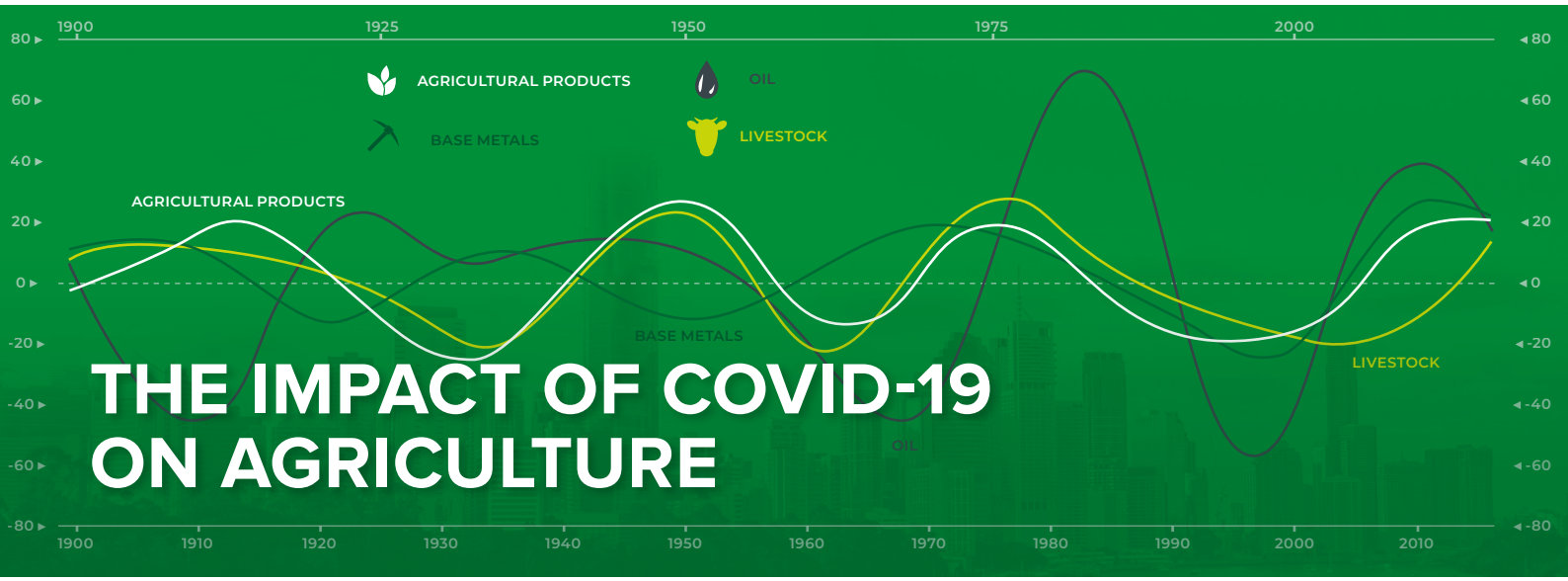
RIPARIAN
CAPITAL PARTNERS



THE IMPACT OF COVID-19 ON AGRICULTURE

Will the fallout from COVID-19 have a similar impact on the agriculture sector as past periods of economic contraction?

EXECUTIVE SUMMARY

- The agriculture sector produces essential goods. In past periods of economic contraction, demand for non-durable goods (i.e. food and beverages) has been more resilient than demand for durable goods (i.e. household goods, cars etc)[1] and select agricultural sector assets, which have shown to be uncorrelated to traditional markets, have been defensive in nature.
- Consistent with past periods of economic contraction:
  - Consumer spending globally is projected to favour non-durable items following COVID-19. Spending on fresh food and organic foods, healthcare and vitamins/supplements is expected to increase over the coming six months while spending on cars, toys and games and athletic equipment is expected to decrease.[2]
  - COVID-19 has had a variable impact on agricultural commodity prices. At the time of writing, agricultural commodities used in the production of durable items (such as cotton) and discretionary items (such as sugar) have decreased by more than non-durable, non-discretionary commodities of corn and soybeans.[3]
- The potential of disruption to supply chains is greater in the current pandemic environment than what we would expect from analysing previous recessionary periods. The full impact on the operational capacity of supply chains is not yet clear. Anecdotal reports suggest COVID-19 has hit some segments of the food and agriculture sector harder than others.
- We expect participants who hold diversified portfolios of agricultural or water assets, which provide exposure to multiple commodities, that are balanced across domestic and export markets will be well placed in the medium term. That said, it's possible that factors, unique to COVID-19, create headwinds for the sector which may also present unique opportunities for further investment.

