





# UNDERSTANDING CAPITAL GROWTH

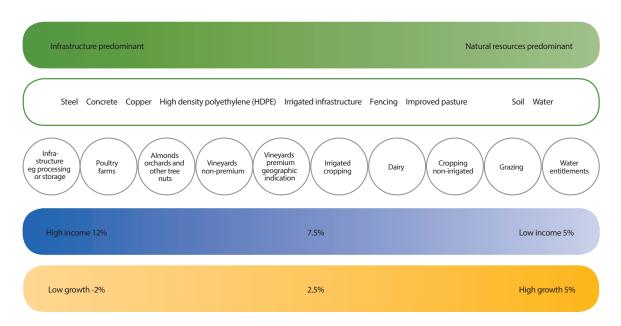
#### **David Bryant, RFM Managing Director**

This article examines the capital growth of agricultural assets and discusses the impact this will have for unitholders in the Rural Funds Group (RFF).

Figure 1 is a diagram that has been included in the numerous presentations that RFM has lodged with the ASX on behalf of RFF. It is designed to illustrate the range and characteristics of agricultural assets that are common in Australia. RFF's assets are concentrated on the left hand side of this diagram – assets that have

a large infrastructure component, generating relatively high rates of income but lower rates of capital growth. This is because they include substantial infrastructure, such as irrigation equipment and trees. This element of their asset base depreciates over time for which higher rents are paid as compensation.

Figure 1 - Australian Agricultural Industry Assets<sup>1</sup>



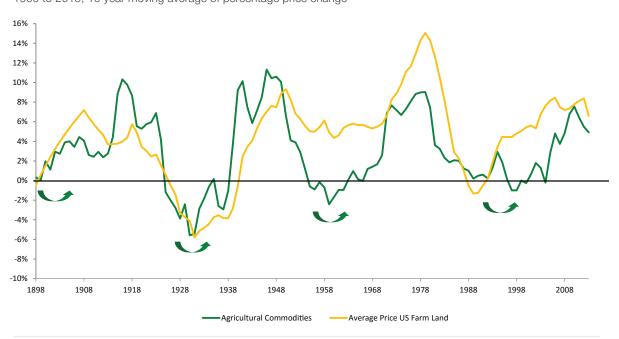
The natural resource component of these assets, such as water entitlements and fertile soils, generally have appreciated over time. It is this element of the RFF portfolio that may generate capital growth.

Since 1978, when systematic measurement commenced in Australia, farm values have achieved compound growth of 4.4% per annum. A longer data set is available from the United States, where over the past 115 years farm values have increased by 4.5% per annum. Figure 2 illustrates a major cause of increasing

farm values, by demonstrating the correlation between changing agricultural commodity prices and changing farm values. As expected, the capital value of farms rise at a faster rate when agricultural commodities are rising.

During the 115 years displayed in the chart, agricultural commodity prices in US dollars increased by an average of 2.3% per annum, while inflation averaged 3% per annum. As a result, the real price being paid to farmers for the commodities they produce has been declining by 0.7% per annum. Given this gradual erosion of value, there must be an additional driver of capital growth.

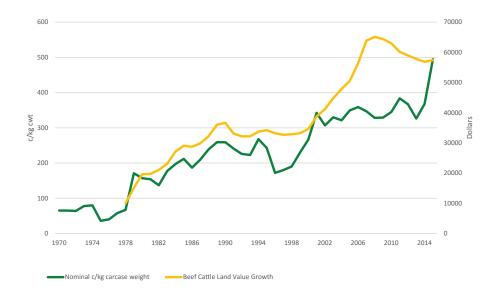
Figure 2 - US Commodity Prices and Farmland Values<sup>2</sup> 1900 to 2015, 10 year moving average of percentage price change



<sup>&</sup>lt;sup>1</sup> Note: The income and growth figures presented in Figure 1 have been provided to differentiate the profile of income and growth that can be derived from different assets. They are based on RFM's experience and observations of agricultural lease transactions and historical rates of growth. They are neither forecasts nor projections of future returns. Past performance is not a guide to future performance.

