SHIFT IN EMPHASIS IS NECESSARY FOR NEW ZEALAND TO GROW STRONGLY

**New Zealand has existing strengths**

New Zealand has historical strengths in the primary sector, as well as more recently in tourism. Some of these sectors have promising outlooks e.g. strong dairy prices.

**New Zealand needs additional strengths**

But despite recent growth in these sectors, New Zealand's international performance remains ordinary. The scale of New Zealand's economic challenge means that more growth is required than can be delivered from these sectors alone. The weightless economy is additional to New Zealand's historical strengths rather than a substitute.

**Capture a portion of global growth**

Globally, significant growth is expected in the weightless economy over the next few decades e.g. in the creative industries, export education, commercial R&D, as well as in terms of foreign direct investment. New Zealand needs to develop strength in the weightless economy to capture a share of this global growth.

**Where else can growth come from?**

If not in the weightless economy, where else can New Zealand be expected to generate strong competitive advantage and significant international growth opportunities? Focusing on the weightless economy is not a guarantee of success, but it does hold substantial potential.

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# NEW ZEALAND HAS NOT GROWN MANY NEW AREAS OF STRENGTH IN TERMS OF EXPORTS OF GOODS

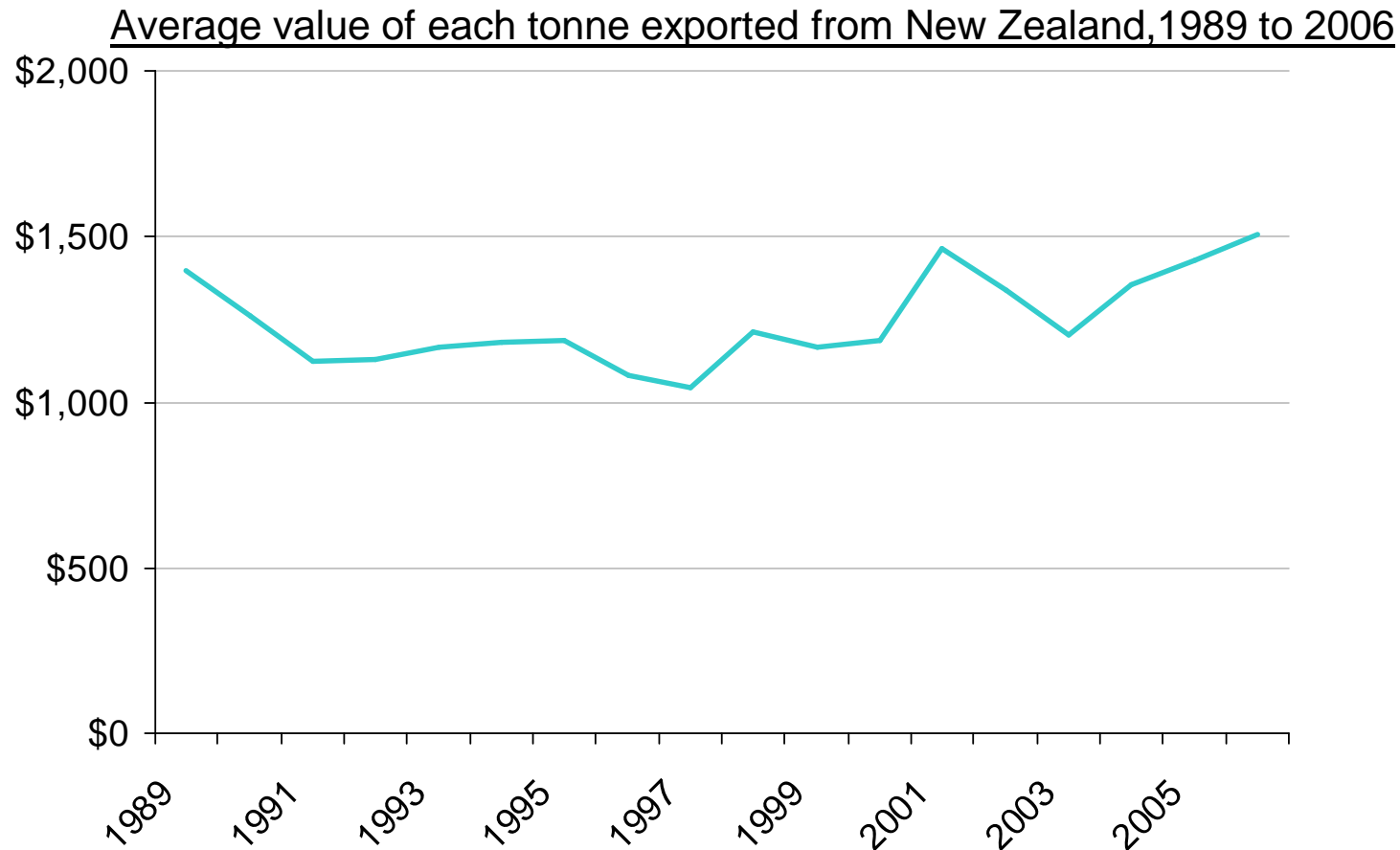
New Zealand's Top 20 Export Categories in 2006 and 1980