INTRODUCTION

In our initial discussion paper, we outlined our expectation that the agriculture sector will be less sensitive than other sectors to periods of economic contraction resulting from COVID-19. We still expect this to be the case.

Many economists, much better positioned than we are, have provided forecasts on the future prospects of the global economy. Our simplified analysis leads us to believe that it is very possible that the economy will set new records over the coming months and the longer it takes to reach the new normal, the higher the potential for deep structural implications that may have an outsized influence on economic prospects. Certainly, we have already seen markets set new records. The Australian Securities Exchange's All Ordinaries Index has recorded the biggest daily loss since 1987, combined with the biggest daily gain on record. In March 2020, we also recorded three of the ten largest daily losses and gains. This is combined with the biggest monthly drawdown since Black Monday in 1987, exceeding the interim drawdowns of the Global Financial Crisis.[4]

As long-term investors in real assets producing essential goods, we are less concerned about the short-term movements in equity markets and are focused on the functional components and long-term prospects of the food and agriculture sector.

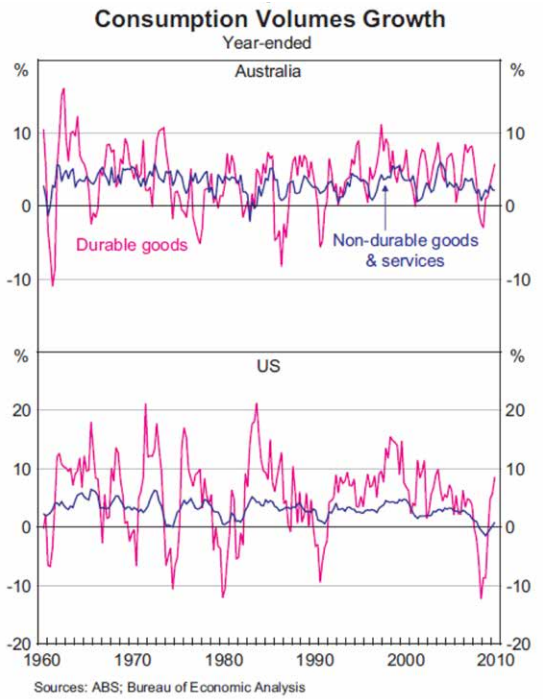
This paper is part two of a series of discussion papers published following the global spread of COVID-19. Our objective is to share insights on the impact of COVID-19 on the food and agriculture sector. In doing so, we purposely avoid formulating specific predictions for economic growth into the future and we are acutely aware, that observations made today may well be redundant tomorrow given the depth and speed of the disruption.

THE HISTORICAL AND PRESENT DEMAND FOR DURABLE AND NON-DURABLE GOODS

The historical divergence in consumption of durable goods (generally defined as goods that have utility over a long period and range from toasters to cars) and non-durable goods (single use products such as food and beverages) during periods of economic contraction provide a foundation for the potential, but not guaranteed, resilience of the agriculture sector across business cycles.