<sup>&</sup>lt;sup>2</sup> Source: Bureau of Labor Statistics & US Census Bureau

Figure 3 - Nominal Beef Prices and Cattle Property Growth<sup>3</sup>



Australian data, though more recent, tells the same story. Figure 3 presents the price paid to Australian beef producers over the past 45 years. During that period the nominal price paid for a kilo of beef has risen from \$0.66 per kg to \$5.52 per kg, an increase of 4.5% per annum against an inflation rate of 5.4% per annum.

The second line on Figure 3, plots the available data for the increase in value of cattle farms over a similar timeframe. During that period, cattle farms increased in value by 4.7% per annum, a remarkable rate of capital growth given the real price paid for cattle had declined by 0.9% per annum.

If commodity prices are declining in real terms, while the costs of running farm businesses are rising at the same rate as inflation, then every farmer in the world should be bankrupt. Instead, we find that over time they are prepared to pay more and more for farms. In fact enthusiasm for farming is such that the rate of increase in farm values has been significantly greater than inflation. How can this be?

To simplify the discussion, let us assume that every farm in the world is exactly the same. If this were the case, the only driver of farm values would be the profit that can be derived from them, which can be calculated as revenue minus expenses. If expenses are rising roughly with inflation, and given we know that commodity prices are falling behind in real terms, then the only way that farm profits can be rising is through increased productivity.

Throughout the past 115 years, farm productivity improved as a consequence of several major new innovations and countless minor ones. The first major innovation of last century was the tractor. While steam driven traction engines had been deployed in agriculture since the 1870s, these enormous machines, weighing as much as 14 tonnes, were very expensive and prone to bogging. The other source of power were draft horses, which ate up to one third of a farm's output.

During World War One, Henry Ford introduced the Fordson tractor and sales exploded as a consequence of labour shortages and high commodity prices.

In 1922 Ford discounted the Fordson from \$625 to \$395, in response to the crash in farm values and commodity prices. This triggered a price war, with Ford's market share reaching 44%, and a swift recovery in sales during the balance of the 1920s.

The next major productivity breakthrough to occur in farming was the Green Revolution of the 1950s and 1960s. Manufactured fertilisers and improved cereal grain varieties were combined to dramatically increase crop yields. During the period 1951 to 1968, wheat yields in the US increased 72%, corn yields increased 117% and soybeans 28%.

A third technological leap to drive farm productivity began in the 1990s with the introduction of genetically modified plants combined with continued improvements in plant breeding. Since that time, yields for crops such as corn, soybeans and cotton have increased by 40%, while the use of pesticides to control insects has declined massively.<sup>4</sup>

In addition to these three major breakthroughs specific to agriculture, there have been numerous technologies available to industry and households that have also assisted farm productivity. Returning to the Australian cattle industry charted in Figure 3, during that period this industry benefited from the construction of roads and the utilisation of road trains to reduce the cost of freight. It has deployed solar powered bores to replace windmills, and rolled out poly pipes and water troughs to open up pastures previously unusable for lack of water. Bovine brucellosis and tuberculosis were eradicated, while cattle genetics continue to improve each year through breeding. And perhaps most significantly, farmers have invested in new pasture species that have lifted productivity across millions of hectares by improving animal nutrition and therefore daily weight gain and fertility.

<sup>&</sup>lt;sup>3</sup> Source: MLA & ABARES

<sup>&</sup>lt;sup>4</sup> Source: USDA Crop Production Historical Track Records



Throughout the past 115 years, farm productivity improved as a consequence of several major new innovations and countless minor ones.

Inside the farm office, farmers switched from mail, to fax, to email. In the stock yard, farmers acquired electronic scales and electronic ear tags so they could monitor weight gain of individual animals using digitised record keeping. And in their pockets they put a smart phone to communicate conveniently and monitor the weather in forward months, instead of looking at what the sky might hold for tomorrow.

All of these innovations have enabled farmers to not only compensate for the declining real price paid for their produce, but also to increase their profits. It is these growing profits that give farmers the confidence, appetite and financial capacity to continue to expand their business by buying new farms. And this is why farm values have gone up faster than inflation.

