

## ***'Australian Agriculture: the real story***

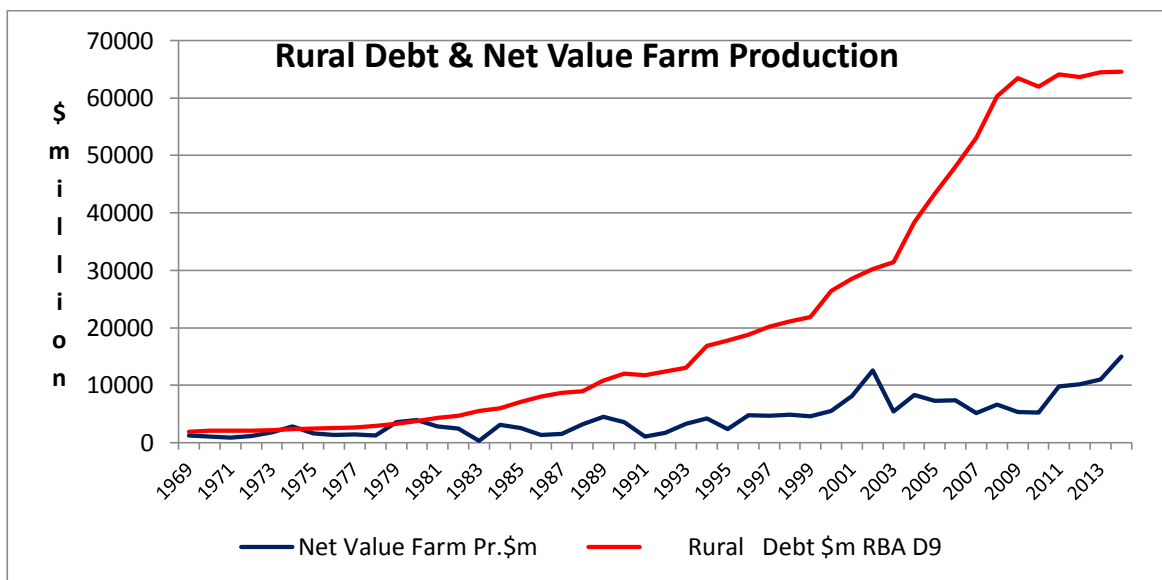
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Compiled from: ABAREs commodity statistics Table 13, 2014

*This paper discusses the historic development and application of agricultural policy. Five decades of economies of scale agricultural policy by any common sense measure has failed.*

*The core problem is conflict between two Laws in economics. The first law forms supply and demand theory in contemporary economic models and assumes constant returns to scale. This conflicts with a second well known Law that identifies agriculture as operating under declining returns to scale. Conflict between these two laws has resulted in long term policy failure, unmanageable debt levels, bank foreclosures insolvencies, suicides; and, damaged the social fabric in rural Australia. Political will is required for effective policy change and the restructure of rural industries.*

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## Australian Agriculture: the real story

*Ben Rees*

### *1 The Policy Problem*

The GFC triggered a collapse in rural land values. Across Australia all major rural industries have been caught in subsequent financial dislocation. Whilst different industries have their own trigger, the underlying crisis is a large farm low income problem. This is a policy structured converse of the late 1960's small farm low income problem. Whilst industry specific catalyst triggers crisis, below the surface lies a common story of large efficient farms heavily exposed to debt confronting solvency questions post GFC land value collapse.

Victoria dairy was triggered by \$1 milk marketing by the large retail giants. Once land values collapsed, WA grain farmers experienced difficulty in obtaining necessary bank finance for the 2013 planting season. NSW horticulture sector was undermined by cheap imports and closure of manufacturing plants. Both north Queensland's and NT cattle industries were closed down with the cessation of live cattle exports. Across all these troubled industries, wide spread severe drought not only compounded the underlying low income problem; but also masked the true state of Australian broad acre rural industries.

