NEW HORIZONS: ALTERNATIVE ASIAN MARKETS – FROM OPPORTUNITY TO CONNECTIVITY

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FOREWORD

In this report we look at market opportunities across Asia for New Zealand, with a specific focus on primary sectors.

The opportunities Asia provides to nations like New Zealand are widely acknowledged and the first part of this paper briefly details some of these.

There is ample opportunity for a country of New Zealand's size and location given:

- growing purchasing power and wealth across the Asia region;
- changing consumption patterns that are becoming more closely aligned with what New Zealand produces;
- the population base (3.85 billion people across the countries we analyse); and
- improving connectivity in terms of reduced trade barriers, new channels to market (i.e. increasing online sales), and better supply-chain infrastructure.

Sometimes we overlook that we are a nation of 4.5 million people and we are estimated to be producing enough food for 'only' 40-60 million people at present, i.e. 1-1½% of Asia's total population. There is always room for improvement, but there are restrictions too in the form of available capital, access to expertise and natural resources.

China often grabs the headlines and has been a big focal point for many businesses and sectors over the last eight-odd years, and for some, over a much longer period of time. But how often do countries such as Malaysia, the Philippines, Indonesia, Kazakhstan, Mongolia and others get a mention, or further serious consideration? Adequate analysis and in-depth discussion of the opportunities that exist in such markets, as well as the barriers to unlocking them, is lacking.

We believe there needs to be a shift in conversation from 'opportunity' to 'alignment'. Alignment is about connectivity potential and the ability to unlock opportunity. It's looking beyond the often-quoted metrics such as rising incomes into a much broader array of indicators to identify where countries really stand in the pecking order of where our resources should be directed to develop export markets and maximise returns.

This paper provides a framework for assessing alignment and connectivity potential by looking at a variety of opportunity and constraint indicators for New Zealand's primary sector across 29 countries in the Asia-Pacific region. It is our attempt to move the conversation away from wild extrapolations of GDP and population growth across the region to something more meaningful that can help with business decisions in developing new export markets.

The top-ranked countries in our research, namely Singapore, Hong Kong, Japan, South Korea, Taiwan, Malaysia and China, perform as expected; it's no coincidence that they are already well-established export markets for many sectors. This shows that New Zealand exporters are already pretty good at what they do – chasing opportunities and returns. Together these nations account for around 80% of New Zealand's bilateral trade flow and 81% of total exports to the Asian region.

When it comes to where the next wave of growth might come from, the up-and-comer bunch includes some less well-known names: Brunei Darussalam, Thailand, Indonesia, Mongolia, Armenia, Philippines, Azerbaijan, Kazakhstan and Vietnam. Each market has its pros and cons. Some are fast-growing on a number of metrics, highlighting rapid growth of new opportunities. Others are more mature, but offer growth opportunities if market penetration and share can be increased. Others represent large opportunities, but have a number of barriers that would need to be navigated. In this paper we consider which of these markets has the potential to move up to top-tier status in coming years, giving a signal on where scarce market-development resources should perhaps be pointed.

A general summary paper such as this one can only give general pointers as to the attractiveness of potential markets, with the aim of encouraging thinking 'outside the square'. The next step for businesses requires an even deeper dive, to gain an intimate knowledge of a chosen market based around a specific proposition. But 'big picture' lessons from those who have gone before have shown essential elements for success in Asia include:

- strong business relationships built up over time and based on mutual trust;
- an intimate knowledge of a targeted market segment;
- cultural understanding of tastes and business practices;
- local staff or collaborators;
- scale: many of these markets are super-sized compared with New Zealand, and therefore collaboration will often be required within a sector; and
- patience, with a long-term view: time, cost and effort are required to become truly established.

The Asia region has assumed an ever-greater proportion of New Zealand's export market, and that trend is likely to continue. But Asia is a big and diverse place. The temptation is always to simply try to emulate others' successes. While that's often not a bad strategy, and our analysis shows New Zealand exporters are hitting the 'right' markets, this paper aims to provide some pointers for those brave enough to be trail-blazers into some of the up-and-coming nations.

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Chief Economist

EXECUTIVE SUMMARY

The 'Asian Century' is upon us and the opportunities available to New Zealand are, in broad terms, well understood. Asia's economy already accounts for a quarter of global economic output and ANZ expects this will rise to 35% by 2030 and over half the global economy by 2050. The United States and Europe, which currently account for around half of global economic output, could see their share fall to less than a quarter by mid-century. This is a tectonic shift in the economic landscape.

While the Asia opportunities for New Zealand are impressive, we need a framework for moving the conversation beyond opportunity. Regions need to 'connect' and be 'aligned' for opportunities to be unlocked and maximised.

This requires going beyond the often-quoted metrics, such as rising incomes and middle class, into a much broader array of indicators to identify where scarce market-development resources should be directed. After all, incubating export markets takes time, capital and huge effort – better that these efforts and investment be well-directed from the start.

To help with this process we identify six broad categories to assess how different Asian markets rank in terms of connectivity with New Zealand. Three categories relate to identifying demand/opportunity within markets, and three represent constraints or barriers to accessing markets.

Demand/opportunity categories are:

- Food market size and development
- Consumer purchasing power and affluence
- Alignment with New Zealand-oriented trade

Barriers to trade are:

- Market access
- Ease of doing business
- Supply and cool chain development/infrastructure

We gathered a comprehensive dataset of 43 different indicators for 29 Asian countries across these categories.

Food market size and development

Here we look at indicators that provide insight into the relative size and growth of a country's food market, but also its state of development. The latter is important due to the perishable nature of much of what New Zealand produces. It is also a useful proxy indicator of westernised consumer preferences, demand for New Zealand's product mix, and the viability of other 'value-add' products.

On this measure the top five countries were Japan, Singapore, Hong Kong, China and South Korea, which was an unsurprising result. However, the different indicators highlight the various features of each market. China versus Japan is a good example. China is a behemoth in terms of its overall size, and apart from Azerbaijan, has been the fastest-growing food and non-alcoholic beverage market in recent years. Conversely, it ranks only middle of the pack on consumer and food market development metrics.

Japan ranked very highly on all the food market and development measures, as well as being a reasonably large market – this is why it took pole position in this category. However, one drawback is its fairly mature food market, with annual growth of only 5% in recent years – much lower than China (+18%), Hong Kong (+9%) or Singapore (+12%). Still, given New Zealand's limitation in terms of the number of people it can realistically feed, the game is about targeting the super-wealthy segments in big markets, such as China, Japan, India and Indonesia, to maximise returns.

Consumer purchasing power and affluence

This category provides an assessment of where consumers with the highest purchasing power in Asia reside. This is important, as many propositions are endeavouring to target the highest-paying channels and markets, taking into account New Zealand's somewhat limited potential to create scale in these markets. We assume that purchasing power is a function of not just the level of incomes but also recent growth. Looking at the former alone would exclude some of the fast-growing regions and the point of this paper is to look at where new opportunities are being created, and not just focusing on the heavily-westernised countries with high per capita incomes.

The familiar names of Singapore, Japan, Hong Kong, China, Thailand and South Korea featured, as well as some less well-known markets, such as Turkmenistan and Mongolia. The former group ranked well on most indicators, but were near dead last for the change metrics for incomes and wealth. This implies fairly mature food consumption metrics compared with the likes of Mongolia and Turkmenistan, who had the strongest growth profiles, but off much lower levels of income and wealth.

Alignment with New Zealand-oriented trade

This is about assessing what a marketplace requires, and whether or not we produce it. New Zealand's main competitive advantage is in the production of livestock (specifically dairy, red meat and seafood), horticulture (wine, kiwifruit and pipfruit) and a number of other niche products, usually of livestock or horticulture origin. We therefore want to identify countries where import demand opportunities for these products will be rising in the future.

The top-ranked countries were the familiar names from the other opportunity categories, plus Taiwan. The more interesting results were the middle-ranked countries, which threw up a number of less well-known names, including Armenia, Azerbaijan, Malaysia, Mongolia, Kyrgyzstan, Turkmenistan, Vietnam and Kazakhstan. Each have their own strengths and weaknesses depending on the metric.

Market access

One of the biggest impediments to unlocking primary sector opportunities are tariff and non-tariff barriers. These barriers often significantly inhibit (and distort) trade via pricing imported products out of the market through high tariffs, restricting trade volumes for certain goods, creating investment and policy uncertainty by arbitrarily changing the rules, and/or creating other technical barriers to trade.

Singapore, Brunei Darussalam and Hong Kong took out the top three spots for this category, as virtually no tariffs are applied to primary products and New Zealand has free trade agreements with all three countries.

The next most attractive countries were Taiwan, Indonesia, Philippines and Malaysia. What is perhaps more interesting are the markets that ranked well on the opportunity front, but not so well for market accessibility. Countries that rate a mention here are: South Korea, Turkmenistan, Kyrgyzstan, Mongolia, Kazakhstan, Sri Lanka and India. Japan ranked down the pecking order too, but could move up the rankings in this category over coming years if TPPA benefits flow through. It remains to be seen whether global politics will see it fall at the last hurdle.

Ease of doing business

This is important as it defines the effort required to pursue opportunities. The facets that are important when conducting business within a country are many, but key ones include:

- the regulatory environment;
- the ease of completing appropriate documentation and regulatory requirements (e.g. registering a business and its activities, paying taxes etc);
- the political environment;
- the strength of intellectual and property rights;
- the financial framework; and
- the level of corruption.

If these facets are not favourable it creates investment uncertainty and limits a business' ability to pursue opportunities. Singapore took out top spot in this category, followed by South Korea and Hong Kong. The next top-ranking markets were Japan, Malaysia, Taiwan, Thailand, Philippines, China, Sri Lanka, Vietnam, India and Armenia.

Supply and cool chain development/infrastructure

As the majority of New Zealand's primary products are highly perishable they require a robust cool chain to ensure high standards of food safety, adequate shelf life, and a cost-competitive distribution channel, particularly when competing against local producers and other exporters.

There were few surprises in countries' rankings for this category. The trade hubs of Singapore and Hong Kong took the top spots, with Japan, Malaysia, Taiwan and South Korea rounding out the top six. The next group of countries then includes Brunei Darussalam, China, Thailand, Indonesia, Philippines, Sri Lanka and Vietnam.

Overall results

The overall top-ranked countries are Singapore, Hong Kong, Japan, South Korea, Taiwan, Malaysia and China. Together these countries account for around 80% of New Zealand's bilateral merchandise trade flow and 81% of total goods exports within the Asian region.

The next group of Asian countries on our ranking system – the potential up-and-comers – are less well-known: Brunei Darussalam, Thailand, Indonesia, Mongolia, Armenia, Philippines, Azerbaijan, Kazakhstan and Vietnam. Our ranking system highlights potential opportunity for each, but also helps identify why they are not yet key markets for New Zealand. For various reasons, other key markets stand out more in terms of attractiveness (and most likely returns) at this point in time.

Our analysis is static. It looks at the attractiveness and connectivity of these markets with New Zealand as we sit here today. But as we know, the Asian region is not sitting still, and some countries within the region are developing and changing at a rapid rate.

The push for further trade openness, faster per-capita income growth, improved cool-store infrastructure and many other factors should see these countries' relative attractiveness for New Zealand exporters continue to grow over time. These 'next-tier' countries could easily shift up our rankings, and it is in this possibility where real opportunity exists. Some factors, such as urbanisation and incomes, evolve relatively slowly. Others, such as trade barriers and supply and cool-chain development, can change relatively quickly. Looking at how quickly key existing barriers have been dismantled (or missing components developed) in other countries suggests that the key markets to watch over the next 5-10 years are Japan, Thailand and Indonesia.

OPPORTUNITIES ABOUND

The economic opportunities Asia provides to nations such as New Zealand are impressive.

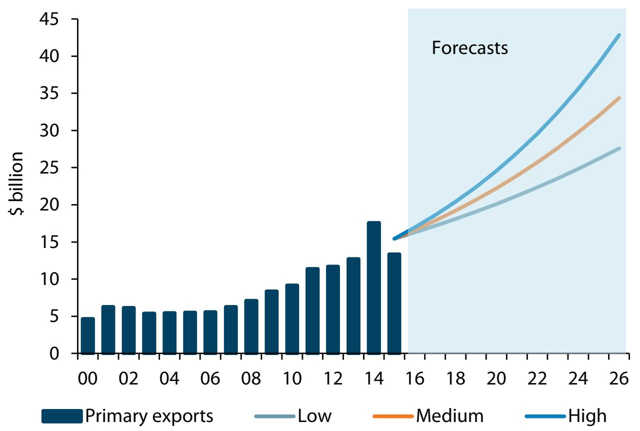
- Asia's economies already account for a quarter of global economic output. ANZ expects this will rise to 35% by 2030 and account for over half the global economy by 2050. The United States and Europe, which currently account for around half global output, could see their share fall to less than a quarter by mid-century. This is a tectonic shift in the landscape.
- Asia's total population is 3.85 billion at present, or 54% of the global population. While future forecasts vary, according to the recent French Institute of Demographic Studies, by 2050 the population of Asia is expected to be 5.2 billion people (+35%).
- The middle class in Asia continues to grow at an annual compound growth rate of 5% and now numbers some 1.1 billion people. Expectations are that the growth rate will slow to 4% over coming years, but this still means 50 million people will continue to make the leap to middle-income status each year. In 10 years' time this could mean an additional 480 million middle-class consumers, meaning Asia would account for around 67% of the world's middle class by 2025 (up from 54% at present).
- There are growth-friendly (i.e. young) demographics in many Asian countries – although there are outliers too, in the form of China and Japan. This is a key factor underpinning the continued rise of the middle-income cohort. India and Indonesia in particular are endowed with youthful populations, and the working-age population is expected to continue to rise. These, and other Asian countries, still have capital-deepening education potential ahead of them. The productivity dividend is likely to be particularly beneficial in these economies as their skill sets lift. The working-age population is an important driver for underlying consumption in most food categories.
- Urbanisation continues and is a powerful factor in middle class formation. By 2050, one immense megalopolis is likely to stretch almost continuously from Beijing to Jakarta, a sprawling conurbation running thousands of kilometres. The scale of this is almost mind-blowing in terms of its physical size, density and likely population.
- As income levels increase, demand for food increases in two ways. First, per-capita calorie consumption rises. Second, individual diets shift from being carbohydrate-based to protein-based. While lower-income country diets are predominantly comprised of cereals, higher-income country diets are more focused on fruit and vegetables, sugars, meat, dairy and other animal products such as eggs – all things New Zealand produces.
- Due to higher protein consumption levels, developed economy diets currently require almost two and a half times the water and almost three times the land per person relative to the least-developed countries, with developing countries somewhere in between. Much of Asia has low per-capita availability of both arable land and renewable water. For example, Asia has an average of 3.5 million litres of renewable water supply per capita, while the American continent has 26.5 million litres per capita. China and India have just 2.1 million litres and 1.6 million litres per capita respectively, and face serious environmental challenges.
- New Zealand has favourable market access to many Western markets due to our historical political ties. However, it is worth noting that until the TPPA, all but one of our free trade agreements have been with Asian/Australasian counterparts (with Chile the exception). This highlights the rapid change in end markets that has already taken place in response to efforts by the business community and New Zealand Government to improve market access to Asia.