The Reserve Bank of Australia (RBA) 2010 report titled Durable Goods and the Business Cycle, noted "spending on consumer durable goods and machinery & equipment investments has been highly correlated with GDP growth in both Australia and the United States over the past 50 years". [5] Furthermore, the RBA identified that "during deep recessions, spending on consumer durables and capital goods in Australia has fallen sharply. In contrast, growth in household spending on non-durables and services slowed on average but remained positive. The experience in the United States has been similar".[6]

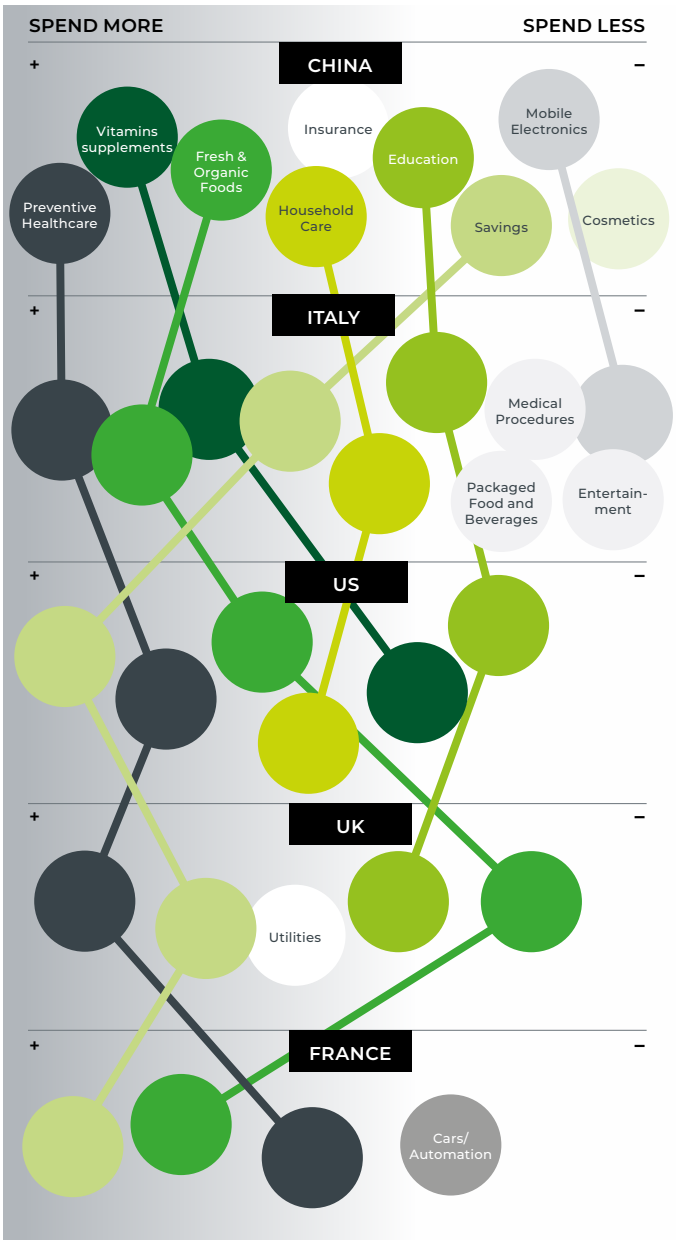
Chart 1: Australia and US Durable and Non-Durable Goods Long Term Consumption.[7]



The International Monetary Fund (IMF) in their 2010 world economic outlook referencing the Global Financial Crisis noted "the contraction in final demand during the recent crisis was asymmetric across sectors, with demand for durables falling by considerably more than demand for non-durables or services. For example, demand for durables in the United States fell by more than 30 percent, whereas demand for non-durables and services fell by only 1 to 3 percent".[8]

These historical spending patterns are broadly consistent with expected spending patterns of consumers globally following COVID-19. Spending on non-durable goods of fresh and organic foods, healthcare and vitamins/supplements are expected to increase over the coming six months while spending on durable goods including cars, toys and games and athletic equipment is expected to decrease.[9]

Chart 2: Top Categories where Consumers Expect to Spend more over the coming Six Months.[10]