Sometimes capital growth is negative. Looking once more at Figure 2, there are two periods where the change in farm values declined. From 1921 to 1933, US farm values collapsed as commodity prices dropped due to the recovery of European food production after World War One and the onset of the Great Depression. Farm values dropped again from 1983 to 1987 in response to falling commodity prices and high interest rates. Figure 3 on the Australian cattle industry also shows a recent fall in property values.

While declining commodity prices catalysed these declines, they were exacerbated by excessive debt. In the two US examples, secondary mortgage financiers poured additional liquidity into the sector thereby inflating farm values. At the beginning of this century, the Australian cattle industry saw land values appreciate quickly as banks supplied additional liquidity based on higher and sometimes unsustainable loan to value ratios. Understanding the risks to capital values can assist an astute investor to avoid speculative bubbles and prepare for opportunity.

RFF's assets are leased for long periods with indexation clauses that are not generally tied to changes in the capital value of the assets. For this reason the benefits of any capital growth will not be realised until a lease comes up for renewal or renegotiation. Nevertheless, in the interim, unitholders benefit from the indexation of lease rentals, underwritten by the profit increases that flow to lessees from increasing nominal commodity prices combined with improving productivity.

Since listing, the market price of RFF units has increased and the distribution yield has compressed. A consequence of this movement is that it is now possible to consider acquiring assets to the right hand side of Figure 1 – assets with lower rental yields but higher rates of capital growth. Leases for assets like this, such as cattle properties, will have market review clauses that enable rent increases, providing there has been capital growth. For this reason, understanding what drives capital growth is an important investment consideration for RFF unitholders.



## Rural Funds Group (RFF) Update

RFF is a stapled security comprising Rural Funds Trust ARSN 112 951 578 & RF Active ARSN 168 740 805

#### In this section:

- Considering climate diversification & cattle
- RFF makes its first macadamia acquisition
- Perth Markets investment
- Fund milestones

As part of the RFF half year results presentation in late February 2016, Rural Funds Management (RFM) outlined findings of studies into rainfall data from across Australia which found low to negative correlation in rainfall variability between the northern, western and south-eastern parts of the continent.

This is useful information as RFM considers new property acquisitions to expand the RFF portfolio. One conclusion that may be drawn from the studies is that by acquiring assets across climatic zones, the likelihood of numerous lessees experiencing adverse climatic conditions at the same time can be reduced.

Climatic diversification is likely to have the added benefit of introducing new commodities with different seasonal production cycles and separate commodity price fluctuations. As an example, RFF has investments in almond orchards in western NSW which are harvested in autumn months, while newly acquired macadamia orchards in Queensland are harvested from February through to October. The almond price has softened recently while macadamia prices remain high.

As the half year results presentation indicated, RFM is currently exploring new investments in different climatic zones in Australia's northern and western states. RFF recently purchased three macadamia orchards in Queensland as a first measured step in climatic diversification. It has also made an infrastructure investment in Perth Markets Ltd which is also an introduction to the Western Australian agricultural sector and potential new lessees.

Beyond these sectors, the northern cattle industry was identified as potentially suitable for diversifying the RFF portfolio due to the benefits outlined below.



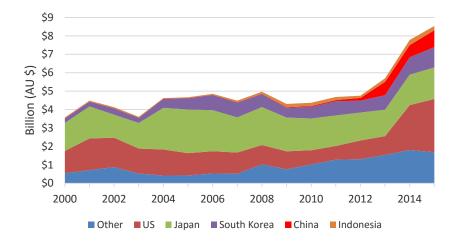
- It is a large industry with comparative advantages. The northern Australian cattle industry takes advantage of an abundance of grazing land and its close proximity to our main export partners in South East Asia. The industry has a clean and disease free reputation among these markets, thanks to Australia's strong domestic regulatory framework. The demand for cattle continues to grow as the buying power of the Asian middle class increases, as has their demand for high quality protein. Figure 1 below demonstrates how this demand has been reflected in export growth.
- There is potential for capital and income growth. Productivity gains will drive income growth.
  For example, improved access to water for livestock could increase returns by opening up previously unusable pasture.
- There is a positive long-term outlook for beef. Global demand for beef is increasing, especially in China where the middle class continues to grow. Chinese demand for beef is expected to increase from 7.2 million tonnes in 2015 to 8.4 million tonnes

in 2024, an increase of 17%. Based on OECD research, it is estimated that the world will consume an additional 300 million head of cattle per year by 2024.