Rural financial dislocation flowed from GFC capital market dislike of rural mortgage backed securities issued by major rural financiers. Capital market devaluation of rural mortgage backed securities flowed directly back to farm values. As banks moved to restructure rural portfolios, farmers financed on pre GFC valuations found themselves technically insolvent. Farmers financially sound post GFC are in trouble with ongoing imposts of drought management costs. Bank foreclosures have been subjected to confidentiality clauses which have prevented rural financial stress becoming public knowledge.

All major political parties are playing games with rural lives and sectoral stability. They conveniently hide behind drought affecting the northern cattle industry. Urban voters are constantly being reminded of the need

for political support for drought affected farmers. The veracity of this political spin is refuted by two examples of bank foreclosures. National media reported on two large wheat growers placed into receivership in WA and Queensland. The WA case owed \$40 million whilst the Queensland wheat grower owed \$30 million. Drought in northern NSW and Queensland's cattle industry had little to do with these geographically divergent examples from the wheat sector.

This paper seeks to explain the true story underlying rural dislocation. Appendix A provides a discussion on income distribution across selected Queensland local government districts (LGD's). The selection of LDG's is heavily weighted with cattle producing regions. This is a deliberate attempt to expose the fallacy of political focus upon drought as the major policy concern

## *2 Conflicting Laws in Economics*

Contemporary economics became institutionalised in Australian economic policy when Whitlam established the Industries Assistance Commission in 1974. In 1975, the IAC initiated interest in the use of a competitive general equilibrium model for analytical study of economic and social change<sup>i</sup>. Several Government Departments became involved: IAC, Departments of Industry and Commerce, Employment and Industrial Relations, Environment Housing and Community Development, and the ABS.

Competitive general equilibrium theory underwrites neoclassical economic models. They assume purely competitive markets; and, market clearing prices. Purely competitive markets and market clearing prices are assumed to deliver an efficient allocation of resources generating rising productivity and a competitive production system.

It is conflict between the models supply and demand theory and an established; but, unrecognized empirical law that lies at the centre of policy failure. As underlying assumptions do not reflect the real world of agriculture, protracted reliance upon modelled policy has resulted in long term policy failure<sup>ii</sup>.

### Law 1: Supply and Demand Theory

Say's Law of Markets, forms supply and demand theory in neoclassical modelling. This Law, first postulated in 1803, depicts a moneyless economy in which supply always creates its own demand<sup>iii</sup>. In terms of economies of scale, this Law requires an implicit assumption of constant returns to scale.

In 1927, Professor A.C. Pigou modernized Say's law of markets by restating it in terms of the labour market.

*"Under free competition wage rates will tend to be so related to demand that everybody is employed"*<sup>iv</sup>

Between 1927 and 1945, Professor Pigou restated six times this modernized version of Say's Law.

In 1995, the National Farmers Federation restated the Law in terms of commodities.

*"The downward trend in real commodity prices need not of itself produce a loss of national income nor a decline in the profitability of commodity producers if the decline in the real commodity or manufactures price is the result of higher productivity"*<sup>v</sup>

## Law 2

Engel's Law is the second law in economics which is unrecognized in contemporary agricultural policy. This empirical Law, first postulated in 1857, argues that *"the percentage of income spent on food declines as income increases"*<sup>vi</sup>.

A contemporary University of Massachusetts research paper has this to say:

*Engel's Law continues to be relevant today across countries as well as across households within countries"*

Richard Anker, Jan. 2011

Engels Laws describe an imperfect market structure operating under declining returns of scale.

Engel's Law is used in modern microeconomics to calculate income consumption curves<sup>vii</sup> from which income elasticity of demand for commodities is derived. Modelled policy based upon constant returns to scale is in conflict with the real world of agricultural production driven by the unrecognized empirical Law.

### *3 Applied Policy*

In 1967, McKay identified the small farm low income problem in Australia<sup>viii</sup>. In 1968, The Commonwealth Government introduced a policy of farm consolidation of dairy farms that embraced compensation for farmers exiting an industry<sup>ix</sup>. Policy focus began a shift from closer settlement to enlarging farm size.