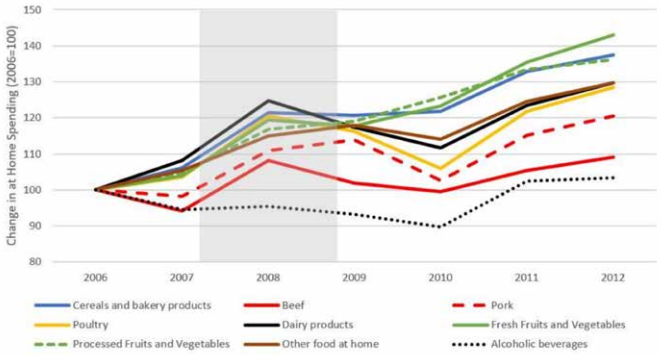
Australian Bureau of Statistics retail trade and international trade data for March is due to be published in May and will provide an indication of consumption trends during the early stages of COVID-19. In the meantime, anecdotal evidence and reports suggest a short-term boost in retail demand for non-durable goods. This short-term demand spike has been witnessed globally. [11] Export demand for non-durables and the operational capacity of supply chains is less clear. Longer-term, historical precedence, assuming a period of economic contraction, suggests demand for food & beverages (non-durable goods) in aggregate will remain robust relative to durable demand.

THE VARIABLE IMPACT ACROSS THE FOOD AND AGRICULTURE SECTOR

Consistent with historical precedence, we should not expect aggregate food demand to decrease significantly but rather we should be aware that inter-industry shifts in demand may occur as a result of changes in the economic prospects and lack of consumer mobility resulting from COVID-19. Research from the USDA and US Bureau of Labour Statistics (summarised below) suggests this expectation is consistent with changes through the 2007-2009 recession.

- USDA analysis shows during the 2007-2009 recession, Americans of all income levels tightened their belts, primarily by eating out less. Food-at-home sales also declined during the recession. By contrast, clearly restaurant and food service sales have fallen significantly during March 2020 outstripping changes seen in 2007-2009. Food expenditure fell 1.3% between 2006 to 2009. Importantly it was also found that the fall in at-home spending consisted of initiatives that emphasised a decrease in costs including substituting comparable but lower cost foods; taking advantage of sales, promotions and coupons and seeking lower cost stores.[12]
- Analysis of data from the Bureau of Labour Statistics Consumer Expenditure Survey over the same period (2007-2009) highlighted the variable impact of recessions across agricultural commodities. Unsurprisingly expenditure on discretionary items (alcohol) fell more than essential food products.

Chart 3: US Food Expenditure by Product 2006-2012[13]



Early indications, as reported by the Australia Trade and Investment Commission, suggest similar trends, have been evident in China recently with "some dairy suppliers saw strong demand", "demand for wine remains very soft, especially at the premium end" and "around 56,000 tons of beef were exported in the first three months of 2020.....a 7.7% increase by volume [from the prior year]".[14]

colesgroup

Coles employs 7000 people in two weeks, further 5000 needed

Applications fast-tracked to support demand in supermarkets and liquor stores

28 March 2020

The New York Times

Panicked Shoppers Empty Shelves as Coronavirus Anxiety Rises

The scene inside one crowded store: There was no chicken available, nor garbanzo beans or chips. Another had no flu or cold medicines

DHL

Total container volumes handled at Chinese coastal ports dropped by 10.1% in the first two months of 2020 compared to the same period in 2019, with full year volumes expected to register negative growth rates for only the second time since 1970

THE WESTERN PRODUCER

Covid-19 sinks ag containerized shipments

16 March 2020

WALL STREET JOURNAL

China Shipping Exports Rebound, Just as Western Ports Cope With Coronavirus Downturn

Chinese gateways are again moving cargo after a two-month near-standstill, but ports in Europe and US are now hunkering down

Commodity price volatility is generally ever present in agriculture. In theory agricultural commodity prices are driven primarily by supply and demand which makes the attribution of GDP growth alone to price movements in commodity markets challenging. That said, they provide another data point. Rudimentary analysis of agricultural commodity futures markets between 1990 and 2009 suggests that the impact of economic contractions varies across commodities and that prices of inputs used in the production of durable items (in this case cotton) and discretionary items (in this case sugar) typically decreased by more than non-durable, non-discretionary commodities of corn and soybeans. Commodity market movements since late February 2020 illustrate commodity price trends consistent with recessionary periods between 1990 and 2009. See Table 1 below noting that sugar in the 2007 - 2009 period reflected short supply.