2006 Rank	Commodity Description	1980 Rank
1	Meat and edible meat offal, fresh, chilled or frozen	1
2	Milk and cream	4
3	Aluminium	5
4	Cheese and curd	10
5	Fruit and nuts, fresh, dried	13
6	Butter	3
7	Starches, insulin and wheat gluten; albuminoidal substances; glues	6
8	Wood, simply worked, and railway sleepers of wood	15
9	Edible products and preparations	79
10	Fish, fresh, chilled or frozen	12
11	Wool and other animal hair (excluding tops)	2
12	Alcoholic beverages	52
13	Aircraft and associated equipment, and parts thereof	47
14	Pulp and waste paper	9
15	Paper and paperboard	7
16	Other wood in the rough or roughly squared	16
17	Cereal, flour or starch preparations of fruits or vegetables	74
18	Crude petroleum and oils obtained from bituminous minerals	New
19	Crustaceans and molluscs, fresh, chilled, frozen, salted, etc	14
20	Vegetables, fresh or simply preserved; roots and tubers	20

## MOST OF NEW ZEALAND'S GOODS EXPORTS ARE TRANSPORTED BY SEA BECAUSE OF THEIR RELATIVELY LOW VALUE TO WEIGHT RATIO

Top 10 goods exports, 2005	Value \$b	Transported by:	
		Sea	Air
Dairy	5.2	100%	-
Meat	4.7	98%	2%
Boilers and machinery	2.4	48%	52%
Wood	1.9	100%	-
Fruit	1.2	96%	4%
Fish	1.1	81%	19%
Aluminium	1.1	98%	2%
Electrical machinery	1.0	33%	67%
Starches	0.8	97%	3%
Wool	0.8	97%	3%
Total goods exports	31.2	84%	16%
Average value per tonne (\$)		1,200	48,400

# NEW ZEALAND IS NOT MAKING SIGNIFICANT PROGRESS IN IMPROVING THE VALUE TO WEIGHT RATIO OF ITS GOODS EXPORTS



Note: Exports of goods only.

Source: Statistics New Zealand.

