

Investment and Growth in Extensive Agriculture

A Study of Investment Differences in Global Agriculture

A report for



By

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Foreword

Narrogin is a mixed farming area, which has been in transition from grazing to cropping. My family has been farming in the Narrogin region for 115 years. Over generations the value of the business has grown considerably. In the past 15 years our farm has grown from 1500ha to an operational size of 13000ha.

I would like to think this is due only to good management, but like all businesses it is far from the truth. As with most asset growth businesses, it has been due to a combination of good luck, good timing, wise management, sacrifice and lot of hard work. And along with the growth of our business, we have encountered all the other issues that exist when businesses grow rapidly.

My business is now at a cross roads that a lot of middle size businesses have difficulties dealing with. Our growth has been rapid and has started to plateau. How do we take our growth, size and expansion to the next stage? Why do so many agricultural businesses struggle to make the transition to the next size? Is size more important than innovation and adoption?

My family and I took hard decisions and made large sacrifices in difficult times 10 to 15 years ago. It is my belief that we are at a time when in the lifecycle of our business we will need to reassess what are the possible paths for our business growth are.

Acknowledgments

Claire, who has always supported me and was my eyes and ears at home during my travels.
Thank you for the way you held the family and me together in the good and the hard times.

My children, William and Edward, who always bring me down to earth about the things I do on the farm and while travelling.

Thank you to my parents for trusting their business partner with the freedom to think big and different thoughts and for their support while I travelled.

The sponsorship of GRDC and organisational support of Nuffield Australia has provided me a platform for learning. Nuffield has been a trigger for many changes that I will make as a business and as an individual.

To all my fellow travellers and hosts whom showed so much hospitality, trust and acceptance in my quest.

Abbreviations

ROI

Return on Investment is the total taxable profit as a percentage of funds invested.

MIS

Managed Investment Scheme is an agricultural investment run and operated by an external investment management company for the benefit of external investors.

GRDC

Grains Research and Development Corporation

Marginal Return

Marginal Return is the return on investment that is generated from the last dollar spent.

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Executive Summary

Farming outcomes, as with most long term commitments in life, are based on the cumulative effects of many such small decisions. As agricultural businesses, we rarely understand the implications of smaller decisions and their impact on the future structure of our businesses.

My report, sponsored by GRDC, is an effort to help industry and state and federal governments better appreciate what has occurred internationally when agricultural businesses make the transition from medium to large, in particular regard to investment decisions and business growth. I have based my observations on research conducted from February 2008 to March 2009 while travelling and studying in USA, Canada, Mexico, Brazil, UK, France, Ukraine and Australia.

I will demonstrate international examples of the two main forms of wealth creation used by agricultural businesses and then analyse the use of internal versus external funds for business growth.

As large scale farming businesses have aged in Australia, they have transitioned from cash flow businesses with minor asset bases to businesses where the average annual appreciation of assets is greater than the profit generated.

This requires changes to the way we approach the following:

- banking
- government and agricultural policies
- expansion strategies
- succession planning
- intensification
- farm relocation
- adoption of new technologies
- management skills
- production contracts
- production finance.

There have been many adopters of new ideas in the industry and agricultural support sector, but much of the financial sector is yet to grasp the opportunities that are being created as the farming business environment changes.

Banks need to look at the changes with a new approach, as some farms will become cash flow generators and some farming investors will never participate in the daily management of a farm. Large farming operations will require banks to treat long term investments differently to seasonal and production finance.

Processing and marketing companies need new approaches to maintain loyalty and continuity of supply. The opportunities are huge for companies that can lock finance and supply contracts together.

Governments need to provide structural assistance and not restrict innovators or the removal of dead wood from the industry. Governments and policy leaders need a more mature and realistic approach to external investment models.

Farmers need to improve management skills and understand their business relative to other types of business. Farmers have played the central role in the creation of advisors, some of whom know little or nothing of business outside agriculture. This may be dangerous and will increase our isolation and slow the adoption of new ideas, concepts and forms of investment.

Farming has been of declining importance to the economy. We need to appreciate that the only sectors of growth in the economy are those which can attract outside investment. Outside investment could give those who have the skills and confidence, opportunities that we only read about in other industries.

Farming is made of two distinct components:

- Cash Flow and Profit Generation
- Asset Growth and Accumulation

My key finding is:

Farmers, I believe, will increasingly split their business structure into Asset Management and Production Management, which will operate as two separate businesses. This will account for the vast differences in risk, financing, leverage and investment length.

Farming land has historically been one of the most secure and worthwhile investments. The present opportunities to “sing our own praises” are not being taken and opportunities may be lost.

When economic certainties are challenged, it provides opportunities for those who understand business and can sell the potential that agriculture can offer. There will be a change in investment as people, governments and businesses start to see worth in holding a portfolio of safe, low risk and medium return assets. There are investment possibilities to be managed and those who stand in the way of managed progress risk the benefits of change and need to be held accountable for their decisions.

We cannot turn back time.