Table 1: Agricultural Commodity Prices, Recessionary Periods 1990-2009 and COVID-19[15]

		Recessionary Period			
Period From	Period To	Corn	Soybean	Cotton	Sugar
Jul-90	Mar-91	-9.7%	-7.1%	-10.5%	-29.3%
Mar-01	Nov-01	-3.4%	-2.5%	-30.3%	-15.7%
Dec-07	Jun-09	-3.8%	7.3%	-18.6%	64.2%
21 Feb – 20	9 April – 20	-14%	-5%	-24%	-33%

Longer-term it's possible, and Rabobank make the argument, the sustained trend we have seen in recent times toward healthy eating may be accentuated as a result of COVID-19, benefiting organic producers, fresh fruit and vegetables producers and generally companies and countries with reputations for 'clean & green' / safe food production. [16]

COVID-19'S UNIQUE POTENTIAL TO IMPACT THE FOOD AND AGRICULTURE SECTOR

COVID-19 will have a significant impact on the global economy and the next quarter will confirm that some economies are in recession. Historical analysis of prior periods of economic contraction can provide a reasonable guide to what we could expect in the future. However, the abrupt and widespread impact of COVID-19 on everyday life for billions of people will potentially have a unique impact, not seen in prior recessionary periods, on the food and agriculture sector.

Restrictions adopted globally in an effort to contain COVID-19 will hit some segments of the food and agriculture sector harder than others. Restaurants and by implication supply chains and commodities reliant on restaurant trade (and by extension food service generally) have seen a sharp and dramatic fall in sales. Restaurant expenditure was estimated to account for 34% of food expenditure in Australia in 2015-16.[17] The fall in restaurant sales and hence demand for French fries has resulted in a drop in demand for Canadian potatoes that is not expected to be filled by an increase in sales via grocery stores. Australian watermelon and fresh salad producers have seen a similar fall in demand from food service. Australian flour millers have seen an increase in demand. The closure of labour-intensive meat processing plants will impact producers and consumers. The reduced use of vehicles has resulted in lower consumption of gasoline and for certain countries will result in lower demand for ethanol impacting corn and sugar-cane farmers. Likewise, fresh seafood, which is typically transported globally by air, has seen imports fall by up to 80-90%.[18]

Arguably the potential of disruption to supply chains is greater in the current pandemic environment than what we would expect from analysing recessionary periods of the past. Planting decisions, the supply of inputs, access to labour (particularly for crops reliant on manual labour for harvesting or processing) and the ability to get goods to market may have implications for what consumers find on store shelves for some time yet.

AGRICULTURAL SECTOR ASSET PRICES

The impact of current and future business and economic conditions on agricultural sector asset prices is of particular importance. Given the current strong agricultural commodity prices,[19] the recent improvement in climatic conditions for vast areas of Australia and the historical consumption of non-durable goods during recessionary periods its plausible, although not guaranteed, that tangible (farmland and water) agriculture sector asset prices will be more resilient to COVID-19 than many sectors. The actual impact of COVID-19 on asset prices will likely be delayed and vary by commodity and supply chain segment. Initial indications are that farmland vendors in Australia are yet to be significantly influenced by COVID-19 impacts however the lag associated with farmland values limits the veracity of this position.

Over February and March 2020 Aither's southern Murray Darling Water Index was down 1.1% and 2.2% respectively. The drivers and reasons for these movements are not directly attributable to COVID-19 rather they reflect supply and seasonal timing. Given the valuation cycle and liquidity of Australia's water markets it's possible that the values of Australian water entitlements will provide an early indication of the resilience of the agriculture sector to COVID-19.

