

New Zealand Firms: reaching for the frontier

Responses to questions posed by the Productivity Commission in the Issues paper

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Q1 How should the inquiry define frontier firms? What data are available to enable the study of frontier firms under your suggested definition?

- A frontier firm should be defined as a company that is achieving above average returns across their industry in terms of labour and multifactorial productivity measures¹.
- It is also worth considering the importance of careful capital and human resource allocation and cashflow management to generate long term business value².
- A Frontier Firm should not just be defined as achieving certain financial metrics but as taking into account social and environmental outcomes as well.

Q2 Do you think the OECD framework is useful to guide the Commission's thinking in this inquiry? Are there other frameworks the Commission should consider?

- The OECD's definition that frontier firms fall into "the top 10% of the productivity distribution either among firms globally" or domestically, is relevant however, it may miss firms that are in nascent stages of development that are providing technology solutions to improve productivity across for example traditional primary sector industries. Many of these companies will have applied for funding from angel networks and VC firms and may not yet be profitable and yet are poised to significantly contribute to growing NZ's productivity. Examples include [Halter](#) (Agri-tech) and [Ordomatic](#) (Hospitality technology)
- We would recommend delving into angel networks and venture capital companies to identify potential future frontier firms.

Q3 What do you think are the most important drivers of the productivity of New Zealand's frontier firms?

- Diffusion of knowledge and technology
- Management capability
- Access to expansion capital
- Strong International networks
- Robust & competitive supplier relationships

Q4 What makes frontier firms different? What do they do differently, or have that other firms don't?

- Frontier Firms are ambitious and see themselves as global citizens providing solutions to clients domestically and internationally.
- They recognise that to create a business at scale they need to have an international focus including strong domestic and international sales.

¹ Databases that can help with this definition include: LBA and Xero.

² *The Outsiders: Eight Unconventional CEOs and Their Radically Rational Blueprint for Success* Thorndike, W., Harvard Business Review Press 2012

- They have established systems and processes that not only foster continuous improvement but encourage innovation (which may or may not include R&D depending on the industry).
- Strong international customer relationships drive technology improvements, raise manufacturing, process and product standards, as well as the diffusion of knowledge.
- They have superior systems and process for managing FOREX risk.
- They are always looking for ways in which to improve the delivery of their products or services to the customer.
- They recognise the value of their suppliers and that they are more likely to be competitive if they come from a cluster where NZ has a distinct comparative advantage.
- They regularly provide opportunities for training and upskilling staff via industry specific training programmes or tertiary education.
- They value and are committed to providing equal employment opportunities. They do not discriminate based on race or gender and are committed to equal pay.
- They are committed to diversity at management and board level.
- They have policies that value their workers and allow for flexible working conditions including parental leave.
- They employ top talent and pay well.
- They do not lumber management and staff with the unnecessary burden of too many meetings, but rather allow them time to think and work critically to develop business solutions.
- They have a high adoption rate for technological innovation and processes that improve productivity in the manufacturing process and the administration function.
- They maintain good records across all areas of the business.
- They are committed to Health and Safety.
- They are demand led rather than supply driven.
- Sustainability is a core strategic pillar of their business practices e.g. B Corporation Certification.
- They are committed to implementing, measuring and reporting on ESG goals, such as: carbon emissions, waste management and mitigation, the use of energy, water and land, contribution to land restoration such as wetlands, forests and biodiversity, workplace wellbeing, health & safety, diversity, gender equality such as equal pay, transparency and responsible supply chain management. For more information refer to a review of top 50 global companies³.
- Yes there is an element of timing some businesses are too early to the market and the public sentiment or need has not fully developed.
- They recognise that a business has limited resources and are therefore careful about the allocation of capital and human resources.⁴
- They are clear about their business strategy and the value discipline that informs every aspect of their operation: Product Leadership, Operational Excellence or Customer Intimacy⁵

Q5 Can the success of frontier firms be replicated? For example, how much of their success is down to highly motivated and talented individuals, good timing, or even just good luck?

- Yes, the success of frontier firms can be replicated. It is about defining what is best practice, providing the training to management and putting in place systems and processes that support the desired outcomes.

³ *Transformational Goals in Corporate Strategy: A Review of the ESG Goals of 50 Global Companies* Sustainable Brands, Gowdy, J., Forrest, J.,

⁴ *The Outsiders: Eight Unconventional CEOs and Their Radically Rational Blueprint for Success* Thorndike, W., Harvard Business Review Press 2012

⁵ *Customer Intimacy and other Value Disciplines*, Treacy, M., Wiersema, F., Harvard Business Review 1993 <https://hbr.org/1993/01/customer-intimacy-and-other-value-disciplines>

- It is also about ensuring that the service providers such as accountants, HR consultants, H&S providers are also operating at a best practice level.
- They need to be poised to take advantage of market opportunity. “Luck is what happens when preparation meets opportunity” – Roman philosopher Seneca.
- Yes, a company requires a bold ambitious leader with a vision, but a company is never created in isolation. Frontier firms will allow leadership to arise from within the company and for individuals to contribute to their fullest capability.
For example: The All Blacks work as a team, they pass the ball from one player to the next responding to the specific dynamics in play, they know exactly their individual strengths and when they need to take action with the objective to score tries and win!⁶ I would suggest that it is not good luck but rather good planning and execution of the game strategy. Business should be no different.