From 1971<sup>x</sup>, Australia embarked upon a policy of restructuring agriculture. Policy sought to encourage economies of scale in rural production. Economies of scale was expected to deliver efficiency and productivity dividends to rural producers with flow on benefits to the wider community. It was assumed that increased productivity must raise profitability. In policy terms, productivity and profitability become interchangeable terms. In the real world, they have very different meanings.

Economies of scale became commonly described as "get big or get out". In 1976, reconstruction was replaced by rural adjustment<sup>xi</sup>; but, this policy direction was being questioned in policy debate. Prosperity was not returning to rural communities<sup>xii</sup>. Nonetheless, commodity groups continued to support economies of scale. Refusal of commodity groups to question policy was explained in 1977 by Campbell.<sup>xiii</sup> He argues that these groups concern themselves with survival of commodities rather than farmers.

The inherent problem for economies of scale policy is the underlying assumption of constant returns to scale. The real world of agriculture operates under declining returns to scale. In the real world, it was never a question if agricultural policy based upon an assumption of constant returns to scale would fail. It was always a question when would it fail and under what circumstances. That failure was exposed unceremoniously by the GFC in 2008

Four decades of economies of scale policy has achieved aggregation of properties through mergers and acquisitions. Farmer numbers have halved. ABARES data<sup>xiv</sup> shows that farm establishments have fallen from 187,650 in 1972-73 to 128,917 establishments in 2012-13. This is a 30% contraction of farm establishments. Over the same period, farmer numbers have fallen from 239,600 (1972) to 121,800 (2013), or 49.2% reduction.

The first signs of policy in trouble emerged in the early 1990's. In 1994, the Senate Rural and Regional Affairs and Transport Committee Inquired into Rural Adjustment, Rural Debt and Rural Reconstruction. The Report published in December 1994 carried a number of findings and recommendations. An important finding stated that banks were lending on a debt to equity basis:

*“following deregulation in 1983-84, the banks, in pursuit of market share in the face of heightened competition, made loans based upon security levels offered by existing equity but without sufficient regard to the capacity of clients to repay”*

1994 Report, p. 99

No political party recognized the pending policy failure framed in this particular finding. Politicians preferred to rely on another recommendation on page 88, which suggested that Australian farmers were “a bit thick”. Conclusion 3.37 says farmers need to upgrade skills and learn better business management practices. Hence began the “dumb farmer” syndrome. Education, training and skills enhancement have become regular activities conducted by Departments of Primary Industries and supported by commodity groups.

The 2008 GFC exposed the hollowness of solutions offered in 1994. The ideological ineptitude of political and rural leadership not to accept the debt to equity lending practices observed in 1994 is unforgivable. Rural communities are now paying dearly for political incompetence whilst politicians from all major political parties and commodity groups hide behind the mask of drought.

*4 Restructuring Impacts Wider than Rural Australia.*

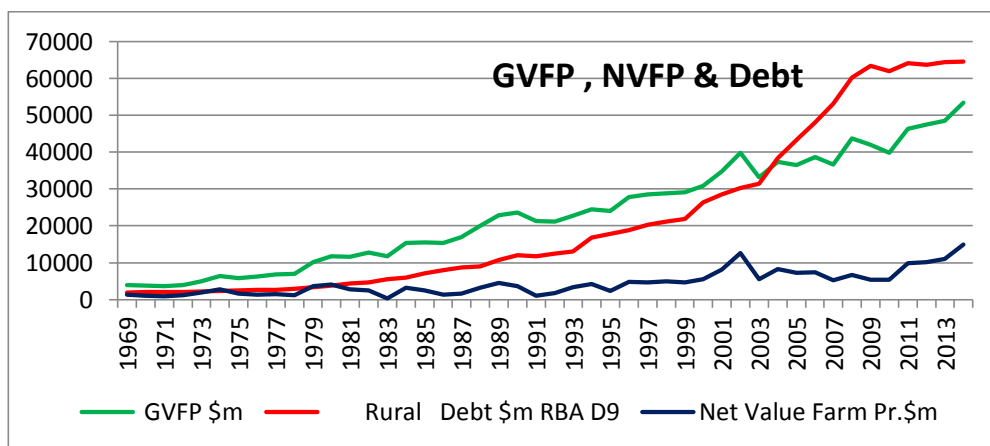
Restructuring of rural Australia has impacted upon rural employment<sup>xv</sup>. In 1972, there were 447,000 employed across all facets of rural production. By 2014, total rural employment had fallen to 312,400 persons whilst the national labour force increased from 5 540 000 persons in 1972 to 11 482 000 in 2014 or 107%. The 30% contraction in rural employment has had negative impacts upon the fabric and structure of rural communities.