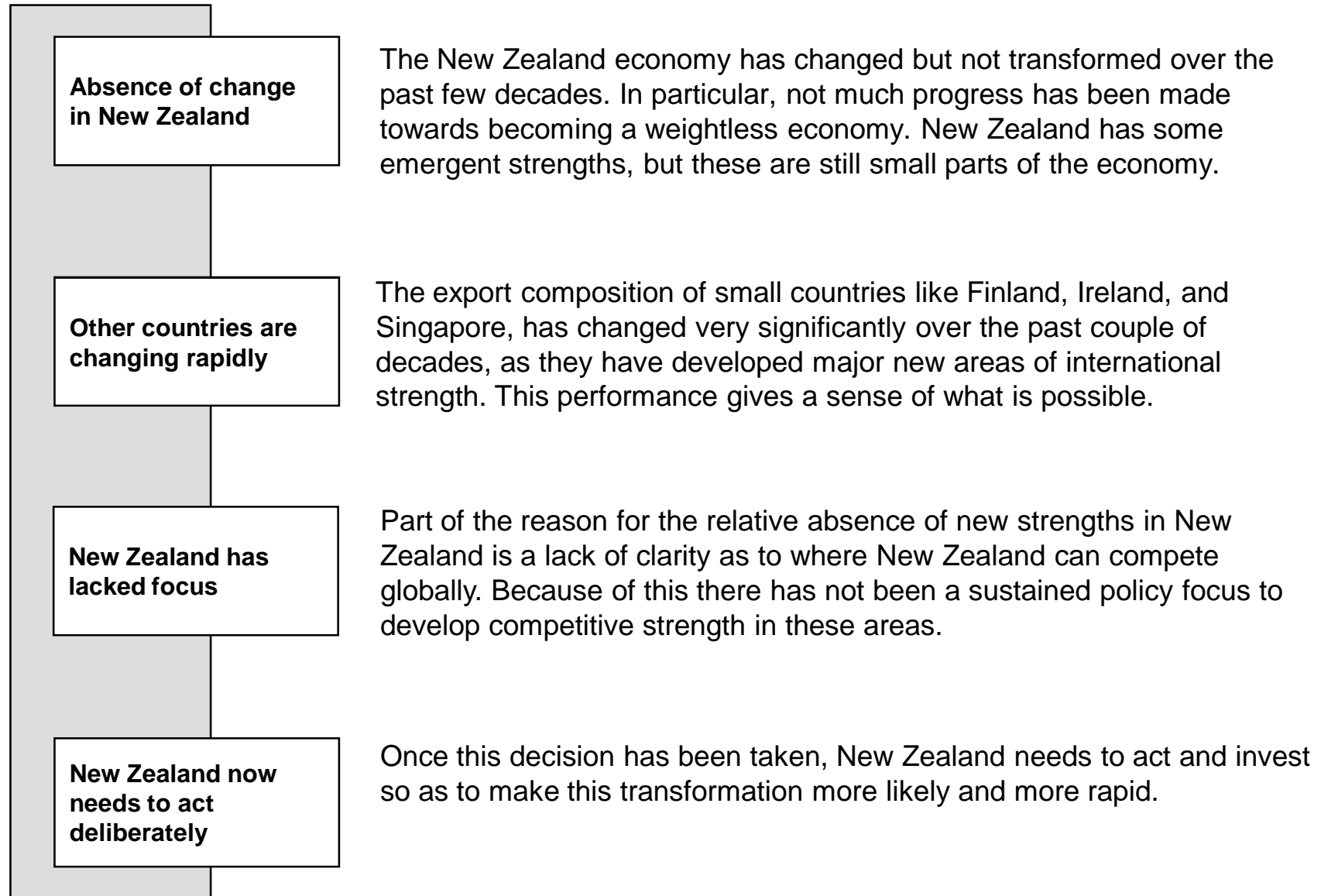
## NEW ZEALAND'S EXPORTS OF WEIGHTLESS SERVICES ARE GROWING BUT REMAIN SMALL

	1996	2006	Share of Exports (%)	CAGR (%)
Communication services	n.a.	282	0.6%	
Construction services	n.a.	45	0.1%	
Financial and insurance services	33	168	0.4%	
Computer and information services	39	272	0.6%	
Royalties and license fees	20	170	0.4%	
Other business services	667	1,217	2.7%	
Total 'weightless' services	792	2,322	5.2%	11.4%
Total services exports	6,995	11,872	26.8%	5.4%
Total goods exports	20,546	32,430	73.2%	4.7%

Note: Years ending in June. Values expressed in \$m. n.a. indicates data not available. CAGR is Compound Annual Growth Rate.

Source: Statistics New Zealand.

# NEW ZEALAND NEEDS TO ACT IN A DELIBERATE MANNER IF IT WANTS TO ACHIEVE ECONOMIC TRANSFORMATION



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## **WE HAVE IDENTIFIED AN INITIAL LIST OF AREAS THAT WE THINK HAVE HIGH POTENTIAL IN CREATING A WEIGHTLESS ECONOMY**

1. Create a business environment that supports international growth by New Zealand firms
2. Invest in world-class communications infrastructure
3. Invest in R&D
4. Invest in the education system, particularly universities
5. Attract foreign investment into New Zealand by firms in the weightless economy

These are all important areas for action, and should be approached as a coordinated package in order to obtain full value. The following discussion does not contain specific recommendations, as much as identifying areas and issues that we believe deserve consideration and debate.

# 1. NEW ZEALAND NEEDS TO IMPROVE ITS PERFORMANCE IN TERMS OF GROWING FIRMS INTO GLOBAL MARKETS

**Firms are the engine of economic growth**

Growth by firms is the primary driver of national economic growth. It is firms that compete in markets, earn income, invest and employ people, and so on. Ensuring that the business environment supports firm growth is therefore a top priority in creating a weightless economy.

**There is work to be done**

New Zealand does not have a great record of growing large and successful firms from a New Zealand base. There are few New Zealand multinationals, New Zealand's exports are concentrated in a small group of firms, and there is relatively little equity capital raising activity from growing New Zealand firms.

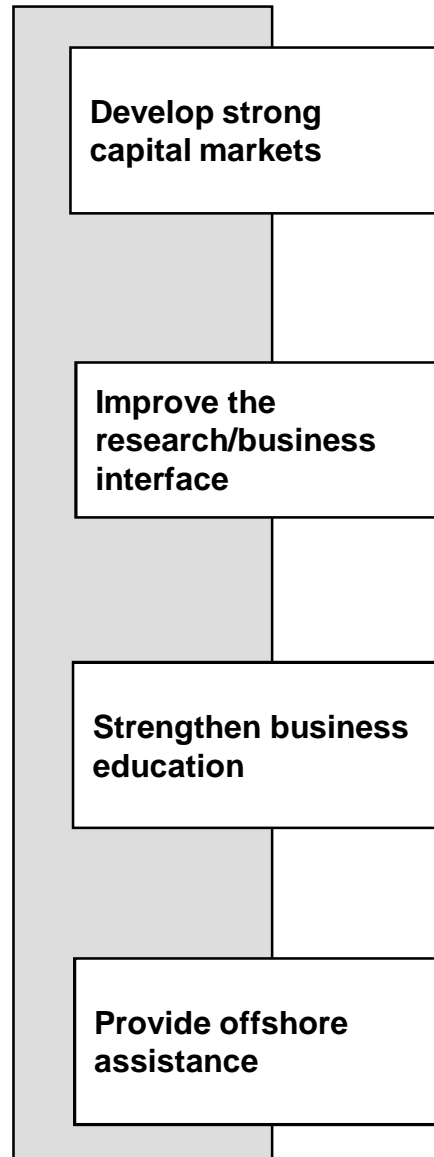
**New Zealand can be more than an incubator or a home to small firms**