Introduction

My family business is like many in Australia. As with many multi-generational farms, we have benefited from a legacy of long held assets. Yet we constantly struggle with the dual strategic challenges of profit generation and asset accumulation. For whom are we accumulating assets? Does our business have the right balance? If we don't grow the size of our asset, will it be at the expense of future profitability?

Where to from here for large scale farming in Australia? This area is rarely analysed and often poorly understood.

On my travels I gained a greater insight into the hidden implications of businesses decisions and the way they affected growth and future prosperity by looking at how older, more mature agricultural economies around the world have changed with time. I gained a better understanding of the intentional and unintentional implication of the decisions that farm businesses make. This knowledge can be used to help understand what future decisions agricultural businesses will need to take in Australia.

Farmers rarely discuss the medium and long term directions of their businesses.

There is a danger that this may indicate they rarely make planned decisions regarding the long term direction of their business.

My report is a study of the limitations and constraints on farm business growth and profitability and how these issues are resolved in the various countries and agricultural industries I visited. I will use the knowledge acquired through both my travels and farming history to outline the major challenges both now and into the future for modern large agricultural businesses and identify some possible solutions.

Objectives

Farming in Australia is similar in principle and business practices to agriculture world over. What differs is the maturity of the economies in which agriculture exists and the way which external forces affect its development. I wanted to understand how the transition from medium to large business occurs over time and how these changes will impact on agricultural investment and ownership in Australia.

Knowledge of how other agricultural sectors have reacted to internal and external influences will help both industry and government understand how our farming sector will change and how we must position ourselves to make the most of the coming changes.

Due to the size and diversity of the agricultural business in Australia my report can only accurately tell my views and opinions in relation to “broad acre agriculture” for the following reasons:

1. Intensive livestock industries such as chickens, pigs and feedlots rarely have large core land assets proportional to the investment upon those assets. The yearly value of the production is often as great as the asset value of the business. The full value of capital improvements is often not recoupable by the sale of the businesses assets.
2. Some horticulture, viticulture and agro-forestry businesses also fall into a hard to define business structure due to their secondary investment, or the proximity to residential real estate markets which makes their appreciation potential driven by external factors.
3. Secondary processors are more akin to the asset ownership and business structures of intensive agriculture. They often have large turnovers and profit capabilities that are based on cash flow rather than asset appreciation.

Farmers need to prepare and strengthen their businesses for all the possibilities that are likely to occur so that they may select the opportunities that best suit them.

My report is an effort to help the industry and government, both state and federal, better appreciate what has occurred internationally, and why we need a more mature approach to what will occur and its effect on farming businesses and communities.

Business owners didn't normally make decisions on how their business is structured, but they all have two forms of wealth creation. These were:

- Cash Flow and Profit Generation.
- Asset Growth and Accumulation.

Chapter 1: Cash Flow and Profit Generation

This is the use of cash flow or seasonal leverage to generate income and potentially profit. It has and will continue to be the primary focus of farmers. Maintaining the returns on investment as asset value appreciate has, is and will continue to be a major issue that restricts the ability of most farmers to grow.

Investments in cash flow businesses normally devalue or depreciate. Investment returns are high as a percentage total of invested funds.

I will examine five main examples of cash flow and profit generation, being Ukraine leases, Australian leases, share farming, quick payback in the USA and management and input joint ventures.



Brazilian dry land farmer harvesting a crop of soy beans.

Ukraine Leases

An example of wealth creation using cash flow and profit generation studied on my travels was Agro-Soyuz.

After the removal of collective land ownership that prevailed during the communist era, land titles were created so that all the collective employees had ownership of small allotments of land. As a result the areas that are now owned individually are not of a viable commercial scale.

In Western Europe there is a lot of discussion about the potential investment and profit opportunities that exist in Eastern Europe. There are several reasons why outsiders perceive it, mostly incorrectly, as an area of opportunity. Firstly, Agro-Soyuz is a large fully integrated cereal, machinery and dairy operation in the Dnipropetrovsk Region in central Ukraine. The land is fertile, the climate is mostly predictable and markets are highly developed.

The impression is that the farms are highly profitable, but for one simple fact. Nearly all the area is leased (698 landlords). This meant that the ROI being generated was nearly entirely off variable costed inputs and fixed depreciating assets. If the profitability of the farm was seen as a function of the profit compared to the land value it would be no more profitable than most comparable farming areas in Western Europe. Capital expenditure on infrastructure has been considerable but they have not had to buy the vast majority of their farmed area.

The frenzy of investment from Western Europe that was evident in the last decade was leases being written mostly with the hope that the land tenure system will be reformed. Due to the strength of the opposition and the Ukrainian view that they would be “selling the farm” this is unlikely.

Many large floated and private companies with millions of Euros of potential investment have attempted to enter the market. The fact is that most have never made a profit due to a lack of management skill, poor infrastructure and the Ukrainians seeing them as wealthy Westerners to exploit. Their long term view seems to be solely about capital appreciation of the value of the exercisable options to purchase land which may never eventuate.



A large grain handling facility in central Ukraine, built by Agro-Soyuz.