- The cattle industry offers natural resource predominant assets with potential for capital growth, adding assets to the right of the 'Spectrum of investment opportunities' featured in David Bryant's lead article. These properties are natural resource intensive, requiring only a comparatively small amount of infrastructure to function efficiently.
- RFM has existing industry experience. An investment in cattle would utilise the existing livestock industry experience of the RFM Management and Board.

In summary, an Australian cattle industry investment would provide multiple benefits to RFF while adding climatic diversification, a new commodity and new lessees to the portfolio.

Figure 1 - Australian beef export values (2000 –2015)<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Source: Meat & Livestock Australia



### RFF makes its first macadamia acquisition

Continuing the theme of climatic diversification, RFM announced in late February that RFF would acquire three macadamia orchards near Bundaberg in Queensland.

The acquisition introduces a new commodity to the RFF portfolio, and a measured first step into a new climatic region in the Wide Bay Burnett region of southeast Queensland. Bundaberg is a prime horticultural area with an annual farm gate production value of over \$500m.

Two of the orchards encompassing 234 ha are leased to a managed investment scheme called the '2007 Macgrove Project', outlined further on page 11. The third orchard, with an area of around 25 ha, is leased by RFM. The acquisition increases RFF's funds under management by \$8.6m.

#### Key details: Macadamia orchards

- Three orchards near Bundaberg, Queensland
- Total 259 ha macadamia orchards
- 25 ha mature trees, balance due to mature in 2018/19
- Long lease terms, up to 21 years
- \$8.6m
- 650 ML of medium security water entitlements

#### In focus:

#### Australia's macadamia industry

Australia's macadamia industry is concentrated along a 1,000 kilometre stretch of the east coast from the mid north coast of New South Wales to Mackay in Queensland.

The value of the domestic industry has doubled in size since 2010, reaching \$200m in 2015. There are 17,000 ha of macadamias planted in Australia, increasing 1,500 ha in the last three years.

Domestic production of macadamias is forecast at 46,750 tonnes nut-in-shell in 2016 of around 160,000 tonnes produced globally.

Australia is the world's largest macadamia producer with South Africa, Kenya and the USA (Hawaii) the other major producing nations.

Over 3,000 tonnes of Australian macadamia kernels are sold domestically in Australia. The USA and Japan are the largest export markets for Australian macadamias.

The outlook for the macadamia industry is positive, particularly in Asian markets. For example, the Australian Macadamia Society reports that Korea is a growth market, noting the recent signing of a Free Trade Agreement with Australia.

The value of the domestic macadamia industry has doubled since 2010.



#### **Perth Markets investment**

RFM announced on 12 February that RFF would invest \$5.275m in Perth Markets Limited (PML), the industry based consortium selected by the State Government of Western Australia (WA) as the preferred bidder for the 'Market City' site in Canning Vale, Perth.

Market City is Perth's central wholesale fruit and vegetable market. In FY15, 42% (by volume) and 55% (by value) of WA's wholesale produce was traded at this site. The markets are the first asset to be sold under the State Government privatisation program.

RFF holds an 8.96% stake in PML, with other cornerstone investors including Chamber of Fruit and Vegetable Industries in Western Australia Inc., Brisbane Markets Ltd, Adelaide Produce Markets Limited and United Crate Co-Operative. Former Skilled Group executive, David Timmel, was appointed Chief Executive Officer of Perth Markets in early March 2016.