The consequence of declining rural employment has forced young people to move from rural communities to urban areas for either education or employment. Once they leave their place of birth, they seldom return. Whilst the exodus of rural young has negative impacts upon regional social fabric, the exodus of rural youth does not help employment prospects for urban youth.

The 15 to 24 year age group across Australia currently has the second highest underutilization rate since recoded data began in 1978. In May, the seasonally adjusted rate was 30.5%. This age group underutilization rate peaked in November 2014 at 31.6% seasonally adjusted. These are the worst labour market performance figures since 1978. The worst of the Hawke unemployment years, seasonally adjusted, peak for this age group was 30.4% in August- November 1992. Urban communities do not need rural young people compounding the employment problem for urban youth.

### 5 Real World Policy Failure

Chart 1



Compiled from: ABAREs commodity statistics Table 13, 2014

RBA online; Table D9, Rural Debt



Chart 1 provides an empirical picture of rural Australia. The relationship between the debt curve and net value of farm production is empirical evidence that post 1981 rural policy was being financed by unsustainable debt/ equity lending. Despite the 1994 Inquiry and the GFC, political rhetorical belief in rural adjustment policy has never wavered.

The Debt and Gross Value Farm Production (GVFP) trace out the story of policy failure. In 1972 when structural reform began, debt to GVFP percentage was 52.7%. In 1994 when a debt crisis triggered the Senate Inquiry, the percentage was 68.9%. In 2000, the percentage was rising; but, at 75.8% remained half the value that would peak in 2010 at 155.7%.

It is inconceivable that no major political party would realize that policy direction needed to change. Instead politicians point to the flattened curve beyond 2009 as evidence that debt is falling as a percentage of GVFP so all is well. The implicit sad fact is that the flattening curve suggests no new lending is occurring in rural industries. The more likely scenario is that any new lending is being offset by bank foreclosures and insolvencies in the real world of agriculture.