Q6 What are the most important drivers of the diffusion of technology, ideas and business practices from frontier firms to other firms in New Zealand?

- The movement of people across companies is one of the best ways to diffuse ideas, business practices and technology. When an employee moves from one company to another, they have to adapt and work with the new business’ practices, including systems, however they may spot inefficiencies and see opportunities for improvement. If the management is open to contributions, then there will be an opportunity for diffusion.
- Graduate cadet programme and internships with Frontier Firms is also an important driver.
- Encouraging CEOs and management to meet and talk with their peers is another way to diffuse these ideas via specific forums and conferences. This is especially important for SMEs both vertically with Frontier Firms and horizontally with their own peers.
- The network effect is also critical for diffusion. Consider that prior to this pandemic many of us had not heard of or used Zoom and House Party. However, the pandemic caused a frenzy of technology adoption as the network effect kicked in and we were forced to adopt new technologies to enable remote rather than face to face interactions with colleagues, friends and family.
- We have witnessed examples of this in the startup sector where successful CEOs and team members from one company will go on to form or lead new companies. For example, Lanzatech has spawned several new companies including [Avertana](#), [Mint Innovation](#) and [Dotterel](#).
- The reallocation of labour, capital and other resources could be measured from the average number of years employees stay with a firm, rate of employee turnover, number of hours of training or education given to employees annually, the number and value of CAPEX projects undertaken annually by a company. Whether the companies have entered and won any awards related to driving continuous improvement or engineering excellence for example.

Q8 In your view, what are the key ingredients that would lead to a successful New Zealand economy, and what would success look like?

- A clear understanding of global trends and those industries that are poised to respond to them.
- Developing a strong focus on growing our export economy
- A greater level of collaboration and consolidation amongst our SME sector as they see the value of combining and scaling their resources to expand internationally.

⁶ *Legacy: What the All Blacks Can Teach Us About the Business of Life* Kerr, J., Little, Brown Book Group 2014

- Encourage our young people to engage in education programmes that develop skills and an appreciation of the importance of international trade, international business and international law for small advanced economies like New Zealand.
- Encourage learning a foreign language and understanding international cultures.
- Advertise international business development and export roles under their own category on job sites.
- Encourage our young people to travel, work abroad and bring back their skills to contribute to the growth of the New Zealand economy.
- We have a huge opportunity now to make the most of returning Kiwi talent as a result of the Covid-19 pandemic.
- Success would look like 1000 firms generating a minimum of \$100 million each in international foreign revenue, paying higher wages and employing more people. (Note at the moment we have approximately 300 companies that generate more than \$25 million in export revenue each, approximately 600 that generate between \$5-25 million and 11,000 companies that generate less than \$5 million with the vast majority exporting less than \$1million per annum).
- Success would look like exports growing significantly as a percentage of GDP to be more in line with other small advanced economies. Our exports have fallen below 30% of GDP in the last 3 years and exports as a percentage of GDP for other small advanced economies are much higher – up to 59% of GDP⁷.
- Availability of alternative sources and forms of capital (beyond bank lending) to assist ambitious export focussed SMEs access expansion capital.

Q12 What explains the research finding of a weak connection between innovation and productivity growth among New Zealand firms?

- Lack of capital resources and lack of focus on growing businesses internationally.
- A supply side focus rather than a demand side driven approach to innovation and R&D.

Q13 What are the main challenges for New Zealand firms that aspire to reach the performance of the best firms globally?

- Lack of capital to support their growth plans
- Consider that FDI typically prefers to write larger cheque sizes and to take controlling stakes. Therefore, we need to activate the local NZ investment community to invest in and support our ambitious exporters with expansion capital.

Q14 Are New Zealand firms ambitious about growing and scaling up? If not, why not? If they are, what's getting in their way?

- Lack of capability
- Lack of access to expansion capital
- Small scale of their businesses makes it difficult to expand internationally into large scale markets like the USA.

Q15 How do New Zealand's frontier firms learn about, adapt and adopt cutting edge technologies and practices?

⁷ *Frontier Firms: an international small advanced economy perspective*; Skilling, D. Productivity Commission May 2020

- As a result of diffusion led by the movement of people and strong customer relationships in market.

Q16 What types of international connections make the biggest difference for diffusion from the global to the domestic frontier? What could be done to improve these kinds of connections?

- We need to foster a culture of collaboration between our NZ firms that are exporting, to share resources, reduce barriers and costs to entry. E.g. Primary Collaboration New Zealand (Shanghai) Co., Ltd. ([PCNZ](#)).
- We also need to consolidate many small firms that are competing for domestic market share and focus their resources on international expansion.

Q17 Do frontier firms have a problem sustaining their performance? What is needed to maintain high productivity over the long-term?