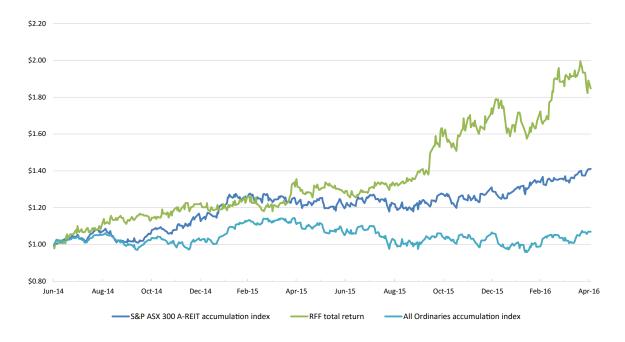
As well as meeting RFF's financial prerequisites, a stake in PML will introduce RFF to a large network of agricultural businesses in WA. RFM's Executive Manager - Funds Management and Company Secretary, Andrea Lemmon, will represent RFF on the Board of PML, potentially providing further opportunities for industry engagement in WA.

#### **Fund milestones**

The half year FY2016 results presentation in late February highlighted that FY2016 Adjusted Funds from Operations (AFFO) and distributions are on track to previous forecasts.

RFF was added to the S&P/ASX 300 Index as part of the Index's March 2016 quarterly rebalance, reflecting growth in the fund's market capitalisation and liquidity performance. The move will expose the fund to a wider range of investors and is a significant milestone.

Figure 2 - Total Shareholder Returns<sup>2</sup>



<sup>&</sup>lt;sup>2</sup> Note: Total return assumes \$1.00 invested 30 June 2014 and all distributions reinvested at the DRP price. Total return of indices as provided by S&P. Past peformance is not an indicator of future performance

Table 1: Key portfolio & financial statistics – as at 31 December 2015

Total assets	\$302.5m
Net Asset Value (NAV)	\$184.1m
Units on issue	164.4m
NAV per unit	\$1.12
Adjusted total assets <sup>3</sup>	\$312.1m
Adjusted net assets <sup>3</sup>	\$193.7m
Adjusted NAV per unit <sup>3</sup>	\$1.18
AFFO per unit	4.3 cents
Gearing	33.8%
Number of properties	32 properties
Weighted Average Lease Expiry (WALE) <sup>4</sup>	13.4 years
Occupancy	100%

#### **Upcoming Key Dates\***

Quarterly Distribution Payment Date	29 July 2016
Annual financial results announced	August 2016
Quarterly Distribution Payment Date	28 October 2016

<sup>\*</sup>Subject to change

#### **RFF Investment Profile**

RFF is structured as a specialised real estate investment trust that owns a diversified portfolio of high quality Australian agricultural assets including almond and macadamia orchards, associated water entitlements, commercial scale poultry growing infrastructure, premium vineyards and livestock, all of which are leased to suitably qualified and experienced agricultural operators (or tenants).

RFF's investment strategy is to deliver a stable income stream from leasing assets and capital growth through the appreciation in the value of RFF's assets.

RFF benefits from strong industry dynamics with growth in Australian agriculture, driven by increasing world population growth, the emerging Asian middle-class and constraints in the global supply of agricultural land.

 $<sup>^3</sup>$  Adjusted assets are presented to show valuations including water stated at fair value  $^4$  Lease expiries weighted by forecast FY16 rental income

# 2007 Macgrove Project (MP07) update

ARSN 119 560 235

The 2007 Macgrove Project (the Project) is a managed investment scheme established in 2007 across 234 ha of land on two orchards outside Bundaberg, Queensland.

Scheme participants, called 'Growers', were granted subleases over an area of 0.4 ha or (one acre), known as a Macgrove. Each Macgrove included 125 trees and associated infrastructure and water entitlements.

The orchards were identified as an attractive investment for the Rural Funds Group (RFF) for several reasons.

The macadamia orchards are cash flow positive, with the trees expecting to achieve maturity over the next three years. In addition, the purchase builds on RFM's existing tree nut industry experience as well as adding a new commodity and climatic diversification to RFF's property portfolio.

RFM was appointed responsible entity of the Project at a meeting of growers on 24 February 2016. This was a condition for RFF to purchase the orchards from the previous land owners.