New Zealand should be more than a home to small, niche companies or acting as an incubator to firms that are sold to foreign owners once they get to a certain size. The international evidence shows that successful multinational firms can grow from small domestic markets.

**Need to create a supportive business environment**

Policy should be directed to ensure that a business environment is created that is supportive of international growth by New Zealand firms.

# CREATE A BUSINESS ENVIRONMENT THAT SUPPORTS FIRM GROWTH



A large, growing domestic pool of capital is vital to ensuring that growing companies can access the capital they need at a reasonable price. A greater reliance on New Zealand capital will also raise the probability that firms retain a New Zealand presence as they expand into offshore markets. A New Zealand ownership stake is particularly important where the firms are expanding offshore through outward investment.

Need to have a good relationship between the research process and business in order to ensure that IP is commercialised. New Zealand is making progress in this area but more remains to be done to ensure that good ideas are converted into commercial success.

Programmes that share the learning of New Zealand firms who have expanded overseas are reported to be valuable. This can be done through universities, business groups, or organisations like NZTE.

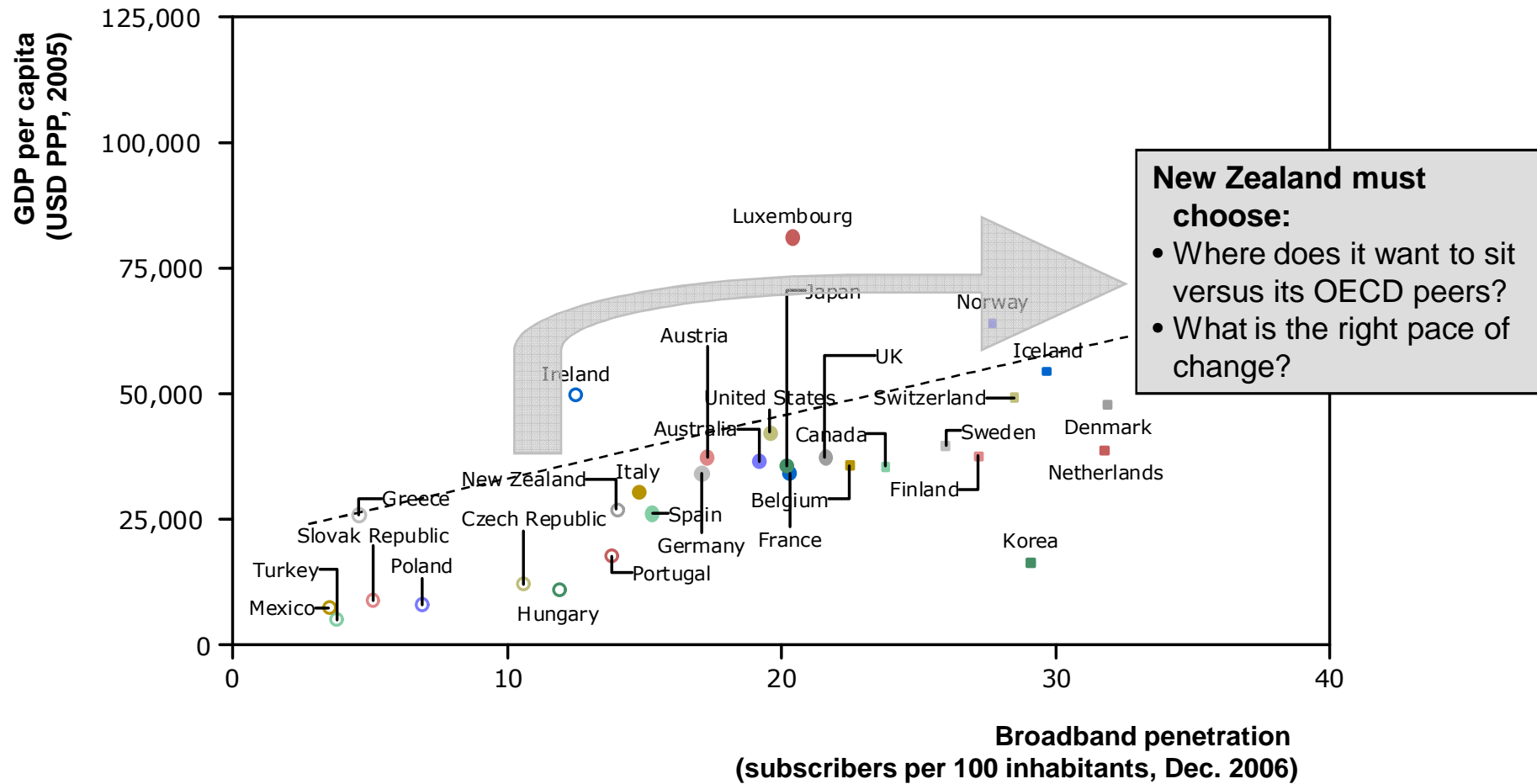
Providing assistance in offshore markets e.g. access to local advice and shared infrastructure, will make international expansion more attractive for New Zealand firms. Also need to ensure that the trade agreements that New Zealand negotiates have a focus on improving access for New Zealand firms engaged in weightless activity.