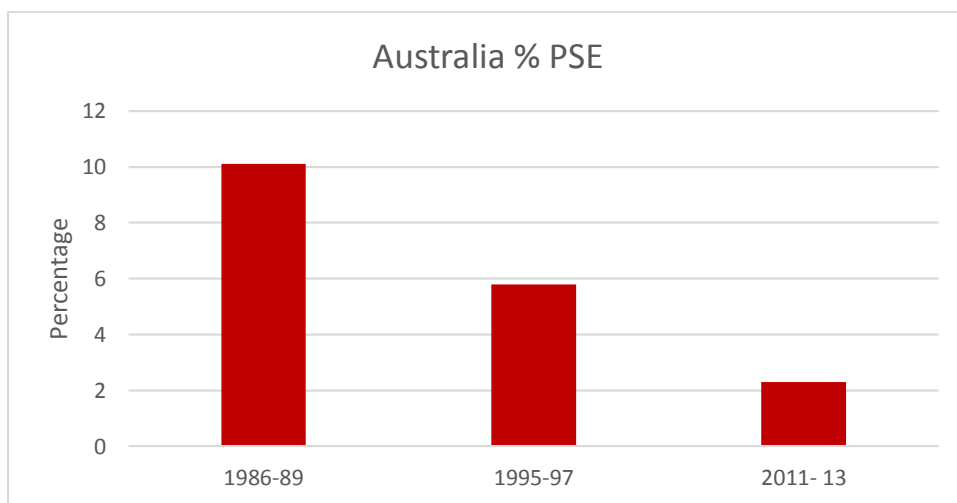
#### *6 Redistribution Farm Production*

The divergence between gross value of production and net value of production is cost of farm inputs. Costs of farm inputs represents the redistribution of economies of scale dividends from the farm sector to the wider community. The heavy redistribution of farm production to the wider economy is explained by market power unevenly distributed between farmers, input suppliers, and buyers of farm production. Whilst the farm sector is considered to operate in a purely competitive market, both input and output markets are strongly monopolized market structures.

The different shapes of the GVFP and NVFP curves in Chart 1 demonstrates the fallaciousness of the inference that productivity and profitability are interchangeable terms. If they were, the shape or gradient of the curves would be similar. They are not. This theoretical divergence between theory and reality underwrites the failure of political parties and commodity groups to understand why economies of scale was always going to fail. Fifty years of failure should be enough. It is time to reconsider policy direction, structure and strategy.

Structural reforms to rural Australia post 1983 removed the countervailing force of orderly marketing on the basis of supply side impediments. Conversely, input and output market participants were encouraged to increase concentration of ownership and control. This cannot be explained in terms other than pure bastardization of economics in the name of market theory

Chart 2



Compiled from: OECD Agricultural Policy Monitoring and Evaluation 2014, p. 77

Chart 2 illustrates policy redistribution of farm income to the wider economy. Percentage producer support estimate (%PSE) measures the farm gate value of all industry support contributions to agriculture. Between 1986 -89 all support measures contributed 10.1% to farm gate incomes. By 2011-13, policy had reduced % PSE to 2.3 %. In 2013, despite evident dislocation in the farm sector, provisional % PSE is 1.9%.

Over the 1990's Australian policy began moving from active support programs to a direction encouraging risk management and preparedness in agricultural businesses. From 2014, drought policy moved to risk management support. Risk management underlying drought policy is

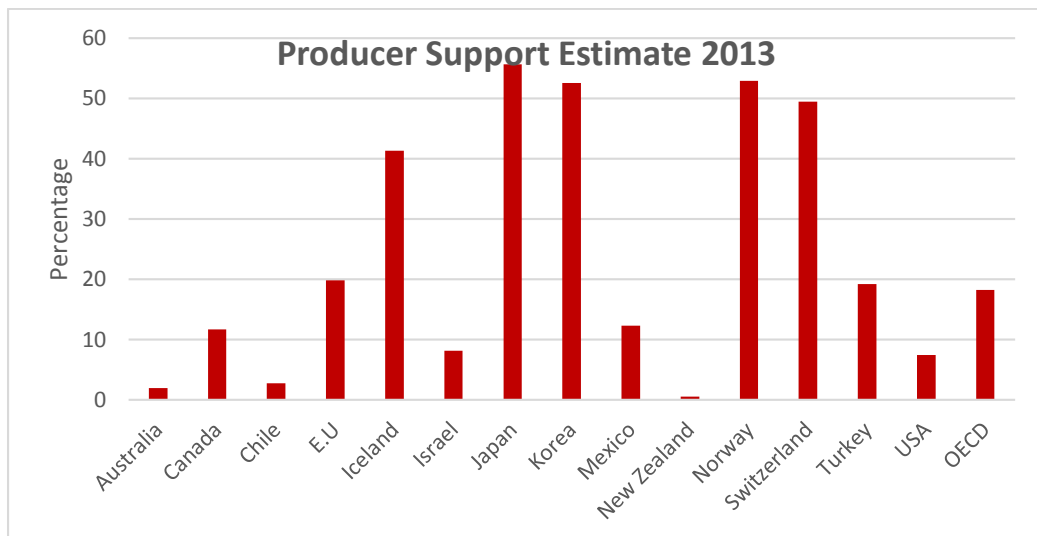
theoretically questionable. Risk theory assumes states of nature or possible outcomes are known and can be allocated probabilities. Uncertainty assumes states of nature are not known so probabilities become calculated guesses. Drought policy would better approximate uncertainty than risk.