As part of the transaction, RFM acquired the farm management company, Maccmanagement Pty Ltd, and became a participating Grower by acquiring 79 Macgroves. This further aligns RFM's interests with the other Growers. Being appointed responsible entity for the Scheme and farm manager is consistent with the structure of RFM's Almond Schemes (AF06, AF07 and AF08).

#### 60 million years in the making

Macadamias are a native tree nut which evolved in Australia more than 60 million years ago. They are suited to rich soils and high rainfall areas found in southeast Queensland and northern New South Wales.

The trees take up to 15 years to reach maturity and grow to heights between 12 and 15 metres. The macadamia flowers form groups of 40-50 flowers in 'sprays', also called 'racemes'. Four to 15 nutlets from each spray later ripen into nuts.

Flowering occurs in early spring, with the first nuts appearing in early summer and green clusters of nuts can be observed by autumn. The nuts fall to the ground between March and September and are harvested at regular intervals during this period.

Macadamias have a long production lifespan. A macadamia tree in the Brisbane Botanic gardens is believed to have been planted in 1858 and is still producing nuts to this day.



Macadamia flowers form in 'sprays', also called 'racemes', with each flower forming four to 15 nutlets



## RFM Almond Funds Update

AF06 (ARSN 117 859 391), AF07 (ARSN 124 998 527) & AF08 (ARSN 127 947 960)

The orchards farmed by the three RFM almond funds produced a crop greater than four tonnes per hectare in 2015, their highest crop yield to date.

This yield, combined with a record high almond price of \$11.45 per kilogram, will result in a substantial distribution for the Growers in RFM's 2006, 2007 and 2008 Almond Projects. It is expected the distributions will be paid in October after the Projects' accounts have been audited.

The 2016 harvest has delivered a smaller crop, of around three tonnes per hectare, in line with the biennial cycle of the almond trees.

#### 'Sapping' useful almond tree data

RFM is trialling a new system to monitor water use in the almond orchards it manages.

The new system involves constantly measuring the sap flow of the trees to determine how much, and when, water is used by the tree. In order to provide accurate data, specialised equipment (picture below) is inserted into the tree trunk to monitor the sap flow within the tree.

Along with the sap flow measurement, RFM uses a 'Stem Psychrometer' which measures plant stress.

This instrument is placed like a clamp on a branch of the tree, taking regular measurements. When combined with the sap flow data, it gives a full picture of water use and plant stress levels within the tree.

The data collected will be combined with weather data from the same area, and used to analyse the tree comfort levels throughout the season. This will provide valuable knowledge, enabling RFM to make very precise and cost effective decisions about the quantity and timing of irrigation for the orchard.





Special equipment is used to measure how much and when water is used by the almond trees (left) while the 'Stem Psychrometer' (right) measures plant stress



## RFM Poultry (RFP) Update

ARSN 164 851 218

RFM, as responsible entity for RFM Poultry (RFP), announced the fund's first half FY2016 results on 2 March 2016.

Results were in line with expectations and the previous distribution forecast for FY2016 of 14.36 cents (inclusive of franking credits) was maintained.

Listed on the National Stock Exchange (NSX), the fund achieved 5% register turnover and 15% trading price improvement for the six month period ending 31 December 2015.

At an operational level, management maintains a focus on the continuing improvement of operations, RSPCA compliance for the Griffith operations and biosecurity. The outsourcing of the repairs and maintenance function to a third party in 2015 has improved the management structure, promoting a focus on core activities.

Table 1: Key portfolio & financial statistics - as at 31 December 2015

Total assets	\$8.48m
Net Asset Value (NAV)	\$7.42m
NAV per unit	\$1.09

#### **Upcoming Key Dates - RFM Poultry\***

Quarterly Distribution Payment Date	29 July 2016
Annual financial results announced	September 2016
Quarterly Distribution Payment Date	28 October 2016

<sup>\*</sup>Subject to change

#### **RFP Fund Profile**

RFM Poultry (RFP) is a large scale chicken broiler farm operator with experienced management, established as a result of a demerger of the RFM Chicken Income Fund (CIF) in December 2013. The Fund undertakes chicken growing activities for Baiada Poultry Pty Ltd and listed on the NSX in March 2014. RFM is the responsible entity of RFP.