The statistics are even more impressive when read in conjunction with facts about New Zealand.

- New Zealand sits geographically close by, in a relative sense. Many Asian markets are closer to us than our more traditional European and North American markets. Other traditional Western competitors are a similar distance from Asia, so New Zealand is on an equal footing with many competitors in terms of distance to market.
- The tyranny of distance is also becoming less of an issue with technology shifts across a range of business functions, and improvements in the cool/supply chain infrastructure, especially in the Asian region.
- New Zealand has a quality, trusted brand.
- New Zealand has a solid food safety record and robust systems though recent episodes highlight that we cannot be complacent.
- We have an abundance of natural resources (crop and pasture land, as well as renewable water). The World Bank ('The Changing Wealth of Nations' 2010) ranks New Zealand number one for 'renewable' natural capital per capita. These resources are timber, non-timber forest resources, protected areas, crop land and pasture land. Even excluding protected areas, which accounts for some 40% of New Zealand's valuation but have limited exploitability in an economic sense, we're still number one and five times better off than the global average.
- New Zealand is ultimately limited in the potential number of people we can feed. That means conversations need to shift towards targeting upper-end consumers and segmenting markets to maximise returns. Indeed, as Chinese Premier Xi Jinping said during his visit to New Zealand in 2014, ***"New Zealand will have to worry about the fact that there is more Chinese demand than you can possibly supply."***

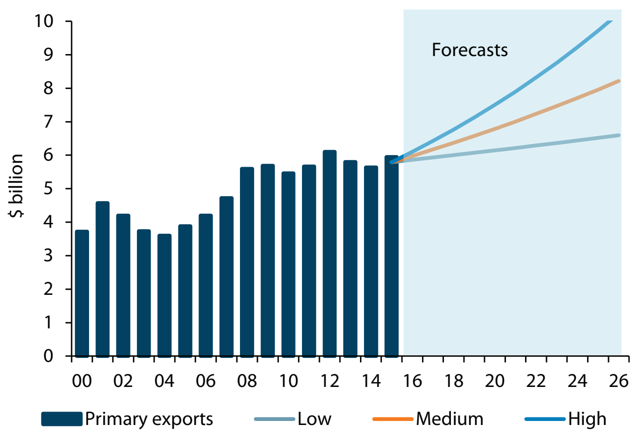
New Zealand's exports to Asia currently total NZD18.4 billion per annum. Nearly 70% of this is primary products. If the growth witnessed over the last 15 years continues (the 'medium' scenario below) then total primary exports could hit nearly NZD28 billion by 2025 and other exports NZD7 billion. Such growth would go a long way towards fulfilling the Government's Business Growth Agenda ambition to double exports by 2025. A slightly higher track of growth closer to 10% would see primary exports head toward NZD38 billion annually.

NEW ZEALAND PRIMARY EXPORTS TO 29 ASIAN NATIONS, DECEMBER YEARS



Source: ANZ, Statistics NZ

OTHER NEW ZEALAND EXPORTS TO 29 ASIAN NATIONS, DECEMBER YEARS



Source: ANZ, Statistics NZ

FROM OPPORTUNITY TO ALIGNMENT AND CONNECTIVITY POTENTIAL

While many of the high-level statistics are impressive, they do not provide the full picture.

- GDP – the most commonly cited measure of upside market potential – has numerous limitations. It does not capture all economic activity within an economy (underground economy, volunteer work, DIY etc); it can be slow to capture structural change across an economy (technology shifts); it is prone to potentially large measurement error and revision; and it doesn't take into account other important components of living standards (such as inequality, environmental impacts, sustainability, and productivity – i.e. how hard people have to work to achieve a given standard of living).
- We severely doubt the ability of economies to deliver on the 'ski-jump' living standard outcomes implied by linear extrapolations of recent GDP growth into the future. China faces clears economic challenges in the form of corporate leverage, investment malfeasance, mispriced risk, demographics, and balancing its required transition from investment to consumption against a social objective of stability.

  The enormous promise of the Asian Century is also partly premised on the demographic dividend in many countries with large, youthful populations, as well as significant technological development and education catch-up. Of 101 countries classified as middle-income in 1960, by 2008 only 13 had managed to escape the middle-income trap and transition to high-income economies, according to the World Bank.[1] There are a number of possible reasons high-growth countries in Asia may fail to effectively make the difficult transition through the middle income trap. These include a loss in export competitiveness as a result of higher labour costs, or productivity growth stalling as governments fail on necessary social, financial and industry structural reform that may be unpopular with either entrenched interests or the broader population, limiting the move toward a more services-oriented economy. Rapid accumulation of debt are a near-term growth risk for some countries.
- Asia presents opportunities to other nations as well, not just New Zealand. Competition is ever-present in the form of other businesses offering similar products, but also consumer choice, with many substitutes available. In many markets the competition is already well established. From a cultural perspective there are different taste preferences and cooking styles in many markets. In many cases there are also established, locally-produced substitutes that suit a market's particular characteristics.

[1] World Bank, China 2030: Building a modern, harmonious, and creative high-income society, Washington, DC, 2012.

So if opportunity is only a partial condition for economic success, what should we be looking at to complete the equation? Two concepts are relevant.

1. Firstly we need a framework for moving the conversation towards alignment and connectivity potential.
2. The second concept is around execution. This is really all about microeconomics and the ability of firms to succeed in target markets. Opportunity, alignment and connectivity can open the door; businesses still need to be able to go through it.

These concepts are interconnected, but also distinct. The better the alignment the greater the chance of successful execution. We believe there needs to be a shift in conversation from opportunity to alignment – connectivity potential and further successful business strategies – for New Zealand's export sectors. Examining alignment requires going beyond the most often-cited metrics (such as rising income) into a much broader array of indicators to identify where countries really stand in the pecking order.

This paper looks at where the greatest alignment and connectivity potential exists between 29 Asian countries and New Zealand's primary sectors.

A FRAMEWORK: BROAD CATEGORIES AND BACKGROUND

This paper provides a framework for assessing alignment by looking at a broad array of opportunity and constraint indicators for New Zealand's primary sectors. In total, 29 different countries in the Asian region were analysed.[2]

We identified six broad categories to assess the alignment between different markets and New Zealand. Three categories relate to identifying opportunities within markets and three relate to constraints or barriers to pursuing the opportunities.

Demand/opportunity categories include:

- Food market size and development
- Consumer purchasing power and affluence
- Alignment with New Zealand-oriented trade

Barriers to trade include:

- Market access
- Ease of doing business
- Supply and cool chain development/infrastructure.

[2] Where a country was missing a large number of data points (e.g. Myanmar and Afghanistan) across multiple categories, it was excluded. North Korea was excluded on the basis that trade and investment is restricted by trade sanctions.

[3] For some indicators, especially under the food market size and development category, there were a number of countries for which data wasn't available. They were excluded from this part of the analysis. For the overall evaluation we therefore used a truncated set of criteria. Most of the countries where data was limited ranked fairly low down the pecking order in any case, which is not surprising, as a shortage of data often goes hand-in-hand with a less-developed economy.

We looked at 60-odd data series in total, but settled on 43 across the six categories (see Appendix One: Data Sources for a full list).[3] There is some overlap between the categories.

For each statistic we calculated a percentage rank, which is a measure of how each country is placed relative to all other countries evaluated. For instance, GDP per capita ranged from US$694 to US$55,180. Because Thailand's GDP per capita is US$5,779, its score is 9% of the way through the US$694 to US$55,180 range. For each of the six categories an average score is derived for each country, with equal weightings applied to each indicator. This is then used to rank and provide a 'relative attractiveness' measure for each country for New Zealand's primary sector exports. We also calculate an absolute ranking for each indicator to rank countries within categories. A lower score indicates a more favourable ranking. In some cases, due to how each measure is calculated, the two approaches led to slightly different end rankings for a country within a category and overall.

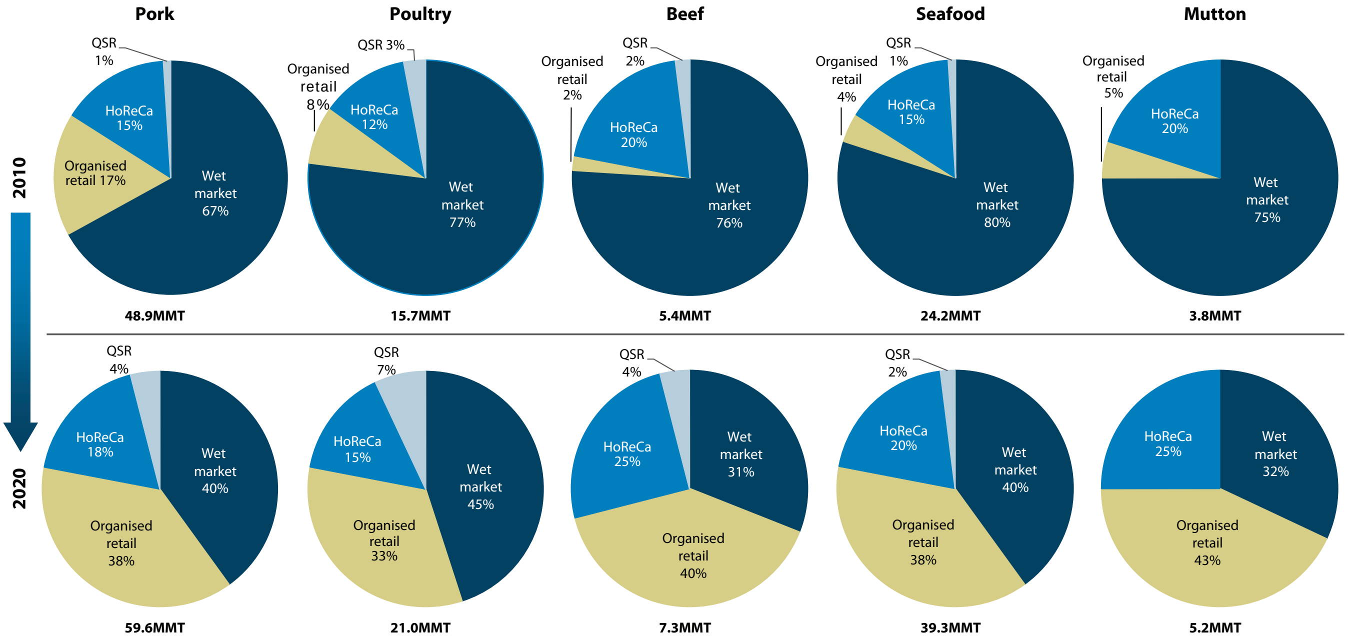
1. FOOD MARKET SIZE AND DEVELOPMENT

Asia's food markets vary greatly in size and sophistication. Many Asian countries are seeing rapid change in how and where consumers source their food. In the case of China, most consumers have historically sourced their meat from local wet markets. But with urbanisation, changing consumer preferences, food safety issues, regulatory changes and the expansion of organised retail, this is rapidly changing. Understanding these changes is important to make the decision on who New Zealand businesses should partner/invest with, as well the need to adapt product offerings to suit.

The New Zealand primary sector is involved in a wide range of end food markets and channels. These vary greatly according to a specific product's characteristics and specifications, the sector, supply chain partners and the export market in question. But for the majority of sectors and products the food markets that are most desirable are those that are well developed with a heavy presence of foodservice and organised retail operators. There are several reasons for this.

1. The product mix of New Zealand's main soft commodities tends to be more suited to foodservice or organised retail channel formats, as opposed to wet markets. This is due to our traditional markets and supply chain partners being wealthier Western countries, where these are the main channels to market. Many businesses and products such as packaged wine, or chilled cuts of red meat, are therefore set up to target such markets.
2. Many of our main products are highly perishable, and in order to maximise shelf life and maintain high food safety standards a robust cool chain is required, with proper refrigeration and handling facilities until final consumption.