## 2. NEW ZEALAND'S CURRENT BROADBAND INFRASTRUCTURE IS NOT CLOSE TO WORLD CLASS

Feature	Rank/26 OECD countries
Broadband uptake	22
Overall broadband price and performance	22
Average broadband download speed over DSL	13
Average broadband upload speeds	23
Average speed of synchronous products (products with the same upload and download speed, mainly used by business customers)	26
Percentage of plans with data caps	1

# NZ'S BROADBAND RANKING MATCHES ITS INCOME RANKING BUT IT MUST NOW CHOOSE THE PACE AT WHICH IT WANTS TO MOVE

Relationship between broadband reach and GDP per capita



# NEW ZEALAND NEEDS TO INVEST IN WORLD-CLASS COMMUNICATIONS INFRASTRUCTURE

**Communications infrastructure is vital for weightless growth**

Communications infrastructure is a key piece of strategic infrastructure for a remote country like New Zealand. It allows New Zealand firms to access world markets in the same way as firms located anywhere else.

**Communications infrastructure enables economic transformation**

Communications technology should be at least as transformational for the New Zealand economy as refrigerated shipping was for parts of the primary sector 125 years ago. It will enable the growth of new types of economic activity from New Zealand.

**Other countries are moving quickly**

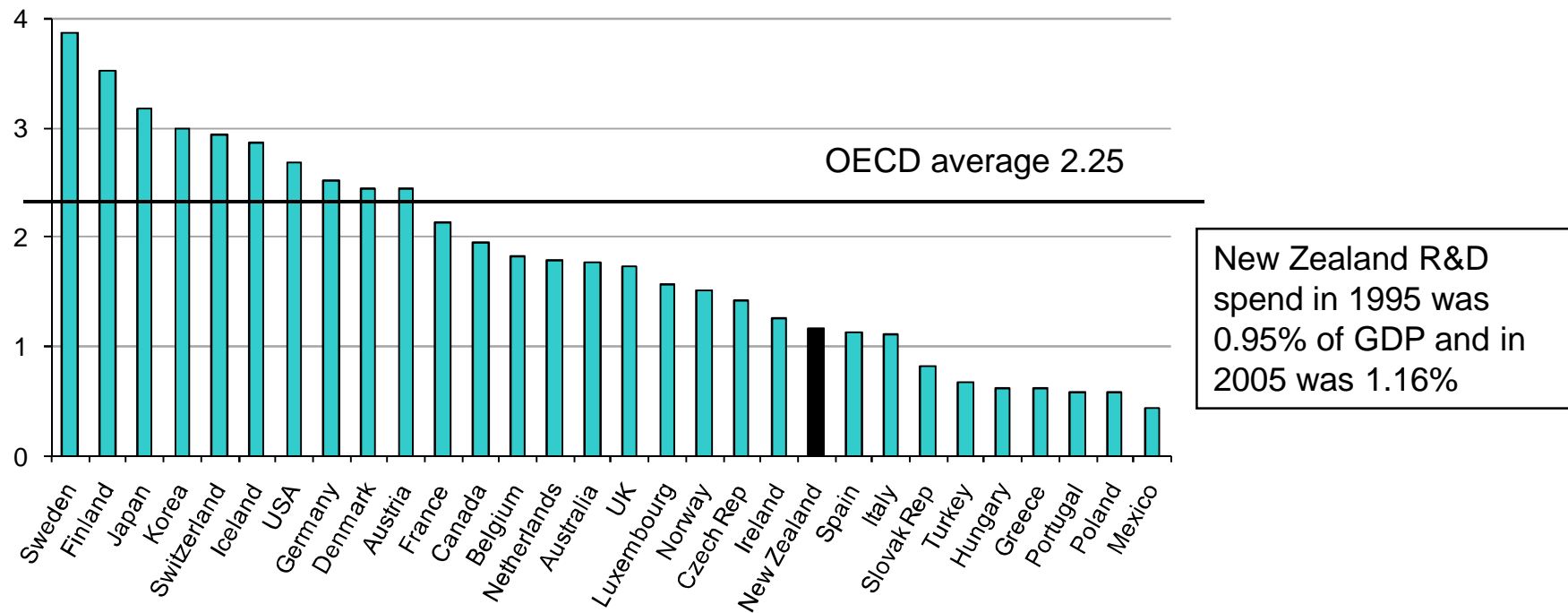
Substantial investments in communications infrastructure are being made in other countries to position themselves as a location for this economic activity. This puts pressure on New Zealand's competitive position.