Leasing in Australia and the First World

For most farmers in Australia and the developed world, leasing enables them to expand their cash flow and profit generation capabilities without having to risk as much equity by land purchases. It also enables farmers to gain better economies of scale on existing plant and labour therefore reducing fixed costs. This is a common form of expansion worldwide in all forms of agriculture.

In older, more mature agricultural economies there is a history of tenant farming that goes back generations and hundreds of years. For example, in the UK I visited farms that have had life tenancies which have enabled investment in dairies, piggeries and fixed assets associated with farm productivity. The length of tenancy has meant that investment can be written off for taxation purposes or paid for by the landlord with the cost built into the tenancy fee.

In Australia we do not have a culture of long term tenancy farming. It is my belief that as land prices increase and ROI of owned land decreases there will be increase in tenant farming. The owners of leased land view their land as assets of wealth creation and security, not solely generators of the highest returns on that investment.

The challenge in our system is the length of tenancy contracts. In Europe tenancy contracts are often 10 or 20 years, but it is not unusual for generational or even multiple generation contracts to exist. In contrast, in Australia the accepted length of lease contracts is three or five years. This may change as fixed investment associated with production, environmental restoration and amenities becomes increasingly important to profitable and sustainable farming practices.

Share farming

This is a variation on a lease contract where the value of investment and the returns for both investors are proportional to the value of production, whether it is food or fibre. These types of contracts occur in most of the world.

On my travels I saw share farming production of grain and vegetable production in North America, Ukraine and England.

Share farming of chicken, sugar cane, coffee and vegetables is often the only way smaller farmers throughout Brazil and Mexico can maintain production funding of inputs.

Milk, grain and vegetable production were often produced under variations of share farming agreements in most agricultural economies.

Australian agripolitical leaders and governments need to get realistic about MIS which are variations on the accepted model of share farming agreements. MIS can be another form of investment and in my view, it should be encouraged. To promote and hasten the development of new industries and infrastructure such as the Ord River Development new forms of partnerships will need to be formed. If it is not viable, sustainable or practical it will not last. This can be demonstrated by the timber industry.

How will investment growth find new forms of capital if outside investors are excluded for some naive belief that it will preserve the status quo?

Do we want viable prosperous business in evolving communities or struggling businesses in dying communities that are reliant on struggling industries?

Quick payback

South America is a vast and diverse agricultural economy. The businesses of the southern developed areas resemble the older developed areas of Australian agriculture.

On the other hand, the recently cleared and frontier lands of north western Brazil are similar to areas of Australian agriculture during the 1950's to 1970's, in that land development can be self funding where one or two years of good production coincides with expansion. In these areas the investment lengths are short due to cheap land and low development costs. The payback time is short enough to enable businesses to be profitable in a few years, whereas in developed agricultural economies it would take decades.

Management and Input Joint Ventures

A rarely used and difficult to manage form of profit growth is focused strategic investment into management and inputs. It is also a form of share farming, where an external investor helps improve management skills and some technical investments by the focused investment of funds. The restrictions to this are how the improvements get measured and finding farmers who want investment and managerial support.

Chapter 2: Asset Growth and Accumulation

Asset growth and accumulation has traditionally been the focus of many family farming operations both in Australia and the developed world. The value of the business has been the legacy of the previous generation and gifted for the advantage of following generations. Appreciation of agricultural land assets is not closely related to profitability or managerial skills. Assets in this area of business normally appreciate and taxation depreciation benefits are rarely available, or must be spread over many years.

Accumulation

For most farmers this is a natural process and is unmanaged. As opportunity arises farmers will often utilise equity increases to enable more leverage for land purchases. This type of expansion is mostly not self funding and the justification has nearly always been to obtain better economies of scale.

For most very large farms the economies of expansion are increasingly limited. For example, in the USA and South America most of the large business that is expanding is far beyond initial units of machinery, labour and even management.

Gaining further economies by the expansion of large agricultural businesses in Australia are mostly, I believe, overstated. My business, as with the large businesses I studied, is more likely to suffer greater inefficiencies of the use of labour. This is due to management finding it increasingly difficult to monitor the effectiveness of each extra unit of labour. Machinery efficiencies can inevitably fall when machinery usage falls between the units supplied.

To explain my example I have simplified how I view the down side of efficiencies once multiple units are employed. Two planters can complete a season on time for 800ha but for 1000ha 3 would be needed. The use of one more planter is needed, but the result is that for an extra 200ha more trucks, service vehicles, labour and tractors are required. Are the gains in efficiency from increasing 200ha more than the losses from increased complexity, other investments needed or the need for greater managerial attention?



An example of limited expansion efficiencies. This horticultural farm in California had up to 2000 employees and multiples of the same machines.

High Prices of Expansion

Growth is justifiable until the land price is high and the leverage costs of capital are exceeded by the service capacity of the new area. For many European farmers the profitability of the new purchase is far exceeded by the interest cost. Land prices in Western Europe have been driven by investors and are far beyond the ability of most farmers to purchase.

Appreciation

As the scale, size and maturity of agricultural areas grow, there is an evolution from accumulation to growth of existing asset wealth. The return on mature assets starts to decline as a percentage as asset growth of those assets continues.