CHANGING CHANNELS VIA WHICH CHINESE CONSUMERS PURCHASE MEAT



"Organised" retail is the fastest growing meat sales channel to urban consumers followed by quick service restaurant

*HoReCa = Hotel, Restaurant and Catering

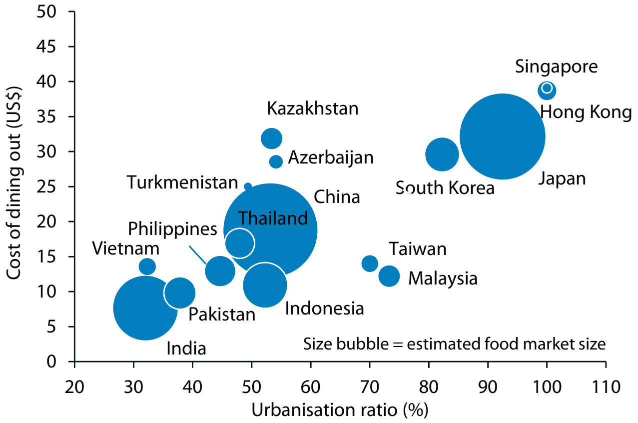
Source: ANZ, McDonald's China

3. A well-developed market with size is usually an indicator of the presence of multi-national retailers and foodservice operators who will tend to have global sourcing capabilities. They are usually more receptive than local operators to introducing imported products, as they are more familiar with them and already have a business relationship. This provides a better avenue for food imports.
4. A more-developed food market is an indicator of more westernised consumer preferences, packaged food consumption, and viability of other 'value-add' products. Many sectors are already well down the 'value-add' track with a product suite that promotes different functionality (e.g. helps with a specific health ailment, or provides consistent taste/quality attributes), service/convenience, provenance, brand, and food safety assurances. This means businesses are looking for markets that can understand their proposition, or can be educated, and who are willing to pay a premium for their products' specific qualities.

The indicators we collected to get a feel for a country's food market size and development were:

1. Estimated size of the food and non-alcoholic beverage market.
2. Population.
3. Annual growth in the food and non-alcoholic beverage market. This gives a feel for new opportunities that might be emerging.
4. Per capita expenditure on food. This provides a view of the average consumer's purchasing power and affluence, and is an indicator of demand for New Zealand's mix of soft commodities, ability to pay, and higher expenditure per kilogram of food purchased (i.e. higher price points through the supply chain).
5. Proportion of income spent on food.
6. Catering consumer expenditure per capita. This is an indicator of the prevalence and development of the foodservice channel.
7. Cost of a three course meal at a mid-range restaurant. This indicates the development of the foodservice channel, ability to pay, and expenditure per meal (i.e. a higher cost points to the likelihood of more favourable margins).
8. Urbanisation ratio. Usually linked to consumer affluence, more westernised consumer preferences, the prevalence of organised retail and foodservice providers, and concentration of potential customers. There is a strong relationship between urbanisation ratios and the likes of per-capita food expenditure and the cost of dining out, as the chart overleaf shows.

URBANISATION RATIO RELATIONSHIP WITH COST OF DINING AT MID-RANGE RESTAURANT

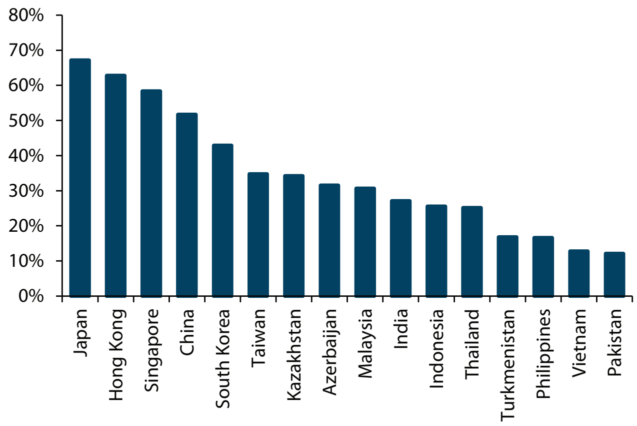


Source: ANZ, Euromonitor, World Bank, Numbeo

The analysis

We excluded 13 of 29 countries due to data limitations. For the 16 countries where robust data was available, the top five were Japan, Hong Kong, South Korea, Singapore and China in that order when ranked on an average attractiveness basis for the eight indicators in this category. On an accumulated ranking basis for the indicators, the top five fell in a slightly different order, but included the same countries.

RANKED ATTRACTIVENESS OF COUNTRIES FOR FOOD MARKET DEVELOPMENT AND SIZE (REGION'S RELATIVE ATTRACTIVENESS SCORE)



Source: ANZ, Euromonitor, World Bank, Numbeo

FOOD MARKET SIZE AND DEVELOPMENT

	Ranking on placings for indicators	Ranking on average attractiveness score for indicators
Japan	1	1
Hong Kong	2=	2
South Korea	2=	5
Singapore	4	3
China	5	4
Taiwan	6	6
Indonesia	7	11
Kazakhstan	8	7
Thailand	9=	12
Malaysia	9=	9
Brunei Darussalam	11	n/a
Azerbaijan	12	8
Philippines	13	14
India	14	10
Pakistan	15	16
Vietnam	16	15
Turkmenistan	17	13
Mongolia	18	n/a
Armenia	19	n/a
Uzbekistan	20	n/a
Bangladesh	21	n/a
Sri Lanka	22	n/a
Laos	23	n/a
Bhutan	24	n/a
Timor-Leste	25	n/a
Kyrgyzstan	26	n/a
Cambodia	27	n/a
Tajikistan	28	n/a
Nepal	29	n/a

The top five were unsurprising. In the middle of the table there were some familiar emerging names and some less well-known potential up-and-comers including Taiwan, Malaysia, India, Indonesia, Thailand, Kazakhstan and Azerbaijan. The results varied for these nations depending on the measure used – especially India and Indonesia.

For India the results were heavily influenced by the fact it was at two ends of the spectrum. It ranked well on size metrics, but was just about dead last for all the other indicators, from growth in the food market through to affluence metrics, such as the cost of a meal at a mid-range restaurant and food expenditure per capita. Indonesia was similar to India but not quite as extreme, with better rankings for urbanisation, growth in the food market and catering expenditure – all implying relatively better growth opportunities through foodservice and organised retail channels.

Thailand's downfall on the relative attractiveness measure was its low urbanisation and eating out expenditure metrics, perhaps implying relatively limited opportunities for higher-value foreign foodservice products outside tourist hotspots. Taiwan ranked down the pecking order on the size metrics, but scored well on the food expenditure metrics.

For the remaining 13 countries where there was limited data we completed a truncated analysis using population, urbanisation and GDP per capita (a proxy for food expenditure per capita and purchasing power). As would be expected, except for Brunei Darussalam, they generally ranked fairly low compared with the 16 countries where better data was available.

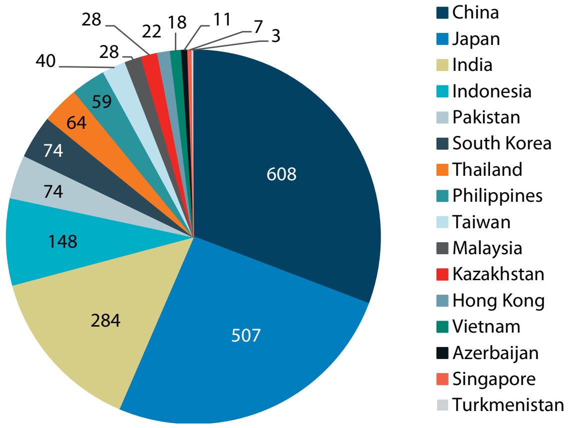
What stood out in the results?

The different indicators shed light on the various features of each market.

China is a behemoth in terms of its overall size, and apart from Azerbaijan, has been the fastest-growing food and non-alcoholic beverage market in recent years. However, it ranked only middle of the pack for food market development metrics.

At the other end of the spectrum, Japan ranked very highly on all the development and consumer measures, as well as being a reasonably large market – this is why it pipped China, Singapore and Hong Kong at the post. However, its one drawback is that it's a fairly mature food market with annual growth of only 5% in recent years, compared with China (+18%), Hong Kong (+9%) and Singapore (+12%). But one can overstate the importance of this, given potential gains in market share. Zespri noted that its exports of kiwifruit to Taiwan, which it had considered a mature market, unexpectedly surged 30% when tariffs were lifted. In addition, as we discuss in the next section, given New Zealand can only feed a limited number of people, the game is about targeting the opportunities that can maximise returns from limited supply.

SIZE OF ASIAN FOOD & BEVERAGE MARKETS (US$B)



Source: ANZ, Euromonitor

Although the biggest markets can sometimes be the easiest targets, potentially lucrative niche markets shouldn't be ignored. Some of the more interesting up-and-comer rankings were for Taiwan, Malaysia, Thailand, Kazakhstan and Azerbaijan.

1. Taiwan and Malaysia had similar scores for most metrics. Both aren't the biggest markets, but ranked well for all the food development and consumer indicators. Taiwan has a slightly larger food market, but Malaysia's is growing at a faster rate, highlighting the potential for new opportunities. Taiwan has slightly stronger food spending metrics than Malaysia, especially via the foodservice channel.
2. Azerbaijan and Kazakhstan aren't the biggest markets either, but their food markets have experienced some of the fastest growth in recent years. In addition, Kazakhstan has the third-highest per capita expenditure on food behind Hong Kong and Japan, and both countries are relatively highly urbanised, with a high cost to dine at a mid-range restaurant. This implies the presence of a relatively well-developed foodservice sector, with possible opportunities for foodservice products.
3. Thailand's food market has been growing strongly, but it ranked middle of the pack for nearly all the other measures. Lower urbanisation and weaker eating out expenditure metrics weighted on its overall placing, especially on the average attractiveness basis measure.

As we mentioned earlier, the likes of India and Indonesia and even the Philippines rank well when it comes to the size stakes for potential markets outside the well-established top five. However, they rank well down the rankings for food market development and consumer expenditure through foodservice and specifically on food.

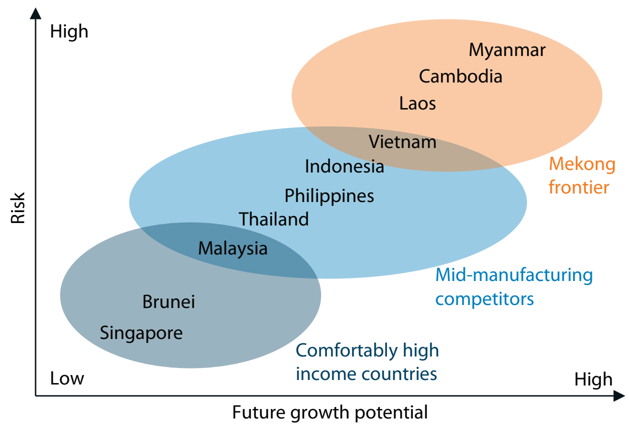
2. CONSUMER PURCHASING POWER AND AFFLUENCE

All the primary sectors are trying to target the highest-paying channels and markets; therefore an assessment of consumer purchasing power is required. Additionally, in order to find channels with opportunities to sell 'value-add' products, some assessment of affluence and the wealthier segments that exist within a country is required. There is a limit to the amount of food New Zealand can produce, meaning to maximise returns the different sectors should target the super wealthy with propositions for which they are willing to pay extra.

We assume that purchasing power is a function of not just the level of incomes, but also recent growth. Just looking at the former alone would exclude some of the fast-growing regions and the point of this paper is to look where opportunities exist, and not just focus on the heavily-westernised countries with high per capita incomes.

Some Asian markets, such as Singapore and Hong Kong, already have high consumer purchasing power/affluence. Others have higher growth potential in regard to consumer purchasing power/affluence, which implies new opportunities in the future. This category includes the likes of Thailand, Philippines, Indonesia and Vietnam where manufacturing is expanding.

DEVELOPMENT PHASE OF DIFFERENT ASIAN REGIONS



Source: ANZ

All countries were included in analysis of this category. There were several data points that were missing, but these were estimated from other indicators. The indicators we collected to get a feel for a country's purchasing power, affluence and wealthier segments were:

1. GDP per capita.
2. Wealth per capita.
3. Average growth in GDP over the last seven years. This indicates how the purchasing power of a country is changing. Greater growth will usually indicate higher growth rates for food intakes; specifically protein and fat consumption.
4. Percentage change in GDP per capita over the last seven years. This indicates how the purchasing power of the average consumer in a country is changing.
5. The retail cost of a basket of key food staples. Indicates purchasing power, expenditure on key staples, and available price points/margins (i.e. higher retail prices should imply better purchasing power and margins).

   The above five indicators give a feel for the level and growth of food intakes – and specifically protein and fat consumption. This makes them a proxy for demand for New Zealand's mix of soft commodities, ability to pay, and expenditure per kilogram of food purchased (i.e. price points/margins available through the supply chain).

6. Income share for the country held by the highest 10% of earners.
7. Disposable income for the highest 10% of earners.
8. Number of adults with wealth greater than US$100,000

   The above three indicators give a feel for the number of wealthy consumers within a country, as well as their purchasing power. With New Zealand able to deliver a limited volume of value-add food products, the wealthier segments need to be prioritised to maximise margins and earnings.

9. Secondary education attainment. Educational attainment links into wealth indicators, but also into ability/willingness to learn about different foods and products. This is particularly important when selling more sophisticated propositions, be it a provenance story or the special attributes (i.e. flavour, texture, taste, tenderness, convenience) of a product. Imported products/brands in emerging markets are also often new, and some education is required for households to understand the product, and how it should be prepared, cooked and consumed.
10. Adult literacy. Provides similar insight to secondary education attainment.

Key results

The top five markets were Singapore, Japan, Hong Kong and – surprisingly – Mongolia, followed by China when ranked on an average attractiveness basis for the ten different indicators. On an accumulated ranking basis the top five were slightly different, with Singapore, Japan and Hong Kong retaining the podium positions, followed by China and Thailand (up from 8th). Mongolia fell to seventh place on this measure.