**New Zealand needs to invest in communications infrastructure**

If New Zealand wants to become a significant participant in the global weightless economy, there is a need to invest in the infrastructure that makes this possible. Physical infrastructure continues to matter but communications infrastructure will be increasingly important.

### 3. NEW ZEALAND'S R&D SPEND IS LOW BY INTERNATIONAL STANDARDS

Gross Expenditure on Research and Development, % of GDP 2005

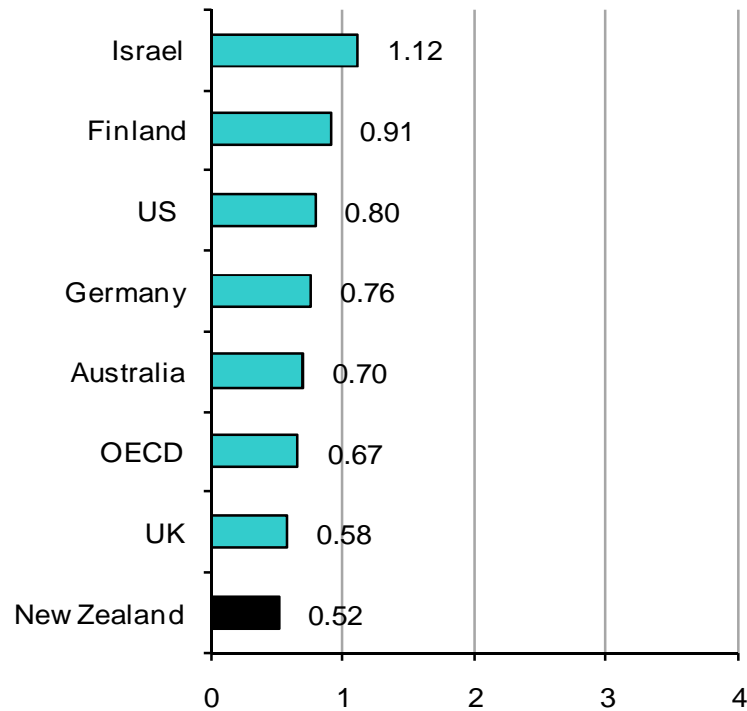


Note: 2005 or most recent year available.

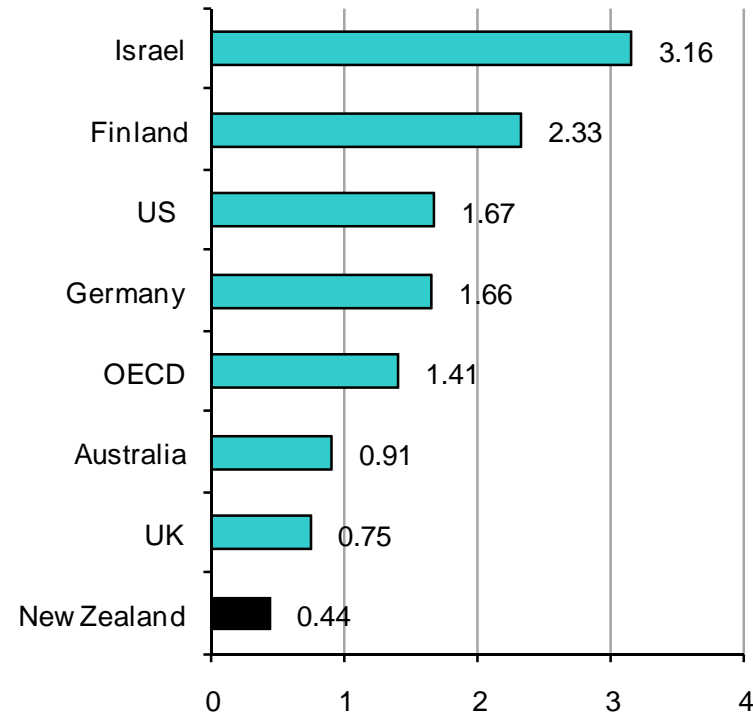
Source: OECD.