Land like this in the Nappa Valley is so valuable, and the annual appreciation so much higher than the ability of any investors to service the debt, that purchases are made to secure wealth and gain appreciation returns rather than agricultural profits.

Farming in the UK is profitable and has some of the best producers in the world.

The expansion of farms is more about capital appreciation, wealth protection and succession planning than increasing profitability.

One of the best examples of the exploitation of asset appreciation that I observed was Richard Burt. In the last 20 years UK land prices have risen rapidly. Richard Burt utilised appreciation and strategic purchases of undervalued assets to grow the size of his asset base. In the late 1980's he and his father decided to move their business. They sold the family farm near a

local town for a price that reflected real estate prices for urban development not agricultural land prices. He moved 200km to an area that was on the edge of an urban encroachment zone. He bought two farms with very good houses that needed renovation; he improved a small area around the houses then sold them for a huge profit, which was tax free if he invested it back into more land.

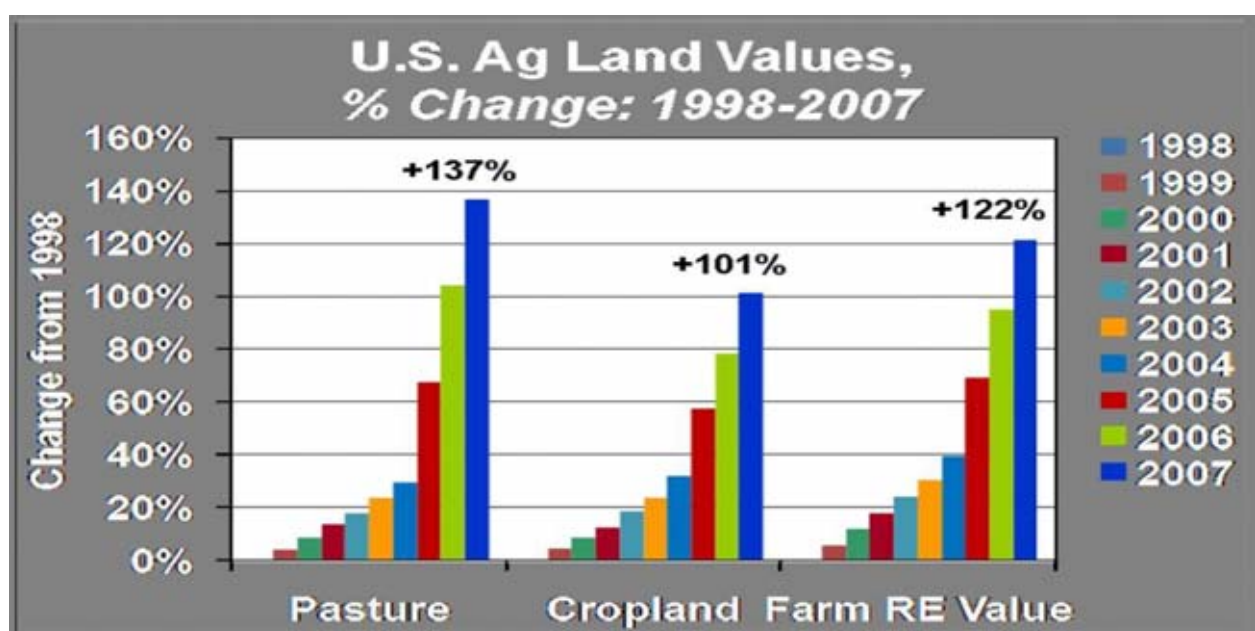
The effect was that he still owned nearly all the land he wanted to farm.

With the profits he did the same thing again. Eventually he had expanded his operation considerably in size and was positioned in an area where urban encroachment would continue to appreciate his asset.

Most Australian farmers are not subjected to the effects of urban encroachment, but there are sometimes land use changes which have the same effect on land prices.

While travelling in Canada we visited a church group that has no intention of farming. They used the asset of their farm property which they had not farmed for years as the wealth source to enable them to follow other interests. They had neither the management skills nor financial capacity to farm. Their decision was sensible given the large appreciation of the asset.

Below is a table that illustrates how agricultural land prices in the USA have risen in the period from 1998 to 2007. It shows how there has been a continual appreciation of land values in both pasture and cropping land across the USA.



Chapter 3: Analysis of various investment alternatives.

This chapter will examine whether growth and expansion is best when funded internally or externally.

Internally Funded Growth

This is expenditure which is financed internally from farm resources by profit generation or leverage.

Strengths of internally funded asset growth

Full management control is maintained.

Most farmers fight to retain their independence. This will continue to limit the existence of cooperative agreements, shared use agreement and most other forms of collaborative use of capital, labour, management or resources. Farmer owned cooperatives have struggled unless the efficiency gains are very large.

Tight focus and rapid decision making is possible.

Small businesses thrive when they can make rapid decisions. Even if farmers don't make very good decisions they will always fight for their rights to act independent to others.

There is mental investment into the project.