CONSUMER PURCHASING POWER AND AFFLUENCE

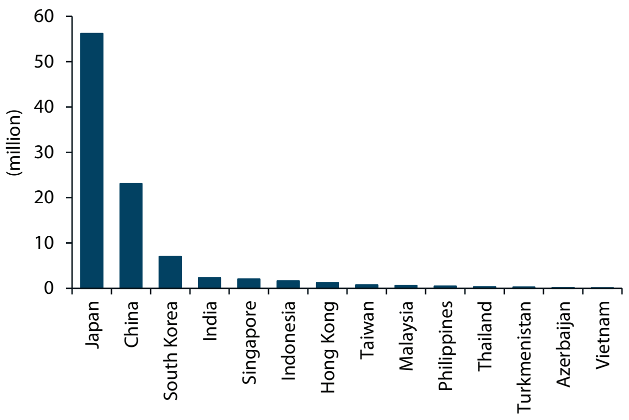
	Ranking on placings for indicators	Ranking on average attractiveness score for indicators
Singapore	1	1
Japan	2	2
Hong Kong	3	3
China	4	5
Thailand	5	8
South Korea	6	6
Mongolia	7	4
Turkmenistan	8	9
Malaysia	9	12
Brunei Darussalam	10	7
Taiwan	11	11
Sri Lanka	12	10
Philippines	13	14
Azerbaijan	14	20
Armenia	15	13
Indonesia	16	16
Kazakhstan	17	17
Uzbekistan	18	15
Vietnam	19	19
Timor-Leste	20=	26
Kyrgyzstan	20=	18
Laos	22	23
India	23	25
Tajikistan	24	21
Cambodia	25	22
Bhutan	26	27
Bangladesh	27	24
Pakistan	28	29
Nepal	29	28

The likes of Brunei Darussalam, Taiwan and South Korea would have ranked higher in this category if instead of a simple equal-weighting system, more weight were given to current high levels of purchasing power and wealth in these countries, for which one could certainly make a case. These countries ranked near the top for most of the indicators, apart from the change metrics for GDP and income per capita, where they were near last. This implies fairly mature food consumption metrics compared with the likes of Mongolia and Turkmenistan who had the strongest growth profiles, but off much lower levels of income and wealth.

The additional slight drag for Japan and South Korea compared with others ranked in the top echelons was that the top 10% of earners held a lower share of income, implying wealth is a bit more evenly distributed in these countries – generally considered to be a good thing, of course, but a headwind if one is attempting to export to the wealthiest few.

China excelled on the growth metrics, but where it really stands out is the number of adults with wealth greater than US$100,000. China ranked second behind only Japan on this metric. In total it is estimated nearly 23 million Chinese have wealth in excess of US$100,000 and in Japan there are an estimated 56.2 million. The next highest-ranking countries on this metric were South Korea, India and Singapore. The wealthier individuals in China and Japan outnumber the entire population of nearly half of the 29 nations analysed, highlighting the size of the wealthier echelons in some of the bigger Asian markets. In terms of 'super wealthy' segments, the incomes of the top 10% in Hong Kong and Singapore were US$471,800 and US$400,400 respectively. This was nearly seven times that of China.

NUMBER OF ADULTS WITH WEALTH GREATER THAN US$100,000



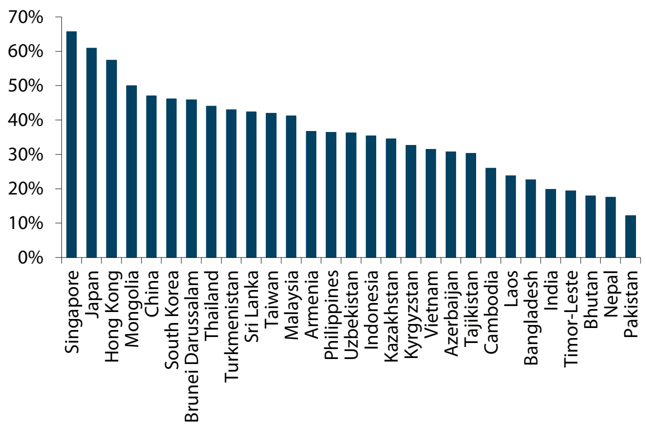
Source: ANZ, Credit Suisse

The two most interesting results in the top-ranking countries were Mongolia and Turkmenistan. This was solely driven by both topping the change metrics for GDP and income per capita. If these metrics are excluded they drop back into the middle of the pack.

Looking across all the measures, Turkmenistan stands out more than Mongolia in terms of being a 'prospect'. It has higher levels of average income and wealth. It also has a wealthier segment of society with the disposable income of the top 10% of earners a touch higher (ranking 7th). While it is a smaller country, the number of adults with wealth greater than US$100,000 totalled 254,000 (ranking it 12th).

Mongolia had the fastest growth metrics of all the countries analysed, but off lower levels of wealth and income per capita. The size and purchasing power of the wealthier segments is also a lot lower, with the number of adults with wealth greater than US$100,000 only a tenth of that of Turkmenistan at 24,000. This is partly due to Mongolia having a smaller population of 2.8 million people compared with Turkmenistan at 5.2 million.

RANKED ATTRACTIVENESS OF COUNTRIES FOR CONSUMER PURCHASING POWER AND AFFLUENCE
(REGION'S RELATIVE ATTRACTIVENESS SCORE)



Source: ANZ

Outside of the top-ranked countries and others already mentioned, the middle of the table was occupied by South Korea, Thailand, Malaysia, Taiwan, Brunei Darussalam, Sri Lanka, Azerbaijan and Armenia.

1. South Korea was very similar to Japan, ranking high for the level of wealth and average income metrics, but it has slower growth for these metrics (relative to other countries). It would be ranked higher if one put more weight on the level of wealth and incomes as opposed to the change. It also ranked third for the number of adults with wealth over US$100,000 and sixth for the incomes of the top 10% of earners. But in general the top 10% held a lower proportion of income, implying wealth is more evenly distributed compared with the likes of China and Singapore.

2. Taiwan has high levels of wealth and average incomes, but it has slower growth for these metrics. There is a wealthier segment of consumers with the number of adults with wealth over US$100,000 ranking 8th and the disposable income of the top 10% of earners being US$55,900 (ranked 14th). The income share of the top 10% ranked last though, implying the wealth isn't necessarily concentrated.

3. Thailand's growth metrics were relatively strong, but it ranked middle of the pack on most other measures. The top 10% hold a high proportion of income too.

4. Malaysia has high levels of wealth and average incomes. Wealth is also relatively concentrated. The income share of the top 10% was the highest of all countries (35%) and the disposable income of these consumers was US$136,000 (5th).

5. Brunei Darussalam has very high income per capita (3rd) and wealth (6th). It also has a small segment of super wealthy, with the disposable income of the top 10% of earners US$289,400 (ranked 3rd). But it has to be remembered it's a very small country with a population of just 420,000.

6. Sir Lanka was boosted up the rankings by fast GDP per capita growth, but off a low base. Most of its other metrics were ho-hum.

7. Azerbaijan has fairly high wealth and income per capita (both ranked 10th). However, it didn't perform so well on the growth metrics (ranked 26th). Secondary education (6th) and adult literacy (4th) also ranked highly. The extreme contrast between the rankings on the different metrics led to the wide divergence between the two ranking methods.

8. Armenia has reasonable wealth (17th) and income per capita (15th), alongside solid growth metrics. However, it fell behind on the wealthier segment indicators with the likes of the number of adults with wealth over US$100,000 only totalling 5,000 (23rd).

3. ALIGNMENT WITH NEW ZEALAND-ORIENTED TRADE

To grow markets there needs to be a degree of alignment between what they require and what we produce. New Zealand's main competitive advantage is the production of livestock (specifically dairy, red meat and seafood), horticulture (wine, kiwifruit and pipfruit) and a number of other niche products, usually of livestock or horticulture origin. Therefore, we need to identify countries where import demand opportunities will be rising for these products in the future. In this section we look at indicators that identify the presence of such alignment and opportunity.

The indicators we collected to get a feel for alignment with New Zealand-oriented trade were:

1. Fruit/meat/milk/seafood/vegetable expenditure per capita.

2. Average fat and protein consumption per capita. Many of New Zealand's products are high in both. These are also usually an indicator of more westernised diets.

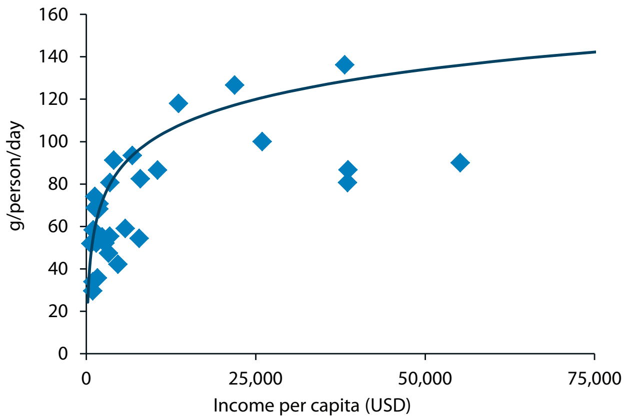
3. Annual change in per capita fat and protein consumption over the last five years. Change highlights emerging opportunities.

There is a non-linear relationship between incomes and protein and fat consumption, as shown in the charts below. This highlights that it is worth looking not only at the level of incomes, but also the growth, when considering export opportunities for New Zealand.

Protein and fat consumption across Asia

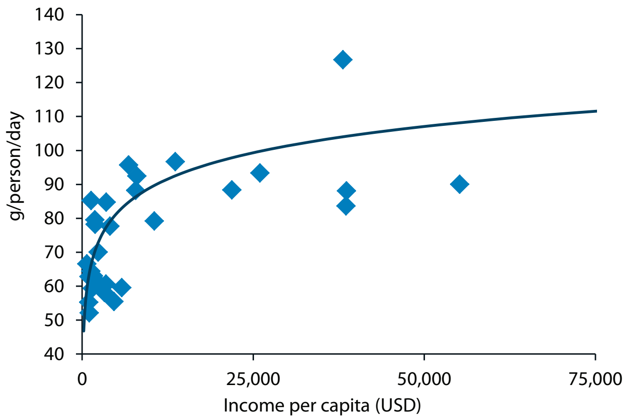
Note that the curve was estimated from all countries while just 29 countries analysed are plotted.

AVERAGE FAT CONSUMPTION BY COUNTRY



Source: ANZ, World Bank, FAO

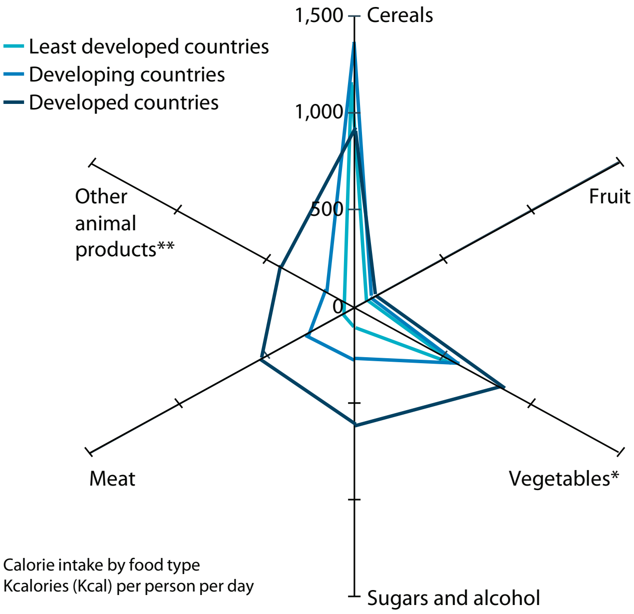
AVERAGE PROTEIN CONSUMPTION BY COUNTRY



Source: ANZ, World Bank, FAO

4. Share of dietary energy derived from cereals, roots and tubers. Usually an (inverse) indicator of westernised diets and the development stage of a food market. As the chart below shows, the four indicators above highlight not only alignment with what New Zealand produces, but more broadly westernised/developed country diets.

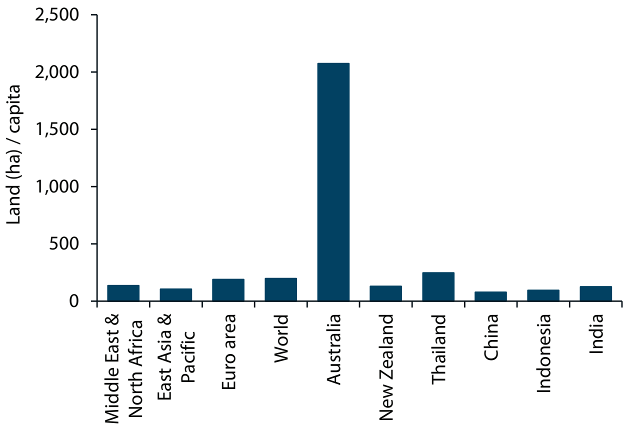
SOURCES OF CALORIE CONSUMPTION



Source: ANZ

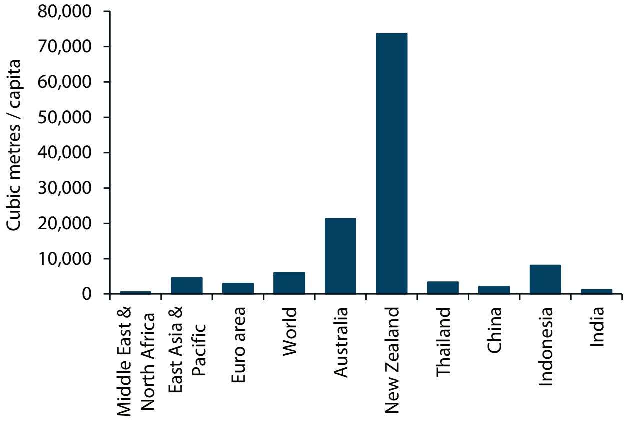
5. Cereal import dependency ratio. We struggled to find a reliable indicator for total food import dependency, but decided this would be a reasonable proxy. This indicator highlights the willingness to trade in base soft commodities, but also the shortfall/limitations in domestic food production to meet total demand.
6. Natural capital per capita. This highlights domestic production potential within a country and potential shortfall/limitations in domestic food production.

ARABLE LAND RESOURCES BY REGION AND COUNTRY



Source: ANZ, World Bank

RENEWABLE FRESHWATER RESOURCES BY REGION AND COUNTRY



Source: ANZ, World Bank

7. Bilateral trade conducted between New Zealand and the peer country over the last 12 months (total NZD). This shows current demand for New Zealand exports, but also willingness to trade by capturing the two-way trade occurring.
8. Recent change (5-year window) in bilateral trade between New Zealand and peer country. This highlights the growth in trade opportunities in recent times.