- When it comes to exports, yes there does appear to be a breakdown in the number of companies sustaining their export journey and performance. In 2016, while working for NZTE, John Holt reviewed export data provided by Statistics New Zealand for the period 2005 to 2013. The data revealed that every year approximately 4000 new businesses attempted to export their goods and services internationally, however after their first year up to 60% of these businesses ceased trading internationally, and after 7 years, up to 90% of these businesses had ceased or paused trading internationally⁸. While the study was unpublished and not peer reviewed, Holt's findings are indicative of a fundamental misunderstanding by SMEs of the cost and complexity of successfully establishing a new export market. The reasons for this failure may be manifold: a lack of competitive or comparative advantage, a lack of access to international distribution networks, a lack of skilled staff, a lack of scale, and/or a lack of capital to fund this expansion.
- To maintain high productivity, businesses need to invest in: market research, developing sound go to market strategies, employing experienced teams.
- They need good governance and a healthy balance sheet as many businesses begin their export journeys undercapitalised.
- They need capable management who are prepared to collaborate with others and access to resources via ExportNZ and NZTE.
- A dedicated export team responsible for international sales and development, with strong foreign language capability and relevant international market experience is critical for developing trust and lasting client relationships in market.
- Exporters that are integrated and connected into international markets: either with a dedicated export sales team in NZ, offices in key international markets, or external direct investment (through acquisition) in the market allowing access to important distribution channels.

Q18 Why don't other firms follow the example of frontier firms? What's holding them back?

Many of them are:

- Domestically focussed
- Don't feel the pressure to grow their business beyond a particular size to compete internationally

⁸ Source: *Understanding the population of New Zealand exporting firms*, HOLT John, 2016

- Under resourced in terms of people to do the work, talent to know what to do, the capital to invest in innovation to improve their company's performance and capital to grow their businesses internationally.

Q19 How could the lessons from New Zealand's frontier firms be better shared?

- ExportNZ is running a programme called Excelerate100 which they are rolling out nationally. The purpose of the programme is to surround exporters generating between \$100K and \$10 million with experienced export mentors (Excelerators) that have industry and / or specific market expertise to help them develop their businesses internationally. The mentors come from industries such as: Food and Beverage, High & Medium Tech manufacturing, Information & Communications Technology. The companies that are helping to pay it forward include: Fisher & Paykel Healthcare, Tegel, and Villa Maria.
<https://excelerate100.co.nz/>
- Through training programmes such as the one above.
- Country Calendar is an example of a programme which is contributing to the diffusion of ideas relating to regenerative agriculture, organics while both moving and celebrating the primary industry's move towards more sustainable farming practices.
- A programme like the above, that is focussed on diffusing the learnings from Frontier Firms in other sectors such as F&B to High-Tech Manufacturing, could inspire people to choose careers and develop international businesses through role modelling.

Q21 What are the pros and cons of the standard corporate governance model for stimulating business growth, innovation and productivity?

- Research shows that directors are risk adverse and prefer to concentrate the business domestically where there appear to be higher returns.
- Need to use the advisory board structure to bring people with specific skills into the business for short periods of time to work on specific projects, without lumbering them with the restrictive compliance of a traditional board structure.
- The role of ESG Governance should also be given careful consideration to ensure businesses are meeting international standards in relation to the environment and society.

Q22 Are there particular barriers to innovation, diffusion and reallocation that the Commission should focus on?

- Yes, a lack of coordination between researchers and the business world. No inventory of research undertaken across universities or Crown Research Institutes available to the private sector.

Q30 What are the top three things you would like to see come out of this inquiry?

- There needs to be a stronger focus on identifying and supporting clusters that are poised to respond to international demands and trends.
- FDI alone, is not the answer, we need to bring together the local NZ investment community to invest into ambitious export focussed SMEs in the productive sector of the economy to enable an export-led recovery.

- We need better use of the Kiwi Saver resource so that some of these assets could be deployed into supporting the international expansion of ambitious export-focussed SMEs that are poised to ride the wave of a productive, sustainable and inclusive economy.

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Authors:

Kirsty Reynolds has 25+ years of commercial experience, developing businesses internationally through the Asia Pacific region, across a range of industries, from SMEs to multinational companies including founding her own export business which she ran for 8 years. She is a visionary leader, angel investor and company director with deep experience investing in start-ups and working with ambitious New Zealand SME businesses that are poised for international expansion.

Kirsty was a member of the Auckland Executive team of Export New Zealand from 2011 to 2019 and is the past Vice-President of the French New Zealand Chamber of Commerce and Industry. Kirsty has been a member of the board of the Ice Angels since 2018 and is an active angel and impact investor, who invests in and works with New Zealand businesses that are poised for international expansion.

Anton Douglas has 25+ years' experience across capital markets, investment banking, corporate finance and wealth management. Anton has extensive experience originating, structuring and investing in private markets across countries, industries and investment types. Prior to moving back to NZ he was based in the US where he was the Chief Investment Officer at Credit Suisse Asset Management's EM credit opportunity & special situations fund, prior to that he was the global head of Credit Suisse Investment Bank's EM Financing business, a market leader in both principal investing and syndicated financing. Anton has extensive knowledge of investment portfolios, financial analysis, due diligence, business strategy, restructurings, client and team leadership through cycles.