For most small businesses it is the commitment and effort to a process that will determine the outcome. Farming is no different. Where business owners have a vested interest, the most economically rational decisions may be created. Small businesses have a direct effect on family life which creates a frame work for great prioritisation of decisions.

Banking and tax systems.

These systems have been created around the traditional forms of asset growth and investment. Banks will lend money at such a conservative equity percentage that in most areas globally it is impossible for farmers to go broke by expansion.

It is difficult to understand why farms can only lend at a maximum of 40 to 50% of the total asset value, whereas house purchases, until recently, could be made with less than 5% equity. The one benefit is that farmers will not be forced to sell because they have enough equity to ride out bad times. This has created an extremely sound investment alternative. Banks have created a floor in the price and supply of land, to their and farmers benefit.

Banks have also created a financial system where it is now, I believe, impossible to change the valuation and loan leverage system. If banks were to revalue assets at new levels in areas where returns on equity have declined due to drought or market conditions the outcome would be disastrous. If an area had a 30% lowering of valuation, it could possibly make many of the areas' farms technically unviable. This would create the explosion of a "land bubble" as farmers and banks are forced to sell, forcing values even lower.

Asset inflation.

Farming assets are normally multi-generational. The length of ownership and the effects of asset inflation will always diminish the percentage of equity that borrowings occupy.

Weaknesses of internally funding expansion

Slow growth and expansion.

This can reduce long term viability when terms of trade fall faster than business expansion. This is one of the reasons why farming numbers continue to decline around the world.

Low market liquidity.

As the numbers of farmers decrease we will create a market that lacks liquidity. We already have periods of low liquidity when farms are hard to sell due to relatively few buyers, caused by an apprehension to invest. What happens when in some regions the numbers of expanding farms decreases to make demand low or nil?

High marginal return.

Investment in cash flow allows the highest marginal return. As asset returns fall with higher land prices there is an increased flow of investment towards cash flow and profit generation, due to the higher marginal return. This could be through diversification, intensification or off farm investment

Asset appreciation/management disconnect.

Land value appreciation is unrelated to the abilities of the management team. There are exceptions to this but the discount in values due to poor management is small and rarely evident.

Gearing restrictions from banks.

Banks restrict the level of gearing due to the traditional view on farming being about the total return and not the marginal return. Few expanding businesses I saw in my travels judged business expansion as a stand-alone investment decision. When expansion is funded by cross subsidization from more profitable areas of investment, the choice to invest is inherently risky.

Slow industry attrition.

Farmers and banks don't normally have to face up to the reality that their business is dying a slow death. The decisions are often deferred or prolonged, mostly at the expense as the farmer's equity. It is also to the banking industry's advantage to encourage farmers to continue to struggle on, rather than the possibility of losing a client. The need for farmers in Australia to exit the industry is being artificially limited. Farmers now borrow to only such a small quantity of leverage that for even poorly skilled farmers, it is nearly impossible to go broke. This has limited efficient farmer's ability to expand by limiting the ability to more highly leverage their businesses. This restricts the flow of knowledge, techniques and managerial skill that would increase industry efficiencies and the flow of capital.

Drought assistance policy.

Present drought assistance has a place in helping farmers but the present structure has limitations. Farmers that have taken their own managerial and financial decision to make their business more profitable and secure in times of drought are often disadvantaged.

Taxation.

Growth is not normally tax advantageous. The long term effect of capital gain taxes in most areas of the world is a large problem. The present generation of farmers are starting to retire; this will crystallize large tax liabilities. These liabilities will mostly be funded out of equity,

further reducing capabilities to grow. Self managed superannuation has reduced this, but sometimes with the effect of reducing assets that can be used as security.

Opportunities provided by internally funding expansion

Leverage.

Assets that have started at a low base and appreciate rapidly allow increases in equity as an easy source of leverage. In Brazil, Northern Canada and the wheat belt of Australia the appreciation of assets has been rapid in the last 20 years. This has enabled farm businesses to use asset appreciation as an easy source of collateral for leverage.

Low risk due to the low amount of leverage banks will allow.

The agricultural banking system in Australia was formed on low asset values. Since most banks will only lend 30 to 40% of asset values they are extremely secure. Why do they lend to such low levels?

The given reason is risk. As land values increase, I believe this should be reassessed. The potential to go broke is less, since production costs are a lower percentage of the asset value.

Marginal return given the risk of that decision.