Key results

The top four countries under both ranking methodologies were the same, but the order was slightly different. On an average attractiveness basis, the top four were Hong Kong, Singapore, South Korea and China. On an accumulated ranking basis, the top four were South Korea, Singapore, Hong Kong and China. The fifth spot was a battle between Taiwan and Japan. Taiwan ranked higher if average attractiveness plays the tie-breaker.

ALIGNMENT WITH NZ-ORIENTED TRADE

	Ranking on placings for indicators	Ranking on average attractiveness score for indicators
South Korea	1	3
Singapore	2	2
Hong Kong	3	1
China	4	4
Taiwan	5	5
Japan	5=	6
Azerbaijan	7	9
Malaysia	8	12
Armenia	9	7
Kazakhstan	10	8
Mongolia	11	10
Kyrgyzstan	12	11
Turkmenistan	13	14
Vietnam	14	15
Indonesia	15	19
Brunei Darussalam	15=	13
Uzbekistan	17	16
Bhutan	18	23
Sri Lanka	19	21
Bangladesh	19	24
Tajikistan	19	18
Nepal	22	22
Thailand	23	27
Laos	24	17
Timor-Leste	25	20
Pakistan	26	26
India	27	28
Philippines	28	29
Cambodia	29	25

The top four countries were all fairly close with only the odd change metric tending to separate one from another. Hong Kong ranked number one for many measures, but it has to be remembered that they have historically counted for a significant amount of the grey-channel trade in food products with mainland China. This is changing for various reasons, but due to how some of the metrics are derived it does cause some distortion. Nevertheless Hong Kong remains an attractive proposition, with high levels of food consumption and expenditure on New Zealand-oriented products. It needs to import a significant amount of food due to limited natural endowments too. Hong Kong's lowest ranking was for fat consumption growth (21st) and a 3% per annum reduction in bilateral trade over the last five years.

South Korea was fairly consistent across all the measures, with no particular weaknesses. South Korea ranked fourth for current fat and protein consumption, but is also experiencing strong growth for both. Current bilateral trade levels are high (3rd) with solid growth in recent years (7th). It is also quite reliant on food imports due to being short of natural endowments (72% of average from 29 countries analysed). Singapore is very similar to Hong Kong, but had slightly lower levels of fat and protein consumption (7th and 6th respectively, compared with 1st on both measures for Hong Kong). It also ranked low for fat consumption growth (22nd). The added positives are slightly higher per capita expenditure on New Zealand-oriented products and higher levels of bilateral trade that have continued to grow at 3% per annum in recent years.

China is more of a mixed bag. Consumption patterns for New Zealand's export mix are favourable, with fat (5th) and protein (3rd) consumption ranking highly. Bilateral trade is high (1st) and growth has been high in recent years. However, the two largest pitfalls are less consumer spending on New Zealand-oriented food products (probably reflecting average purchasing power) compared with the others in the top four, and a much higher level of self-sufficiency. The latter is in part due to the size of China, but equally, government policy on food self-sufficiency especially in the likes of cereals. Unfortunately for New Zealand there also appears to be a drive towards some level of self-sufficiency in dairy products too.

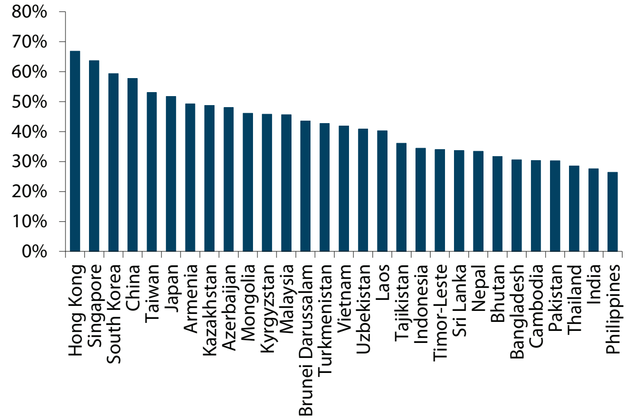
Taiwan rounded out the top five, followed closely by Japan. Taiwan was similar to both Hong Kong and Singapore. It consumes and spends a lot on New Zealand-oriented products. Both fat and protein consumption are high (2nd and 7th ranked respectively) and expenditure on New Zealand-oriented products was fifth. It also has a high dependency on food imports and already conducts a high level of bilateral trade with New Zealand (7th). However, the food market appears fairly mature with little growth (27th for fat and protein consumption growth).

Japan ranked high on most measures too, but was last for the growth in fat and protein consumption. If these measures were excluded, Japan would have ranked higher. New Zealand's export mix is well suited to the average Japanese diet. It includes a high proportion of non-cereals (86%) and high levels of fat (8th) and protein (9th). Japan is also relatively short of good cropping land and dependent on food imports. While this highlights a challenging backdrop for food production (especially livestock) within Japan, it has to be remembered local farmers are heavily protected through domestic support policies and import barriers. The TPPA agreement, if it comes into force, should help imports gain a more level playing field as time progresses.

The middle-ranked countries feature a number of less well-known names, including Armenia, Azerbaijan, Malaysia, Mongolia, Kyrgyzstan, Brunei Darussalam, Turkmenistan, Vietnam and Kazakhstan. The exact order depended on the ranking system used.

1. Armenian consumption patterns match New Zealand's export mix fairly well with fat (11th) and protein (11th) consumption ranking well, and the share of dietary energy coming from cereals low (3rd). Cereal import dependency is fairly high, but natural endowments in crop and pasture land for the country's relative size is around average. The one area that weighed on Armenia's ranking is the current low levels of bilateral trade ($15m over last 12 months) conducted between the two countries – there is no well-worn path for New Zealand exporters.
2. Azerbaijan was fairly solid across most measures. It stood out for high levels of protein consumption (8th) that is growing at an above-average rate of 1.3% per annum. Expenditure on New Zealand-oriented food products (8th) was also above average. Fat consumption (21st), on the other hand, was low, and the share of dietary energy from cereals high. Food import dependency is above average, with less natural endowments too, especially in pasture area.
3. Malaysia ranked highly outside of the growth measures. On this basis it could be argued that it should sit higher up the pecking order. Dietary patterns are favourable for New Zealand's export mix and expenditure is high (9th). Growth in fat and protein consumption was near last place though. Bilateral trade links are strong (6th) and have grown 3% per annum over the last five years.
4. Mongolia's main appeal is a dietary mix high in fat (5th) and low in cereals. Existing bilateral trade is low at $13 million over the last 12 months and is tracking back over this period though. Mongolia's import dependency is low too.
5. Kyrgyzstan's dietary product mix is favourable with protein consumption high (10th), fat consumption growing strongly (2nd highest) and the share of dietary energy from cereals low. Import dependency and natural endowments are around average. Current bilateral trade is non-existent though.
6. Brunei Darussalam expenditure on New Zealand-oriented food products is high (4th) and its dietary mix is favourable. However, the growth metrics indicate a fairly mature market. While it ranked highly for natural endowments, 83% is protected area and when taken with Brunei having the fifth-highest cereal import dependency of the countries analysed, it suggests a heavy reliance on imported food.
7. Turkmenistan's dietary mix is favourable with high protein consumption (5th) and growing fat consumption (3rd). It ranked very low on most other measures due to little current bilateral trade and the fact it is largely self-sufficient (low cereal import dependency and high natural capital per capita).

RANKED ATTRACTIVENESS OF COUNTRIES FOR ALIGNMENT WITH NEW ZEALAND-ORIENTED TRADE (REGION'S RELATIVE ATTRACTIVENESS SCORE)



Source: ANZ

8. Vietnam was a mixed bag. The dietary mix was not overly favourable, but fat (11th) and protein (1st) consumption are growing. Spending on New Zealand-oriented food products was the lowest of all countries analysed, probably reflecting average purchasing power. Vietnam is largely self-sufficient in food production too.

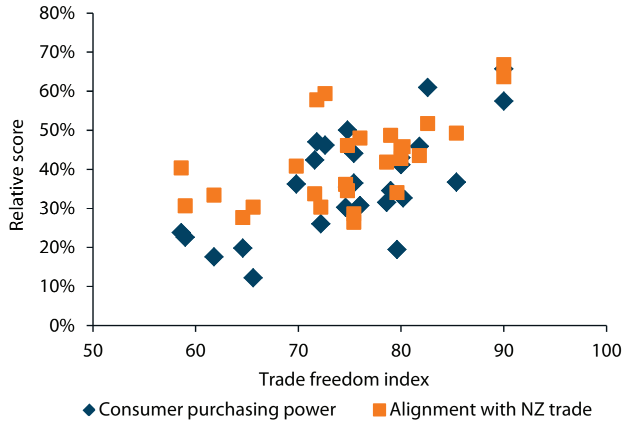
9. Kazakhstan has one of the most favourable dietary mixes, ranking second for protein consumption and third for fat consumption, as well as first for its (low) share of energy from cereals. Spending on New Zealand-oriented food products was also high (6th). However, it ranked very low for amount of bilateral trade (22nd) and growth in that trade. It is also largely self-sufficient with high natural capital per capita.

4. MARKET ACCESS

Tariff and non-tariff barriers globally remain high for agricultural goods. This is often due to biosecurity, as well as countries' desire to have some level of self-sufficiency for protection against food inflation, and/or times of conflict. These barriers are slowly being dismantled, but in many cases they still significantly inhibit (and distort) trade. This is most often by pricing imported products out of the market through high tariffs, restricting trade volumes for certain sensitive goods, creating investment and policy uncertainty by arbitrarily changing the rules, and/or creating other technical barriers to trade.

There is also a strong linkage between a country's trade liberalisation and some of our opportunity categories, such as consumer purchasing power/affluence and alignment with New Zealand-oriented trade.

RELATIONSHIP BETWEEN TRADE LIBERALISATION AND A COUNTRY'S OPPORTUNITY SCORE



Source: ANZ, Heritage Foundation

New Zealand has championed free trade agreements to improve market access for our exports and also have favourable trade access resulting from our historical ties with the likes of the UK and Europe. Out of the 29 countries we analysed we have free trade agreements with 13, and if the TPPA is fully ratified we can add Japan to that list.

The indicators used to gauge market access for New Zealand's mix of soft commodities included:

1. Simple mean tariff rate applied to primary products. A higher tariff rate implies limited market access and a higher likelihood of arbitrary changes to trade rules to protect local producers.

2. Simple mean tariff rate applied to primary products for the most favoured nation rates. This is the non-discriminatory rate countries must apply to all trading partners under the WTO agreement.

3. Whether or not New Zealand has a free trade agreement in place. Depending on the quality of the agreement and when it came into force this can provide a significant competitive advantage, especially when there are high trade barriers in place for competing countries. We assigned a simple ranking of three points if a free trade agreement had been negotiated and added another point if it was part of a wider agreement with other countries that drove extra trade synergies between participants. For those countries with no free trade agreement in place a point was added if one was currently being negotiated and another point if it was reasonably well progressed. In the case of Japan and the conclusion of the TPPA, it received two points as the deal has not as yet been fully ratified.

4. How long a free trade agreement has been in place. The effectiveness of a free trade agreement usually increases over time as linkages are strengthened and trade barriers are phased out.

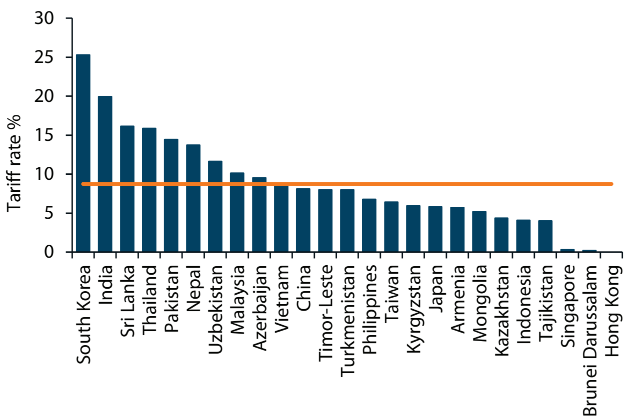
5. Trade freedom index from Heritage Foundation. Trade freedom is a composite measure of the absence of tariff and non-tariff barriers that affect imports and exports of goods and services. Its score is based on the trade-weighted average tariff rate and non-tariff barriers. The non-tariff barriers in a country's trade policy regime are assessed using both qualitative and quantitative information. Restrictive rules that hinder trade vary widely, and their overlapping and shifting nature makes them difficult to gauge and assess the impact on restricting trade. The categories assessed were: quantity restrictions, price restrictions, regulatory restrictions, investment restrictions, customs restrictions and direct government intervention. Unfortunately the assessment applies to all goods and services, as opposed to just soft commodities, but it still provides a reasonable proxy of the relative trade barriers between countries.

Key results

Singapore, Brunei Darussalam and Hong Kong took out the top three spots, as virtually no tariffs are applied to primary products and New Zealand has free trade agreements with all three countries. All three also ranked highly on the trade freedom index, with Singapore and Hong Kong taking out joint top spot on this measure. Hong Kong ranked slightly below the other two as New Zealand's free trade agreement has been in place for a shorter period of time and was not part of a wider agreement, but it does have synergies with the mainland China and Taiwan agreements. Taiwan took out fourth place with a free trade agreement now in place and it also ranked highly on the trade freedom index (3rd).

The next most attractive countries were Indonesia, Philippines and Malaysia. We have free trade agreements with all these countries that are part of the wider ASEAN agreement, which has been in force for five and a half years (albeit Indonesia joined later). All four would drop down to middle of the table without free trade agreements in place as the tariff rates applied to primary products range between 4-10%.