## RFM StockBank Update

ARSN 153 436 803

Recent times have seen the Eastern Young Cattle Indicator retreat from record levels of around 600 cents per kilo.

RFM StockBank (StockBank) continues to place livestock with Operators benefitting from relatively high beef prices.

The Australian beef industry continues to enjoy favourable export news with Japan recently cutting import tariffs

on frozen and chilled beef products under the Japan-Australia Free Trade Agreement. Japanese beef tariffs of 38.5% reduced to 30.5% for chilled beef and 27.5% for frozen beef, according to a media release from Deputy Prime Minister Barnaby Joyce.

Weather conditions can have a material impact on the number of Operators who use StockBank. While eastern Australia has recently come out of a moderate El Niño weather pattern, the Australian Bureau of Meteorology (BOM) has reported a 50% likelihood of La Niña for later in 2016, which is often associated with wetter conditions. Higher rainfall would be a welcome event for livestock Operators looking to increase herd size.

Table 1: Key portfolio & financial statistics - as at 31 December 2015

Total assets	\$21.5m
Net Asset Value (NAV)	\$11.7m
NAV per unit	\$1.00

#### **Upcoming Key Dates - RFM StockBank\***

Quarterly Distribution Payment Date	15 May 2016
Quarterly Distribution Record Date	30 June 2016
Quarterly Distribution Payment Date	15 August 2016

<sup>\*</sup>Subject to change

#### **StockBank Fund Profile**

StockBank is a liquid, alternative investment fund that aims to provide investors with a reliable yield, by financing the acquisition of livestock that are leased and grown out by Operators on a portfolio of diversified properties. StockBank receives payment upon the sale of livestock, calculated as a fixed return on capital, regardless of livestock sale price, weight gain or mortality rates.

## About Rural Funds Management Ltd

AFSL: 226701

RFM is an experienced fund and asset manager that specialises in Australian agriculture. RFM manages a diverse portfolio of large-scale farming and agricultural enterprises for investors who seek the opportunity to diversify their portfolios away from the traditional equity and property markets. Our primary assets under management include land, water, poultry infrastructure, almond and macadamia orchards, vineyards, and livestock.

Established in 1997, RFM is the responsible entity for seven agricultural investment funds and, as of 29 April 2016, had approximately \$380m of agricultural assets under management in New South Wales, South Australia, Queensland and Victoria.

RFM is one of the oldest and most experienced managers of agricultural assets in Australia. In addition to RFM's corporate office located in Canberra, RFM has offices in Sydney, Western NSW, and south east Queensland, and employs more than 70 staff in fund and asset management activities.

#### **Contact Details**

Level 2, 2 King St

Deakin ACT 2600

T 1800 026 665

W www.ruralfunds.com.au

E investorservices@ruralfunds.com.au

E adviserservices@ruralfunds.com.au

F 1800 625 518

#### To make an investment

Rural Funds Group (ASX: RFF) is a listed investment.

To make an investment in RFF please contact your broker or financial adviser.

RFP is a listed investment on the National Stock Exchange of Australia (NSX: RFP).

To make an investment in RFP please contact your broker or financial adviser.

StockBank operates as an unlisted fund (APR Code: RFM0009AU).

### Australian Executor Trustees Limited (AET) Privacy Policy

AET is the custodian for the Rural Funds Group, RFM Poultry and RFM StockBank. To read more about its privacy principles, please visit: www.aetlimited.com.au/privacy-policy

#### Registry

Boardroom Limited Pty Ltd

Grosvenor Place, Level 12, 225 George Street, Sydney, NSW, 2000

T 1300 737 760

E enquiries@boardroomlimited.com.au

F 1300 653 459

#### Provide us your email address

We use email to communicate with our investors. Please take the time to contact our Investor Services team and provide your email address so that you don't miss out on any important information.