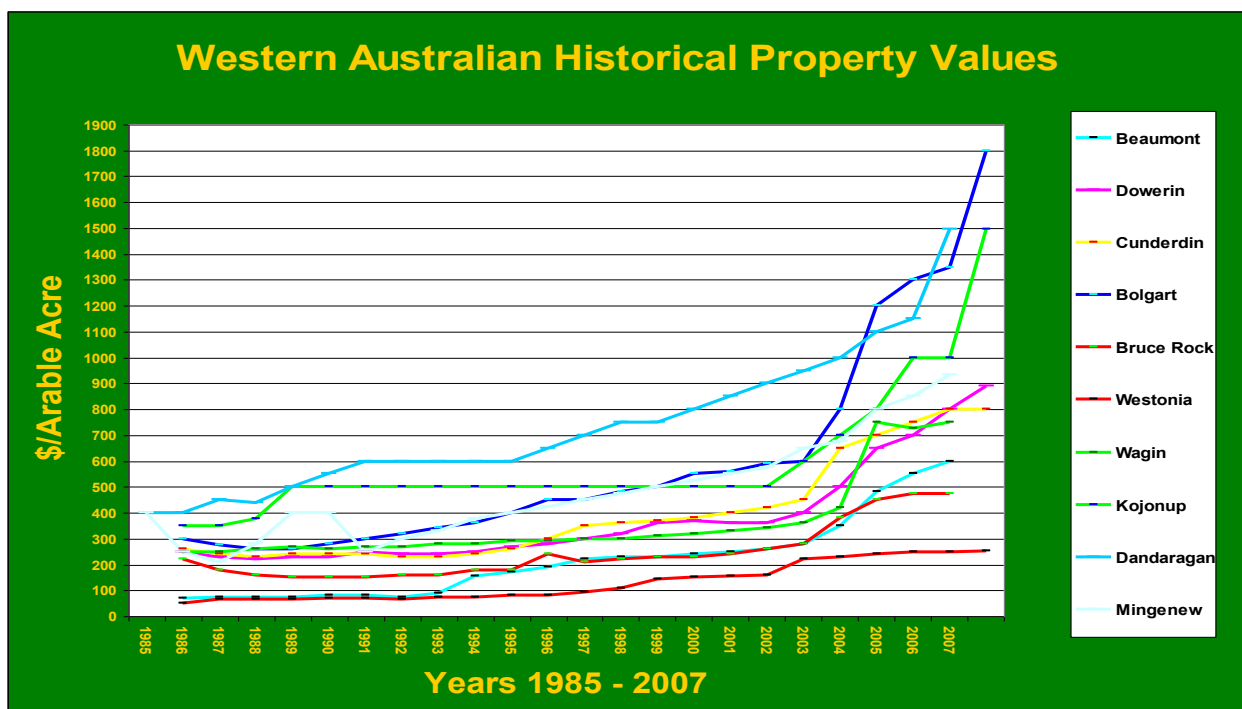
It is my belief that all decisions should be rated by the marginal return (the return on investment that is generated from the last dollar spent) given the risk of that decision. Agronomic and financial advisors don't fully implement the concept of marginal return when placed alongside the risk profile of the assessed decision. Funding decisions are often assessed when the total returns are compared given the risk of the whole enterprise not the marginal return of the investment decision

My point would be that in Australian agriculture very few off-farm investment decisions are compared to the marginal returns that can be made from investment internally.

Returns on other asset classes.

Returns on other asset classes have reduced and there will be a flow of investment from off farm back into agriculture. Long term returns have been comparable to other investments and the lack of volatility may weigh more heavily in farmers decisions when considering whether to invest into their business or off farm.

As seen in the tables below, the ten year average of total returns is well in excess of 12% and 15% in some areas.



Challenges to expansion through internal funding.

Tax laws.

Australia's present tax laws penalise the sale of appreciated assets when trying to crystallise capital gains. Stamp duty taxes on the purchase of properties are a limitation to business decisions when expanding or relocating through the purchasing of assets.

If businesses focused on high growth assets there is normally a low yield and vice versa. The aim is to strike a balance by investing in positively geared high growth assets.

Expansion of the asset base is being funded primarily by asset appreciation not profitability.

This is the use of leverage to continue expansion when only a business's ability to service the loan is applicable. The ability to service debt does not indicate overall profitability. Viable businesses must be able to service debt, repay capital, maintain capital investments, pay drawings or salaries and pay tax. Businesses that don't do all of these are structurally weak and have questionable long term viability.

Farmers have been convinced to invest off farm in recent years. This, I believe misses the point that the level of return of business is not important in investment decisions. The "marginal returns of an investment" is the key to the profitability of internally funded decisions.

Asset devaluation.

Similar to those seen in the share market and urban real estate, this can expose farmers to significant losses of wealth.

Externally Funded Growth

This is the use of external funds to leverage capital purchases or expansion.

Strengths of using external capital to assist expansion.

Leasing of machinery and land.

This allows for greater efficiencies for the use of capital.

MIS models exist that provide a funding and risk component.

Australia and global large scale production is very risky. External investment via MIS enables restructuring and strengthening of industries. Abilities to leverage advantages over other businesses only exposes the underlying weaknesses of business practices in existing farm businesses.

Share farming allows better efficiencies of fixed input costs.

There are also tax advantages for the investor and scale advantages for share farmers. In Brazil I visited a chicken meat producer who had been able to expand his operation by share farming with the processor, when he may not have been able to fund expansion or improvements himself. The processor was also able to guarantee his supply, standardize his product and reduce the risk of disease by spreading his geographic spread of production.

Exceptional growth possibilities by decoupling asset growth and asset yield.

Many farmers know their gross margins and breakeven levels. Few know their returns on fixed assets and variable expenditure. By decoupling land assets from production costs the returns are very good.