TARIFF RATES APPLIED TO PRIMARY PRODUCTS (SIMPLE MEAN %)



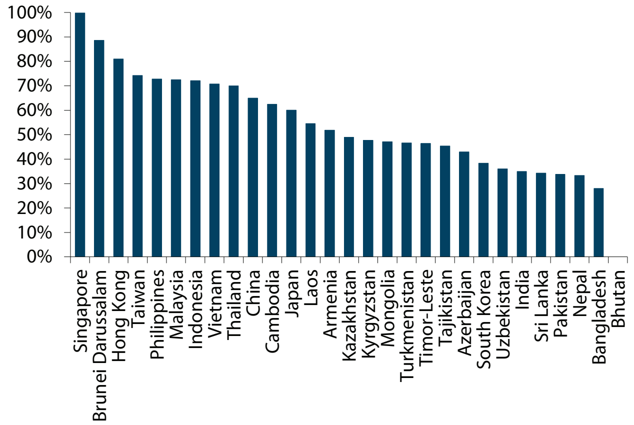
Source: ANZ, World Bank, WDI

MARKET ACCESS

	Ranking on placings for indicators	Ranking on average attractiveness score for indicators
Singapore	1	1
Brunei Darussalam	2	2
Hong Kong	3	3
Taiwan	4	4
Indonesia	5	7
Philippines	6	5
Malaysia	7	6
Armenia	8	14
Japan	9	12
Vietnam	10	8
Kazakhstan	11	15
Mongolia	12	17
Kyrgyzstan	13	16
Turkmenistan	14	18
Thailand	15	9
Timor-Leste	16	19
Tajikistan	17	20
China	18	10
Cambodia	19	11
Azerbaijan	20	21
Laos	21	13
Nepal	22	27
Uzbekistan	23	23
Pakistan	24	26
South Korea	25	22
Sri Lanka	26	25
India	27	24
Bangladesh	27	28
Bhutan	29	29

Both the Philippines (14th) and Indonesia (16th) had a lower trade freedom index too. An example of where a lower trade freedom bias has shown up despite the existence of a free trade agreement has been non-tariff barriers (quantity restrictions) for beef into Indonesia. Indonesia was New Zealand's third-largest beef market in 2009/10 before trade fell substantially due to the implementation of trade barriers as the Indonesian Government wanted the nation to become at least 90% self-sufficient in beef production. Subsequently many of the restrictions have had to be relaxed with import permits being issued according to the evolution of domestic beef prices (i.e. as retail beef prices have moved unsustainably higher more import permits have been issued to help cool the appreciation). This is just one example of where trade rules have been arbitrarily changed despite a free trade agreement being in place.

RANKED ATTRACTIVENESS OF COUNTRIES FOR MARKET ACCESS (REGION'S RELATIVE ATTRACTIVENESS SCORE)



Source: ANZ

Beyond the top seven, the rankings are more mixed and depend on the measure used (i.e. sum of rankings, or relative attractiveness gauge). On an accumulated ranking basis, the next most attractive countries for market access were Armenia, Japan, Vietnam and Kazakhstan. On an average attractiveness basis, the next four were quite different though, being Vietnam, Thailand, China and Cambodia – in that order. Examining the reasons for the different rankings suggests the average attractiveness measure more accurately reflects better market access between the countries being compared.

New Zealand has free trade agreements with Vietnam, Thailand, China and Cambodia that have been in place for 4-10 years. Outside of Vietnam, the other countries ranked lower on the accumulated ranking basis due to lower trade freedom placings and high tariff rates applied to primary products. This suggests their placing very much depends on the quality on the free trade agreement in place and whether or not it is being adhered to. In cases such as China, there are many examples from recent years where trade has been negatively impacted by a wide range of non-tariff barriers across many different sectors. This is reflected in China's 20th placing on the trade freedom index.

Armenia, Japan and Kazakhstan ranked higher on the placing measure primarily due to better trade freedom and lower tariff rates applied to primary goods. We are actually surprised that Japan's measured average tariff rates applied to primary products are so low (6% on both measures), given the protection and subsidies historically offered to local producers. Protection, subsidies and trade barriers are particularly high for the rice, sugar, beef, pork, dairy, horticulture and wheat sectors, which were major sticking points for Japan in the Trans-Pacific Partnership negotiations. Japan now looks set to roar up the rankings in this category over coming years as the benefits of the TPPA flow through.

It is also interesting to lament the lost opportunities: those countries at the bottom of the market access table that scored well in other categories, such as consumer purchasing power/affluence. Countries that rate a mention here are: South Korea, Turkmenistan, Kyrgyzstan, Mongolia, Kazakhstan, Sri Lanka and India. The recent South Korean free trade agreement will help in this case. But then again, there are still significant barriers for many sectors such as dairy and it will take time for tariffs to roll off for other key exports.

India is often held up as a large potential market, but one of its largest impediments is high trade barriers (ranking it 25th on the trade freedom index and 27th for tariffs applied to primary products). The Indian government has a history of changing trade regulations at short notice, creating investment uncertainty. Furthermore, local food producers are supported through a range of policies, and provide fierce competition for many imported food products. Many domestic food products are prohibited from export, but often during good seasons when there is excess production this will be exported by the Government. Tariffs are generally 25-75% on imported food products, which, when coupled with local excise and sales taxes, distributor margins, and transportation costs, means imported products are often very expensive compared with domestic alternatives.

So for many of these countries, a deep dive on tariffs, non-tariff barriers and local producer support is required to fully understand the true risks and opportunities.

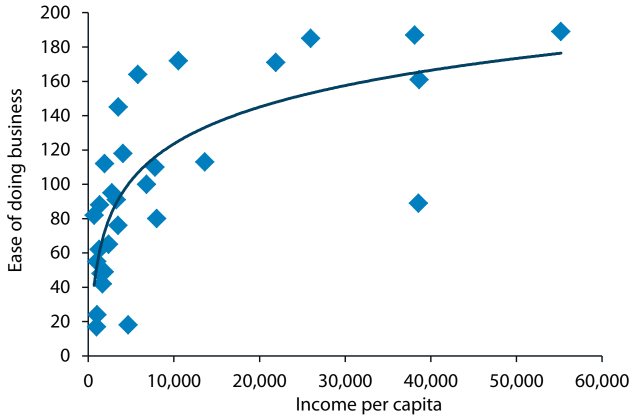
5. EASE OF DOING BUSINESS

Ease of doing business captures the effort required to pursue opportunities that might exist within a country. The facets that are important when conducting business within a country are many, but key ones include the regulatory environment; ease of completing appropriate documentation and regulatory requirements (i.e. registering a business and its activities, paying taxes etc); the political environment; intellectual and property rights; the financial framework; and the level of corruption. If these facets are not favourable this creates investment uncertainty, creates higher costs to conducting business and limits a business' ability to pursue opportunities.

The indicators we collected to get a feel for the ease of doing business within a country were:

1. The ease of doing business index from the World Bank. This takes into account a number of components in conducting business within a country that cover the facets outlined above. It tends to have a non-linear relationship to GDP (see chart).

RELATIONSHIP BETWEEN EASE OF DOING BUSINESS AND PURCHASING POWER



Source: ANZ, World Bank

2. The ease of conducting trade across borders. This is a component from the ease of doing business index that includes specific measures examining both importing and exporting from a particular country.
3. Level of corruption. This wasn't included in the above measures, but is nonetheless important for obvious reasons. The measure we used is an index from Transparency International that is based on surveys of the perception of corruption within a country.
4. Number of New Zealand residents born within a country. This identifies the ability to source local expertise in New Zealand for a particular target market. This expertise could include things such as the ability to understand an export market and business customs, key contacts/ relationships, speak local language etc.

Key results

Singapore took out top spot, followed by South Korea and Hong Kong. The exact position for South Korea and Hong Kong depends on the measure used. Singapore ranked in the top position for ease of doing business and conducting trade across borders. There are only 5,370 New Zealand residents who were born in Singapore (13th), but given its multi-cultural society and the fact English is the main language, finding particular expertise shouldn't be too difficult.

Hong Kong and South Korea have very similar rankings to Singapore for ease of doing business and conducting trade across borders. Where they deviate is in the fact that corruption is higher in South Korea, but more New Zealand residents were born in South Korea than Hong Kong (26,600 versus 7,100). Hong Kong is similar to Singapore with a multi-cultural society and English is also the main language, meaning finding the right expertise shouldn't be too much of a constraint. On this basis, Hong Kong should be slightly more attractive than South Korea for the ease of conducting business.

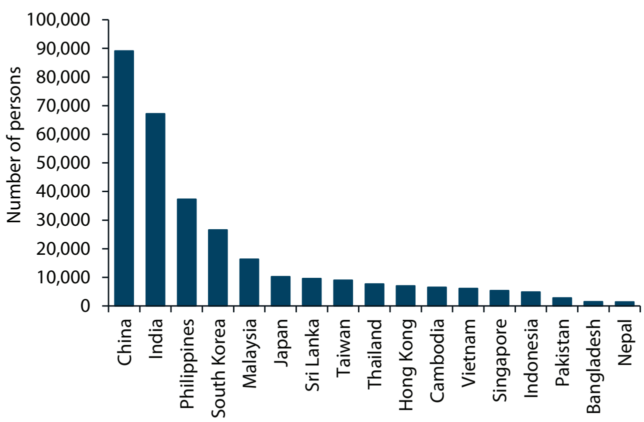
EASE OF DOING BUSINESS

	Ranking on placings for indicators	Ranking on average attractiveness score for indicators
Singapore	1	1
South Korea	1=	3
Hong Kong	3	2
Japan	4	4
Malaysia	4	5
Taiwan	6	6
Thailand	7	8
Philippines	8	9
China	9	7
Sri Lanka	9=	11
Vietnam	11	13
India	12	10
Armenia	13	12
Indonesia	14	14
Mongolia	15	17
Bhutan	16	16
Azerbaijan	17	19
Brunei Darussalam	17	15
Pakistan	17	18
Kazakhstan	20	20
Nepal	21	23
Cambodia	22	21
Timor-Leste	23	22
Kyrgyzstan	24	24
Bangladesh	25	27
Laos	25	26
Turkmenistan	27	25
Tajikistan	28	29
Uzbekistan	29	28

Outside the top three, the next top-ranking countries were Japan, Malaysia, Taiwan, Thailand, Philippines, China, Sri Lanka, Vietnam, India and Armenia. There wasn't too much variation in the rankings according to the measure used.

1. Japan has low corruption (2nd) and was solid for all the other measures.
2. Malaysia ranked well on the ease of doing business measures (4th for both) and had the 5th highest number of New Zealand residents born there.
3. Taiwan ranked slightly lower than Malaysia on the ease of doing business measures (5th and 6th), but has slightly lower levels of corruption (ranking 5th).
4. Thailand was similar to Malaysia and Taiwan too, but had higher levels of corruption (8th) and less than half the number of New Zealand residents born there compared with Malaysia (7,700 versus 16,400). Taiwan also had a higher number of New Zealand residents born there (9,000).
5. The Philippines has the 3rd highest number of New Zealand residents born from a particular country and English is widely spoken, meaning there should be plenty of available local expertise. However, it doesn't rank quite so well for ease of doing business (14th). While conducting trade across borders is better (10th), the main weakness seems to be weaker legal rights for investors.
6. China was fairly constant on the ease of doing business and corruption measures (ranking 14th or 13th). But there are 89,100 New Zealand residents who were born in China (1st), implying a lot of local expertise.

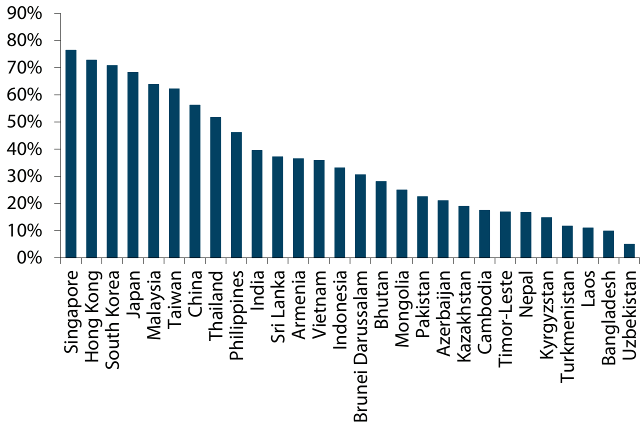
NUMBER OF NEW ZEALAND RESIDENTS BORN WITHIN A COUNTRY



Source: ANZ, Statistics NZ

7. Sri Lanka has relatively less corruption compared with peers (9th) and a high number of New Zealand residents born there. However, it doesn't score so well on the ease of doing business measures.
8. Vietnam's ease of doing business is solid, but relative corruption was on the high side (16th).
9. India was a contrast, with the ease of doing business measures very low (25th on overall index). The significant weakness was broad-based, but particularly so for starting a business and legal contract enforcement. The offset is that there are 67,200 New Zealand residents who were born in India (2nd), implying a lot of local expertise that might help navigate some of these barriers.
10. Armenia ranked well for ease of doing business (8th), but was down the pecking order for the other measures.

RANKED ATTRACTIVENESS OF COUNTRIES FOR EASE OF DOING BUSINESS
(REGION'S RELATIVE ATTRACTIVENESS SCORE)



Source: ANZ

In the bottom half of the table there aren't too many unusual results. Some countries like Turkmenistan that scored high on the consumer purchasing and affluence measures had a low ranking. Further investigation would be required to understand the key impediments to conducting business within the country.

6. SUPPLY AND COOL CHAIN DEVELOPMENT/INFRASTRUCTURE

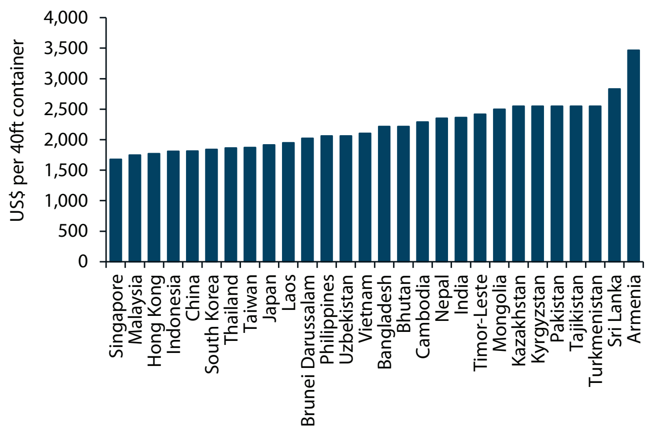
The majority of New Zealand's primary products are highly perishable and require a robust cool chain to ensure high standards of food safety and adequate shelf life when they arrive in market. A robust cool chain is also usually a sign of the presence of a strong food retail and service sector. The robustness and quality of the cool chain can also make a material difference to freight charges, which can influence margins and the competitiveness of products, especially for soft commodities.