# NEW ZEALAND'S PRIVATE SECTOR R&D SPENDING IS PARTICULARLY LOW

Government financed R&D expenditure as a % of GDP



Industry financed R&D expenditure as a % of GDP



Note: 2005 or latest available data. New Zealand is 2003.

Source: OECD.

# NEW ZEALAND SHOULD MAKE A SUSTAINED COMMITMENT TO INCREASE ITS INVESTMENT IN R&D

**New Zealand's low R&D is partly due to its economic structure**

New Zealand's low R&D spend can be partly explained by New Zealand's large primary sector, which has a lower R&D intensity, and by the absence of large firms, who tend to invest more in R&D. This does not mean that New Zealand's low levels of R&D are optimal, but does suggest that this situation is unlikely to change spontaneously.

**New Zealand needs to commit to matching the OECD average spend**

New Zealand should aim to lift its R&D spending to OECD average levels over time, with particular emphasis on lifting the private sector spend. New Zealand can benefit from R&D spending that takes place overseas, but also needs to invest in developing its research capacity.

**This is a rapidly moving target**

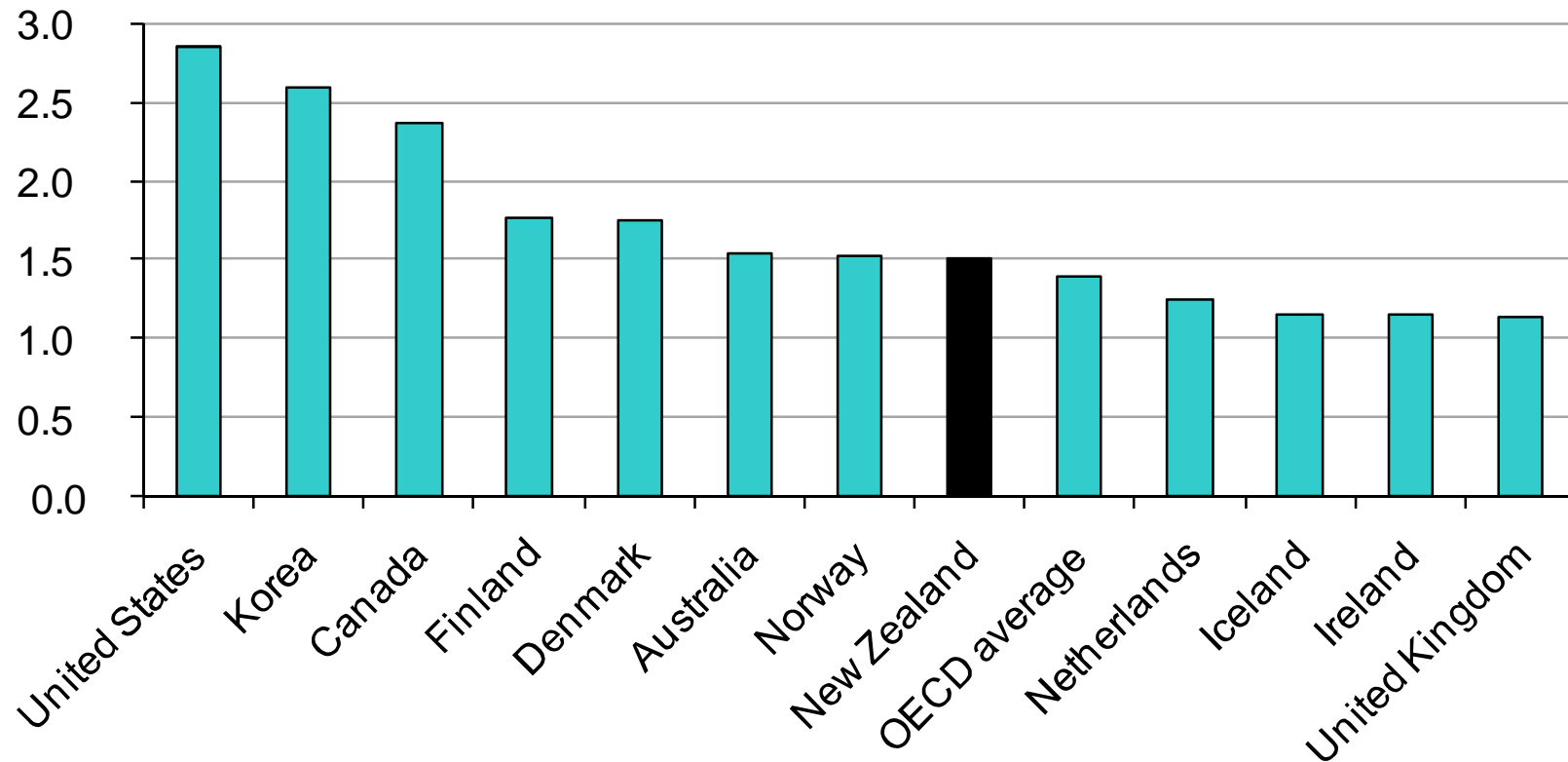
Several EU countries, along with many Asian countries, are setting bold targets for R&D spending and moving quickly. R&D is seen as a key part of the task of developing competitive strength in these economies.