The ownership of land is a high proportion to the cost of production. In Western Europe it represents up to 90% of the investment a hectare to produce a crop on self owned land.

In more marginal and newer areas of Australia and South America it is less than 30%.

If land is leased the funds required to grow a crop are reduced up to 90% in high land value areas. This reduces the investment risk or can increase the size of an operation to gain better economies.

Farmers should separate land purchases so that they differentiate accountancy, financing and management decisions from production decisions. The historically small size of farming

businesses has meant all decisions are seen as related. This limits our view of production profit to the whole business, not to production management decisions.

Most large national retailers, banks or manufacturers do not own their shop floor. The ownership of land or building assets and cash flow generation assets are quite separate.

I believe this will be the future of land ownership for farming.

The separation of farming assets will occur for many benefits:

- Greater leverage
- Estate planning and generational succession
- Risk protection
- External investment with managerial opportunities
- Joint venture possibilities
- Land syndication opportunities
- Increased opportunities for expansion

Weakness that detract from external investor's willingness to invest.

The returns from land ownership by external investors are low risk and therefore can only be compared to similar assets. The rental returns from leasing are comparable to fixed interest or bonds since returns are known and unrelated to agronomic or market factors.

Length of investment.

The reluctance to invest is partially seen due to the relatively lengthy period of investment required.

Retention of control.

Most farmers want control. The change to external investment of any type gives most farmers worries. Farmers deal with uncertainties of production and markets by controlling all other factor as well as possible. This makes large numbers of farmers reluctant to partner with external investor whose goals lack clarity.

Most farmers don't like to report.

A change to external investor, joint ownership or control requires constant reporting. The managerial skills required by farmers to provide accurate, regular reports under a business CEO structure would be difficult and confusing.

Change of perspective.

Farming is a business, not a lifestyle. Some farmers justify their lack of intensity towards farming as farming being about lifestyle. Maybe this is because few farmers have ever worked in a way other than being in self employment. No wonder that large sections of the investment sector see farming as an occupation with few prospects.

Retention of independence.

Farmers are aggressively independent even to their own detriment. Most forms of cooperation between farmers or outsiders have mostly failed or have been broken through industry infighting, as seen in the demise of single desk marketing in industries such as wheat, meat and wool in Australia.

A lack of management skills and new blood entering the industry.

Outsiders to any industry are a necessary way of refreshing talent, view and opinions. Good managers are not being produced and retained inside Australian agriculture. This restricts outside exposure to the dynamic views that are needed to revitalise industries.

Opportunities that farming provides for external investors.

Low yields in comparative assets classes.

In times of low profitability, farm rental returns are comparatively good compared to other forms of investments. For example, farming could be seen as a comparable investment to fixed interest bank holdings.

Low growth prospects in some comparative asset classes.

There has been asset deflation in most forms of real estate investments, such as residential and commercial in all parts of the developed world. In comparison to this, agricultural land retained value.

Superannuation fund managers will need to offer alternative investment products.

There is an over reliance on the share market as the method of investment of superannuation. After the huge losses of wealth in 2008 investors will be seeking safe moderate growth and yield investment alternatives.

Joint investment models.

Historically we have assumed that there is no direct relationship between all sections of agricultural production. The possibility exists for processors to fix the cost of their raw product at the cost of production through joint investment models utilising external investors, end users and farming managers.

- The land could be owned by a land investor.
- Production and farm management overseen by an existing farmer who is being paid as a contractor by using his agronomic and implementation skills.
- The cost of production and production risk could be carried by an unrelated investor or investment scheme.
- The end user of the product would be paying the remainder of the production costs. They would also be securing their raw product at cost of production and obtaining supply at the cheapest world parity cost. They may not use their own product to produce the end goods but the cost of that input would be at the cheapest world parity price.

Contract production on behalf of end users.

This is when end users finance the production of a crop. The implementation of the production is contracted to an existing farmer enabling better efficiencies of scale, an alternative income stream unrelated to production profitability and a value to be gained for knowledge and managerial skills.

Farmers with management skills may be able to find value of their management skills.

Farmer skills in management and agronomy should have a realisable value. Several farmers I saw in the UK used their skills to manage assets on behalf of other businesses. These businesses were an extension of their own and the synergies and economies of scale were of benefit to parties.

Farms purchased by investors don't need to be large if they can be spread over several owners in different regions.

More developed agricultural areas normally have very tightly held land ownership. If the land is owned by external investors there is not a need for the land to be close or located for greatest efficiencies. The operators of the land could be many and different types of businesses. This would allow investments to be made more strategically, for the highest growth assets or the most opportunistic purchases. This would also provide increased liquidity of the land asset.

Challenges and Limitations to external investment

Mega farms are becoming too big to be sold to other farmers.

In many developed agricultural economies it was not rare to see farms with asset values of \$50 million or more. Farm consolidation in most areas of global agriculture reduces the possibility that farms can be sold within that region. In my area of Western Australia 10% of farmers own nearly 40% of farm land. If this trend continues these farms will be so large that even when broken up for sale some will need to be sold at a large discount.