The indicators we used to assess a country's supply chain development/infrastructure were:

1. Burden of customs procedures. This is based on a World Bank survey measuring business executives' perceptions of a country's efficiency of customs procedures. The rating ranges from 1 to 7, with a higher score indicating greater efficiency. The burden of customs procedures and other documentation requirements can be a material barrier to trade for smaller-sized companies (of which New Zealand has many).

2. Quality of port infrastructure. This is a World Bank survey measuring business executives' perceptions of a country's port facilities. Scores range from 1 (port infrastructure considered extremely underdeveloped) to 7 (port infrastructure considered efficient by international standards).
3. Logistics performance index. Another World Bank survey measuring perceptions of a country's logistics based on efficiency of customs clearance process, quality of trade and transport-related infrastructure, ease of arranging competitively priced shipments, quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach the consignee within the scheduled time. The index ranges from 1 to 5, with a higher score representing better performance.
4. Distance from New Zealand. Distance to market isn't necessarily a constraint in itself. However, when it's combined with a lower-quality supply chain and perishable products it becomes a significant barrier to trade.
5. Shipping freight container cost for food products. This is an indicator of the efficiency of the supply chain and cost of seaborne freight. The majority of New Zealand's primary products are shipped by sea rather than air, due to cost.

SEA FREIGHT COSTS



Source: ANZ, worldfreightrates.com

6. Air freight cost for general merchandise. This is an indicator of the efficiency of the supply chain and air linkages/connectivity with a country (i.e. a lower cost will generally indicate better connectivity and vice versa).

Key results

The trade hubs of Singapore and Hong Kong took the top spots, with Japan, Malaysia, Taiwan and South Korea rounding out the top six. The next group of countries then included Brunei Darussalam, China, Thailand, Indonesia, Philippines, Sri Lanka, Vietnam, Cambodia, India and Laos.

SUPPLY AND COOL CHAIN DEVELOPMENT

	Ranking on placings for indicators	Ranking on average attractiveness score for indicators
Singapore	1	1
Hong Kong	2	2
Japan	3	3
Malaysia	3=	5
Taiwan	5	4
South Korea	6	6
Brunei Darussalam	7	7
China	8	8
Thailand	9	9
Indonesia	10	10
Philippines	11	11
Sri Lanka	12	13
Vietnam	13	12
Cambodia	14	15
India	15	16
Laos	15	14
Pakistan	17	20
Bangladesh	18	18
Uzbekistan	18	17
Bhutan	20	19
Azerbaijan	21	26
Kazakhstan	22	24
Timor-Leste	23	21
Armenia	24	28
Turkmenistan	25	23
Mongolia	26	22
Tajikistan	27	25
Nepal	28	27
Kyrgyzstan	29	29

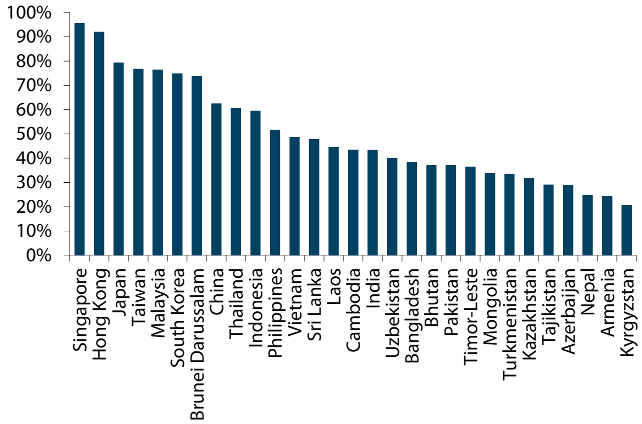
1. Singapore dominated the rankings for efficiency of the supply chain, which is unsurprising given its position as a major hub for trade within the Asian region and globally. Its logistics efficiency is reflected in Singapore having the lowest sea shipping cost for a container, even when it isn't the closest market (5th).

2. Hong Kong was very similar to Singapore and took out second position for the measures of supply chain efficiency. Hong Kong's logistics efficiency is also reflected in a low sea shipping cost (3rd) despite being the 10th furthest away market.
3. Japan has the third-best overall perceived logistics performance, but the quality of port infrastructure is slightly lower. This appears to be a factor in the sea shipping cost being higher too (9th). However, Japan had the lowest air freight cost, highlighting good connectivity.
4. Malaysia was the opposite of Japan. Malaysia didn't rank quite so well on its overall logistics performance (8th). However, Malaysia has slightly better port infrastructure, which appears to be a factor in it having the second-lowest sea shipping cost, which is materially below (9%) that of Japan's.
5. Taiwan ranked well for the burden of customs procedures and quality of port infrastructure (3rd for both). Overall logistics performance and distance to market were higher though and this seems to weigh somewhat on sea and air freight costs (8th and 7th respectively).
6. South Korea ranked 15th for distance to market, which placed it lower on the accumulated ranking basis. However, it ranked very favourably on the logistics performance and quality of port infrastructure measures. The cost of air (2nd) and sea (6th) freight are both low too, implying the distance to market isn't an impediment.

Outside the top six some of the other highlights were:

7. Brunei Darussalam is one of the closer markets (3rd), but sea freight costs are relatively high, despite a solid logistics score.
8. China's logistics ranking was high (5th) and sea freight cost low (5th) due to the higher volume of two-way trade with New Zealand. This is despite it being one of the furthest away markets (depending on final destination within the country) and air freight costs being higher (again, depending on the destination, given China's size).
9. Thailand was very similar to China, but didn't rank quite so well for overall logistics performance (9th) and cost of sea freight (7th). Air freight costs were slightly better (12th), probably reflecting Thailand is a major holiday destination for New Zealanders.
10. Indonesia is the second-closest market and its proximity to Singapore (major trade hub) means it has a low sea freight cost (4th). However, it didn't score so well on the other measures.
11. The Philippines is a close market, but didn't rank too highly on most of the other measures. Its ranking for customs procedures was notably low (26th).
12. Sri Lanka ranked reasonably well for the logistics measures and has a low air freight cost (10th). But its sea freight cost ranked 27th and is 26% higher than the average for the 29 countries analysed.
13. Vietnam ranked well for overall logistics efficiency (12th) and has a competitive sea freight cost (14th), but air freight cost (19th) and the burden of customs procedure were high (18th).
14. India ranked well for overall logistics efficiency (10th), but its a longer distance to market and has very high sea (19th) and air (21st) freight costs.

RANKED ATTRACTIVENESS OF COUNTRIES FOR SUPPLY & COOL CHAIN DEVELOPMENT/ INFRASTRUCTURE
(REGION'S RELATIVE ATTRACTIVENESS SCORE)



Source: ANZ

In the bottom half of the table there aren't too many surprises. Any of these countries that did show opportunity under the other measures would need to be examined further for robustness of the supply chain, as well as the cost efficiency to land product and the ability to compete against local/other imported products.

OVERALL RESULTS ACROSS ALL CATEGORIES

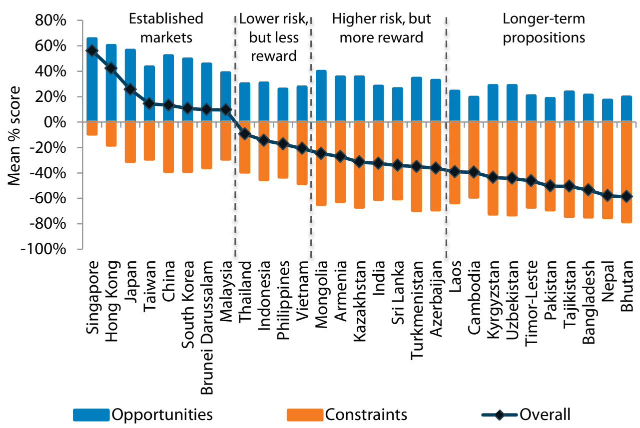
It is perhaps testament to the appropriateness of the framework we have adopted – not to mention the savviness of New Zealand's exporters – that the top-ranked countries of Singapore, Hong Kong, Japan, South Korea, Taiwan, Malaysia and China are already well-established export markets for many sectors. Together these markets account for around 80% of New Zealand's bilateral trade flow and 81% of total exports within the Asian region.

The up-and-comer bunch of Brunei Darussalam, Thailand, Indonesia, Mongolia, Armenia, Philippines, Azerbaijan, Kazakhstan and Vietnam represent some less well-known opportunities. Each market has its pros and cons. Some are fast growing on a number of metrics, highlighting rapid growth of new opportunities. Others are more mature, but offer growth opportunities if market penetration and share can be increased. Others represent large opportunities, but have a number of barriers that would need to be navigated.

The tail end of the table is made up of longer-term propositions that are unlikely to feature in the medium-term growth stakes according to our framework. At present the bottom 12 ranked markets, excluding India, make up less than 1% of New Zealand's bilateral trade in the Asian region. The two where some business of note is currently conducted are Bangladesh and Pakistan. The largest export in each case is milk powder (a low value-add product), while imports feature clothes/footwear, finished fibre and coffee.

Another way to look at the relative attractiveness of the different countries is to split the indicators into opportunities and barriers to capturing the identified opportunities. The likes of food market size and development; consumer purchasing power and affluence; and alignment with New Zealand-oriented trade all define the opportunities that a specific country presents. The other measures – market access, supply and cool chain development/infrastructure, and ease of doing business – together define how difficult it is to capture the opportunity that might exist.

RELATIVE ATTRACTIVENESS OF ASIAN COUNTRIES FOR NEW ZEALAND PRIMARY PRODUCTS (REGION'S RELATIVE ATTRACTIVENESS SCORE)



Source: ANZ

OVERALL RANKINGS

	Ranking on placings for indicators	Ranking on average attractiveness score for indicators
Singapore	1	1
Hong Kong	2	2
Japan	3	3
South Korea	4	6
Taiwan	5	4
Malaysia	6	8
China	7	5
Brunei Darussalam	8	7
Thailand	9	9
Indonesia	10	10
Mongolia	11	13
Armenia	12	14
Azerbaijan	13	19
Philippines	14	11
Kazakhstan	15	15
Vietnam	16	12
Turkmenistan	17	18
Sri Lanka	18	17
Uzbekistan	19	23
Kyrgyzstan	20	22
Laos	21	20
India	22	16
Timor-Leste	22	24
Cambodia	24	21
Pakistan	25	25
Bhutan	25	29
Tajikistan	27	26
Bangladesh	28	27
Nepal	29	28

On this basis, the ranking position of certain countries changes a little, but the overall positioning between established, up-and-comers, and longer-term propositions is mainly intact. What the analysis does allow is an assessment of the relative size of market opportunity for a country versus the potential barriers. For example, while South Korea and China offer greater market opportunities than Malaysia and Taiwan, the latter are currently easier places to access the opportunities and conduct business. The trade-off is that the opportunities are not as great.

It's similar for the next groupings of countries. Mongolia, Armenia and Kazakhstan all offer relatively more opportunity than the likes of Thailand, Indonesia, Philippines and Vietnam. But for the latter grouping of countries it is materially easier to access the opportunities and do business. So depending on a sector's/business's expertise and proposition, as well as their risk appetite, the most obvious opportunity may not in fact be the most fruitful one.

MARKETS TO WATCH

We have picked out some potential movers up the rankings over the next 5-10 years and other highlights from our framework.

Established markets

In the established group, China has been a focus for exporters since 2008. This will continue, with increasing linkages through a number of facets of business and two-way investment. However, an opportunity that hasn't been in the spotlight so much in recent times is Japan. One of the key changes that is likely to make Japan a more attractive future proposition is better market access from the ratification of the TPPA though this still faces political hurdles. Tariffs and restricted market access, along with a complex food market structure, have been key barriers to further increases in the trade of food products.

While Japan certainly isn't a growth market given its maturity, there is a significant opportunity to increase market share. Our opportunity metrics show it is one of the largest and most sophisticated food markets in Asia, with high consumer purchasing power and affluence.

- Japan ranked first under the food market size and development category, being the second-largest market behind China and ranking highly on all the other measures, especially for dining-out expenditure and development of the foodservice channel.
- In terms of consumer purchasing power and affluence, Japan ranked second to Singapore. However, the number of wealthier consumers in Japan (56.2 million) is much larger than Singapore (2 million) and even China, implying a bigger wealthy segment that is able to be tapped into.
- For alignment, Japan ranked fifth. The main reason it didn't rank higher was that it ranked last for the growth in fat and protein consumption. If these measures were excluded, Japan would have ranked near the top for this category. New Zealand's export mix is well suited to the average Japanese diet. It includes a high proportion of non-cereals (86%) and high levels of fat (rank 8th) and protein (rank 9th). They are also relatively short of good cropping land and very dependent on cereal imports. While this highlights a challenging backdrop for food production (especially livestock) within Japan, it has to be remembered local farmers are heavily supported through domestic support policies. These are slowly changing to be more market oriented and this could create new partnership opportunities in the future.
- On the barriers front, Japan is slightly less attractive relative to some of its other established market counterparts. The two key areas of relative weakness are market access and ease of doing business (4th). As mentioned above, market access is expected to improve, and given the opportunities on offer, this should be an exciting prospect for many sectors.

Up-and-comers

The question of which markets in the up-and-comer group might make it into the 'top-tier' status over the next 10 odd years is less clear cut. Each market has its pros and cons and therefore a business' preferences will matter. Preferences are likely to be influenced by product offering, scale, risk appetite, investment time horizon, business partnerships and the like.