**This spend needs to occur in a focused manner**

Rather than simply increasing the level of spending, there is a need for a clear strategy to guide this investment into areas where there is more likely to be economic benefit to New Zealand.

## 4. NEW ZEALAND'S SPENDING ON TERTIARY EDUCATION IS ABOUT THE OECD AVERAGE

Gross Expenditure on tertiary education as a % of GDP



## BUT MUCH OF THIS SPENDING HAS FUNDED INCREASED STUDENT PARTICIPATION RATHER THAN HIGH-END EDUCATION

Public investment and total income per EFTS in \$US adjusted for purchasing power parity (2004)

Country	Public investment per EFTS	Total income per EFTS
New Zealand	\$5,480	\$11,690
Australia - all universities	\$6,990	\$15,890
Australia - Go8	\$10,000	\$21,910
United Kingdom	\$7,410	\$21,490

Student component investment by level (2000 and 2005)

Level	2000 Actual	%	2005 Actual	%	2005 Modelled on 2000 distribution	%
Sub-degree	\$313,515,710	25%	\$679,357,350	37%	\$462,973,166	25%
Degree	\$674,916,200	54%	\$825,412,886	45%	\$996,658,477	54%
Postgraduate	\$263,473,257	21%	\$343,936,161	19%	\$389,074,754	21%
Total	\$1,251,905,167	100%	\$1,848,706,396	100%	\$1,848,706,396	100%

# NEW ZEALAND NEEDS TO INCREASE ITS COMMITMENT TO BUILDING A WORLD-CLASS UNIVERSITY SECTOR

**Important that the education system in general is delivering**

It is important that the New Zealand education system ensures that New Zealand has a highly educated work force, where everyone is capable of contributing and participating. There are some real challenges in the so-called 'long-tail' of educational under-achievement.

**Tertiary education is a key priority**

However, tertiary education is a key priority. Universities are an important part of creating a weightless economy in New Zealand, both because of the knowledge that they create but also because of their role in training and educating people.

**The objective is to move from good to great**

New Zealand has a good university system, with areas of genuine excellence. But moving New Zealand's university system closer to world-class standards needs to be a national priority.

**Developing a world class university system**

New Zealand needs to invest more heavily in academic talent and develop leading programmes, and over time aim to develop at least one world-class university.

## 5. ATTRACT FOREIGN INVESTMENT INTO NEW ZEALAND TO ACCELERATE GROWTH IN THE WEIGHTLESS ECONOMY

**Inward investment can accelerate this process**

In addition to growing domestic strength in the weightless economy, attracting foreign firms to establish operations in New Zealand will help to accelerate the development of a weightless economy in New Zealand.

**New Zealand's FDI attraction record is not great**

New Zealand has attracted a significant amount of foreign investment, but the vast majority of this investment has been into the domestic sector (e.g. banking, insurance) and has related to the acquisition of existing firms rather than new investment. Over the past few years, New Zealand has attracted very little foreign direct investment (FDI).

**A more aggressive effort is required**

New Zealand is much more likely to attract FDI in the weightless economy than in, say, heavy manufacturing. However, deliberate efforts will need to be made to secure this investment given the many other location choices that are open to firms.

## ACTIONS TO ATTRACT SIGNIFICANT AMOUNTS OF FDI INTO NEW ZEALAND'S WEIGHTLESS ECONOMY

### Providing a world-class platform

To attract international firms, New Zealand needs to offer a platform that is better than competing locations for this type of activity e.g. great universities and a high-quality communications infrastructure. New Zealand also has some distinctive assets, such as its lifestyle and quality business environment, which may be attractive.

### More targeted marketing

There should be a greater effort to identify the specific firms and people that will contribute to New Zealand and aggressively market New Zealand to them. Rather than general marketing, efforts should be made to promote New Zealand to a much more focused group of international firms in the weightless economy.

### Incentive packages

Thought should also be given to the specific package that can be tailored for firms. This need not be tax breaks, but may relate to investments in education or other aspects of the environment that matter to the prospective investor. New Zealand needs to have a compelling value proposition to offer.

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