If external investors with long term investment models were to buy farm land of what I call “mega farms” sizes, then this could also be a positive outcome.

Liquidity of farming assets.

The limited amount of buyers of land in each region has created the perception that farming land is an asset that lacks liquidity. Low levels of leverage on land means that sellers normally are far less likely to accept a lower sale price to complete a transaction.

External land investors are likely to be two broad groups:

- Long term investors with large amounts of money with the intention of multi generational investment lengths before seeking to crystallize asset growths.
- Medium term investor with shorter term intentions. These investors have two investment structure possibilities:
 - Individual investors willing to accept longer sale times.
 - Grouped or syndicated investors whom by holding units of investment in large jointly owned assets are more able to trade in and out of their agricultural portfolio, thus improving the liquidity.

Syndication models of machinery are not uncommon in North America and Western Europe and the joint ownership of urban real estate happens in Australia.

A lack of good management.

External investors will require managers that are good agronomists, have good reporting skills, can manage people and have a long term commitment to stay with the industry. Presently there is a lack of willing, trained and proficient managers in Australian agriculture.

Rapid technological change and the turnover of technology related investments.

This I believe has started to have unintended consequence with labour. It has provided an opportunity to down skill our seasonal labour requirements if we can continue to decrease the skills required to use technology.

Rapid loss of management skills to more well paid professions.

Farming could be seen as a relatively under-paid profession. In order to retain good management we to pay fair market price for top management skills.

The loss of knowledge and understanding of historic problems.

If investment becomes external there may not be longer term views towards environmental and social problems if they don't have economic outcomes.

Adverse outcomes to land values.

If banks were to allow purely land investors higher levels of leverage there may be changes to the supply and demand equation that could have adverse outcomes to land values.

Conclusions

The ownership structure of agricultural land will continue to change. Businesses that have may thrive into the future are those that make the most of new opportunities. Some farm businesses will continue to leverage, others will move towards increasing profit generation by leveraging more towards increased cash flow and profit generation.

It is my belief that banks, consultants and investment advisors all have views that will need to change, as the structures and risk profiles of agricultural businesses change.

There are vast untapped opportunities to invest in agriculture. A window has opened that has made farming land one of the best, most secure and high yielding assets classes of low risk. Political and industry leaders have an opportunity to assist industry to maximise benefits that assist the whole industry. New forms of MIS structured risk protection and leverage of management abilities will help farmers who lack assets to continue to farming. Asset businesses have the opportunity to grow by many various investment models and bring outside wealth to an industry that has become overly insular from external investor and ideas.

The greatest challenge is to convince external investors that farm land ownership is a desirable alternative to production risk and managerial challenges. ROI from most corporately managed and owned farms is considerably less than returns from leasing.

Vested interest has always encouraged the best decisions and returns. Family businesses have an advantage that no corporate business structure can replicate. However, farm businesses will need to become professional in their approaches to business. Investors and advisors will be seeking portfolios that have a component of lower risk, medium yield assets and less speculation.

Production risk and land ownership risk are not closely related. Farmers and the investment industry need to better appreciate the difference in order to better understand the risk profile of investment alternatives.

As individual investors and investment tools mature, most will prefer to lease or share farm to minimise the risk associated with the uncertainties of climate, markets, production cycles and day to day management of agricultural business.

If liquidity issues associated with investments into farming land can be managed, agricultural land investments will be one of the major growth areas in the financial sector.

Farming is one of the largest classes of asset ownership in the whole Australian economy. The future will be bright, but it will change dramatically from its present form. Farming and agricultural investments will provide opportunities for the whole economy. We should embrace change with optimism and excitement and position ourselves to make the most of what will inevitably occur.

Plain English Compendium Summary

Project Title:	Investment and growth in Extensive Agriculture
Nuffield Australia Project No.:0811 Scholar: Organisation: Phone: Fax: Email:	Mark Graham L.G.Graham and Co PO Box 22 Popanyinning WA 6309 08 98 836 055 08 98 836 300 mark.clairegraham@bordnet.com.au
Objectives	To study investment differences in global agriculture and how they are affecting growth and investment in large scale agricultural businesses.
Background	The ownership and structure of large scale farming in Australia has generally been as a result of family generational growth of traditionally low value assets. As the value and maturity of farming assets have grown there is now a need to reassess the structure of ownership, the returns assets are generating and look for a new way to grow the value and profitability of businesses.
Research	The research was conducted from February 08 to March 09 while travelling and studying in USA, Canada, Mexico, Brazil, UK, France, Ukraine and Australia.
Outcomes	Large agricultural businesses in Australia need to appreciate the two distinct forms of wealth creation. Asset ownership and structures allow many possibilities for expansion from internal and external sources. Profit generation by the targeted use of investment and risk protection. There are strengths and weaknesses involved in the expansion of farming businesses by the use of internal and external investment forms. Astute business owners and managers will acknowledge how they can best utilise the various forms of investment in order to maximise their returns given the level of risk they are prepared to accept.
Implications	As farming businesses grow there will be a move to split asset ownership and production management. This will benefit internal expansion and the ability to attract external investors.
Publications	