That said, some of our more favoured potential markets are: Thailand, Indonesia, Vietnam, Mongolia, Armenia and Kazakhstan. The first three are relatively easier markets to establish business in, but the latter three appear to offer larger future growth opportunities. Highlights for each are:

Thailand

- Thailand's food market is relatively well developed already, but continues to register strong growth. It's also one of the larger-sized marketplaces. Consumer purchasing power and expenditure on food was slightly less than others in the up-and-comer group. This is changing more quickly than others in this group though, with some of the strongest income and general economic growth conditions in recent years.
- The potential drawback on the opportunity front is that fat and protein consumption is low and only growing moderately. This implies diets are less well aligned with what New Zealand produces. Thailand is also largely self-sufficient in many food products and in some cases a net exporter of soft commodities into nearby regions.
- On the barriers front, Thailand ranked in line with many of the established markets. Market access is good with the second-longest-running free trade agreement in place. Ease of doing business and supply chain infrastructure was solid across all the metrics. This was reinforced by already-high bilateral trade and competitive freight rates, as well as good air connectivity.
- All up, Thailand seems to be a relatively well-developed market, but with substantial new growth occurring. This will create new opportunities. The barriers to entry are low versus many other emerging alternatives too.

Indonesia

- Indonesia is one of the largest markets, with the third-highest population of the 29 countries we analysed. The food market is growing rapidly at 16% per annum. Diets are changing towards more western preferences, with protein consumption growing strongly, albeit off a low

- base. This is creating a number of new opportunities for the likes of meat and dairy products. Equally, increasing incomes will improve demand for fresh fruit too.
- Indonesia's consumer purchasing power metrics and foodservice opportunities are slightly less favourable than the likes of Thailand at present. However, per-capita incomes increasing by 5% per annum and increasing urbanisation will no doubt create niche opportunities given the overall size of the market.
- Indonesia isn't the easiest place to conduct business either, but bilateral trade is at $1.7 billion, implying many businesses have already succeeded in opening the doors. On the barriers front, its better rankings were for locality and low sea freight rates given its geographic position.
- Size, growth and locality are the three most attractive aspects of the Indonesian market that are likely to create significant new opportunities moving forward.

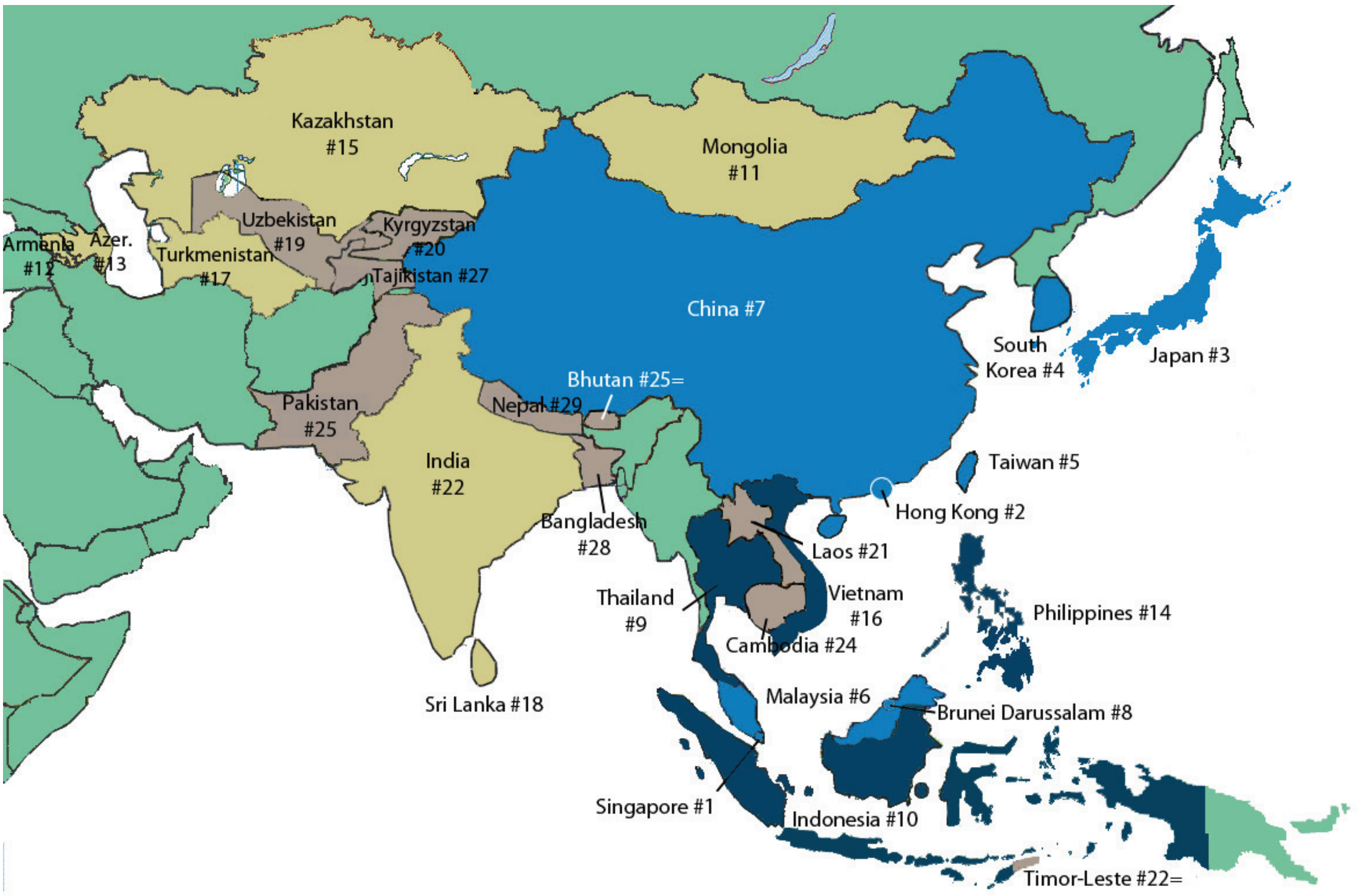
Mongolia

- Mongolia is the smallest market in our up-and-comer group with a population of just 2.8 million people, so it's never going to be a large market. But a number of metrics suggest there could be some attractive niches. Its close proximity to the Northern Chinese marketplace means it shouldn't be too much effort to add it as another destination, or as part of a wider strategy for businesses already established in the Chinese marketplace.
- Mongolia's most attractive traits are a diet aligned with what New Zealand already produces, and relatively high existing expenditure on food – and particularly New Zealand-oriented food products – compared to the rest of the up-and-comer group. Per-capita incomes have been increasing by nearly 11% per annum over recent years too, the fastest rate of all countries analysed. Combined with existing expenditure metrics it implies the possibilities of emerging niche opportunities.
- On the barriers front, Mongolia ranked relatively well for ease of doing business and having low levels of corruption. Market access also appears solid despite no free trade agreement being in place. Its main downfall is distance to market and poor supply chain infrastructure. This could be a very real impediment for many.
- On this basis we view Mongolia as a possible add-on market for those businesses already operating in the North of China. This minimises establishment and development risk, and the costs of establishing a supply chain.

Kazakhstan

- Kazakhstan is a smaller market that is largely self-sufficient in food. However, it has one of the most favourable dietary mixes, ranking very high for both fat (3rd) and protein (2nd) consumption, as well as first for its (low) share of energy from cereals. Spending on food and New Zealand-oriented food products is also high (6th). While economic

MAP OF COUNTRY RANKINGS



growth hasn't been as fast as some of the up-and-comer group, consumer purchasing power metrics are already generally reasonably favourable. This is reflected in existing spending on food and implies the presence of a relatively well-developed foodservice sector too.

- Its main drawbacks are distance to market and associated freight costs, as well as self-sufficiency.

The others

It might take a while, but there are opportunities in the remainder of the countries analysed too.

India is a potential behemoth given its size and favourable demographics. Many businesses are finding lucrative niches already. However, it has some serious impediments in the form of limited market access, an under-developed cool chain and low existing consumer purchasing power. At present tariffs range from 25-75% on food products, many livestock products are prohibited, and there are a number of non-tariff barriers to navigate. The cool chain is still fragmented and linked to a largely informal retail network. Combined with limited experience in handling perishable, or temperature-sensitive products, this limits the potential for many New Zealand food products. India has strong food preferences, which limits opportunities for some products (i.e. beef), but creates them for others (i.e. dairy, or fruit & vegetables). Furthermore while consumers may be familiar with foreign foods in an 'eating out' setting, many do not know how to prepare foreign foods at home, which still accounts for the majority of food expenditure. Some of these dynamics are changing, but it is off a low base.

Armenia is very similar to Mongolia in many ways. It has a similar population size and dietary preferences. It also scores well for ease of doing business and market access, meaning it could be another satellite market for those operating in Middle Eastern markets such as UAE, or Saudi Arabia. This is similar to Mongolia for businesses operating in Northern China.

This highlights the many and varied opportunities that exist for businesses in the up-and-comer group. No market should be entirely written off, but each has its challenges when it comes to extracting the available opportunities.

CONCLUSION

Our framework highlights some of the wider export opportunities across the Asia region, as well as highlighting some of the constraints to exploiting those opportunities. While our framework is necessarily simple, it provides some objectivity and quantification.

This research shows that opportunities exist well beyond the most obvious places for those with the vision and courage to take the calculated risks required in developing new markets. However, such analysis can only take you so far. Ultimately, the pursuit of opportunity within markets depends on microeconomic factors, right down to the level of 'who you know'.

The next step for businesses requires detailed analysis to gain an intimate knowledge of a chosen market based around a specific proposition. Lessons from those who have gone before have shown essential elements for success in Asia include:

- strong business relationships built up over time and based on mutual trust;
- an intimate knowledge of a targeted market segment;
- cultural understanding of tastes and business practices;
- local staff or collaborators;
- scale: many of these markets are super-sized compared with New Zealand, and therefore collaboration will often be required within a sector; and
- patience, with a long-term view: time, cost and effort are required to become truly established in many of these markets.

For New Zealand it isn't just about establishing trade relationships and business. In order to make the most of the opportunities on offer there is another leg – a deepening of economic and financial ties – that paves the way for deepening trade. This involves the exchange of skills (migration), services, technology and capital (foreign direct investment). At the current juncture there is no doubt significant progress has been made on migration and trade links with many countries, but deepening financial ties seems to be in the early adoption stages.

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APPENDIX ONE: DATA SOURCES

Category/Indicator	Source		Measure
Market Access			
Tariff rate, applied, simple mean, primary products	World Bank	World Development Indicators	Percent
Tariff rate, most favoured nation, simple mean, primary products	World Bank	World Development Indicators	Percent
FTA Point scoring	MFAT, ANZ		Index
Years NZ FTA in place	MFAT, ANZ		Years to current
Trade Freedom Index	The heritage Foundation	Index of Economic freedom	Index
Ease of Doing Business			
Ease of Doing Business Rank	World Bank Group	Doing business indicators	Index
Trading Across Borders	World Bank Group	Doing business indicators	Index
Corruption Perception Index	Transparency International		Index (low=corruption)
Birthplace of resident	Statistics NZ	NZ Census	Country of birth
Infrastructure			
Burden of customs procedure, WEF	World Bank	World Development Indicators	Index: (1=extremely inefficient to 7=extremely efficient)
Quality of port infrastructure, WEF	World Bank	World Development Indicators	Index: (1=extremely underdeveloped to 7=well developed and efficient by international standards)
Logistics Performance Index	World Bank	World Development Indicators	Index: : Overall (1=low to 5=high)
Distance from market	CEPII	GeoDist database	Kms
Freight Cost	worldfreightrates.com	Auckland to country port destination	USD/container
Air freight cost	worldfreightrates.com	Auckland to country airport destination	USD/100kg package
NZ Alignment			
Fruit/Meat/Milk/Seafood/Vegetables expenditure per capita	USDA, Economic Research Service	Food expenditure tables	USD/person
Average fat consumption per capita	FAO	Food supply - Meat	Fat supply quantity (g/capita/day)
Change in fat consumption	FAO	Food supply	% change
Average protein consumption per capita	FAO	Food supply - Crop	Protein supply quantity (g/capita/day)
Change in protein consumption	FAO	Food supply	%
Share of dietary energy supply derived from cereals, roots and tubers	FAO	Food Security	%
Cereal import dependency ratio	World Bank	World Development Indicators	Ratio
Natural capital per capita	World Bank	Changing wealth of nations	
Bi-lateral trade ($ value in past 12 months)	Statistics NZ	Merchandise trade statistics	$m
% change (5-year window) in bilateral changes	Statistics NZ	Merchandise trade statistics	percent change

Consumer aff & PP			
GDP per capita	World Bank	World Development Indicators	USD
Wealth per capita	Credit Suisse	Global Wealth data book	USD/capita
% change in GDP over last years	World Bank	World Development Indicators	AAPC
% change in GDP/capita over last years	World Bank	World Development Indicators	AAPC
Cost of a basket of staples	Numbeo		
Income share held by highest 10%	World Bank	World Development Indicators	Percent
Disposable income of a decile 10 h/hold	Euromonitor		USD per household, at current prices
Number of adults with wealth greater than US$100,000	Credit Suisse	Global Wealth data book	000,000s
Secondary education: educational attainment feeds into wealth indicator, but also ability/willingness to learn about different foods and products. This is particularly important when selling more sophisticated propositions be it a provenance story or special attributes (i.e. flavour, texture, taste, tenderness) of a product.	World Bank	World Development Indicators	Percent
Adult literacy	World Bank	World Development Indicators	Percent
Food Market Development			
Population	World Bank	World Development Indicators	
Estimated size of food market	USDA, Economic Research Service	Food expenditure tables	USD, $m
Annual compound growth in food market	USDA, Economic Research Service	Food expenditure tables	% change
Total expenditure on food (US$ per person)	USDA, Economic Research Service	Food expenditure tables	US$ per person
Catering consumer expenditure per capita	Euromonitor		US$ per capita, at current prices
Urbanisation ratio	World Bank	World Development Indicators	
Proportion of income spent on food	USDA, Economic Research Service	Food expenditure tables	
Cost of mid-range restaurant	Numbeo		

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