LOOKING AHEAD WITH GUARDED OPTIMISM

Consistent with past commentary, we anticipate that the agriculture sector will be less sensitive to a future period of economic contraction than many other sectors. We also expect participants who hold diversified portfolios of agricultural or water assets, that provide exposure to multiple commodities (particularly if the majority of these commodities are produced using mechanised farming systems and are inputs into non-durable goods), servicing both domestic and export markets will be well placed in the medium term. That said, it's possible that factors, unique to COVID-19, create headwinds for the sector which may also present unique opportunities for further investment.

Australian agriculture is an export dominated capital intensive sector. We are well aware that factors not discussed in detail in this paper are likely of greater risk to the outcomes of diversified agriculture sector investment strategies. Examples of such factors include, sustained disruption to international trade, reduced access to bank credit, or a sustained elevated Australian dollar (which occurred post the Global Financial Crisis). What remains to be seen is whether the medium-term impacts of COVID-19 elevate any, or a combination of these factors and in turn adversely impact the sector more than others.

RIPARIAN CAPITAL PARTNERS

Riparian Capital Partners, a specialist water, agriculture and food investment firm, focuses solely on identifying, acquiring and managing investments across the agricultural sector. Through its investment strategies, Riparian provides investors with exposure to a diverse range of Australian agriculture sector assets. Riparian's investment strategies have been designed to provide investors uncorrelated returns to traditional markets, a mix of yield and capital growth and deliver liquidity options seldom offered on private market real asset investment products.

FOR MORE INFORMATION CONTACT

Michael Blakeney
Managing Partner
Phone: +61 407 816 919
Email: michael.blakeney@ripariancp.com

Patrick Hayden
Managing Partner
Phone: +1 646 644 2753
Email: patrick.hayden@ripariancp.com

https://ripariancp.com/team

NOTES

1. IMF, 2010, World Economic Outlook; Recovery, Risk & Rebalancing
2. Boston Consulting Group, 2020, COVID-19 Consumer Sentiment Snapshot #3
3. RCP Analysis, 2020.
4. RCP Analysis, April 2020
5. Reserve Bank of Australia, 2010, Durable Goods and the Business Cycle
6. Reserve Bank of Australia, 2010, Durable Goods and the Business Cycle
7. Reserve Bank of Australia, 2010, Durable Goods and the Business Cycle
8. International Monetary Fund, 2010, World Economic Outlook; Recovery, Risk & Rebalancing
9. Boston Consulting Group, 2020, COVID-19 Consumer Sentiment Snapshot #3
10. Boston Consulting Group, 2020, COVID-19 Consumer Sentiment Snapshot #3
11. Boston Consulting Group, 2020, Tracking Spending on Food and Household Goods Amid COVID-19
12. USDA, 2011, Food Spending Adjustments During Recessionary Times
13. Lusk, J, 2020, Impacts of Coronavirus on Food Markets
14. RCP Analysis, 2020 & Australian Trade and Investment Commission, 2020, COVID-19: Support for Australian Businesses https://www.austrade.gov.au/news/news/novel-coronavirus?utm_campaign=Export+Update+March+2020+Group+B&utm_medium=email&utm_source=Export+Update+Newsletter
15. RCP Analysis, 2020.
16. Rabobank, Coronavirus and the Impact on F&A, April 2020 https://research.rabobank.com/far/en/sectors/regional-food-agri/Updated-Coronavirus-Impact-F-and-A.html
17. Department of Agriculture, Water and the Environment, Food Demand in Australia Trends and Issues 2018
18. RCP Analysis, 2020 & Australian Trade and Investment Commission, 2020, COVID-19: Support for Australian Businesses https://www.austrade.gov.au/news/news/novel-coronavirus?utm_campaign=Export+Update+March+2020+Group+B&utm_medium=email&utm_source=Export+Update+Newsletter
19. Rabobank Australian Rural Commodity Index, March 2020.

DISCLAIMER

"Riparian zone" refers to a broad zone spanning from the riverbank to the floodplains; it occasionally includes hill slopes that may influence the stream ecosystem.

Oxford Dictionary 2018