The change in policy direction from redistribution of income through intervention to a risk management and preparedness approach must fail. Engel’s Law is the driver of agricultural demand in a modern growing economy. No quasi intellectual approach based upon probability theory can overcome the inherent policy conflict between an 1803 theory of supply and demand and an empirical law of demand argued to be relevant in 2011 research.

Solutions lie in economic philosophy. Internationally, post Bretton Woods economic philosophy moved from the economics of Keynes to “*more reliance on monetarism and the neoclassical economics of markets*”<sup>xvi</sup>. This change in philosophy has not served Australian agriculture at all well. Ultimately, the question of underlying suitability of economic philosophy for agriculture in modern advanced economies must be addressed both internationally and domestically.

*7 International Policy.*

Chart 3

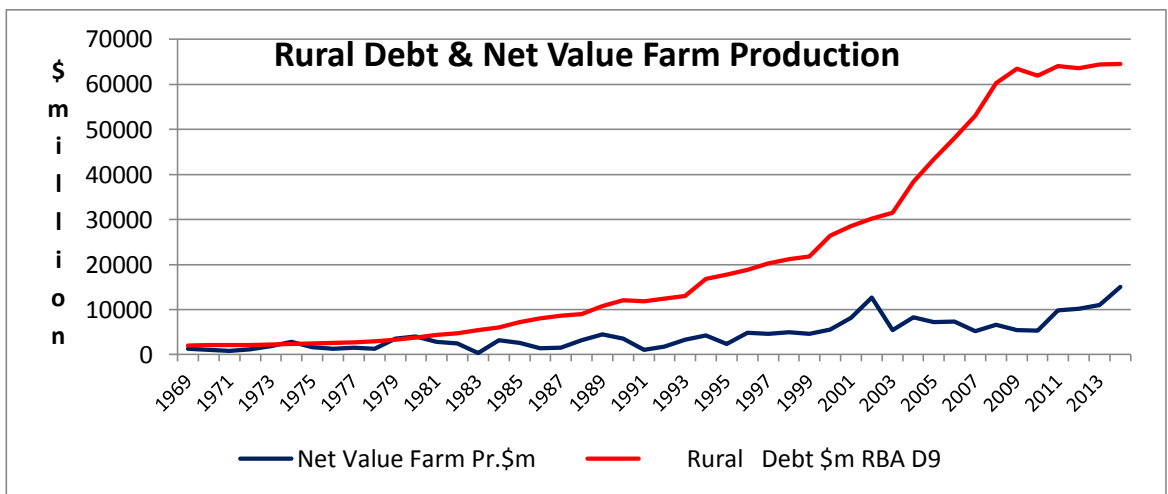


Compiled from: OECD Agricultural Policy Monitoring and Evaluation 2014, p. 77

Chart 3 illustrates graphically the farm gate level income support for agricultural producers across all OECD member countries. Australia at

1.9% is second lowest above New Zealand at 0.5%. Compare this with Japan 55.6%; Korea 52.5%; Switzerland at 49.4%; and the OECD average of 18.2% and any belief in competitive agricultural markets by politicians and commodity groups becomes somewhat ludicrous.

Chart 4



Compiled from: ABAREs commodity statistics Table 13, 2014

Australia’s unshakeable commitment to neoclassical free market theory and belief in trade is severely challenged by Chart 4. Consider the number of FTA’s signed by Australia since 1983.

Table 1<sup>xvii</sup>

Australia Free Trade Agreements

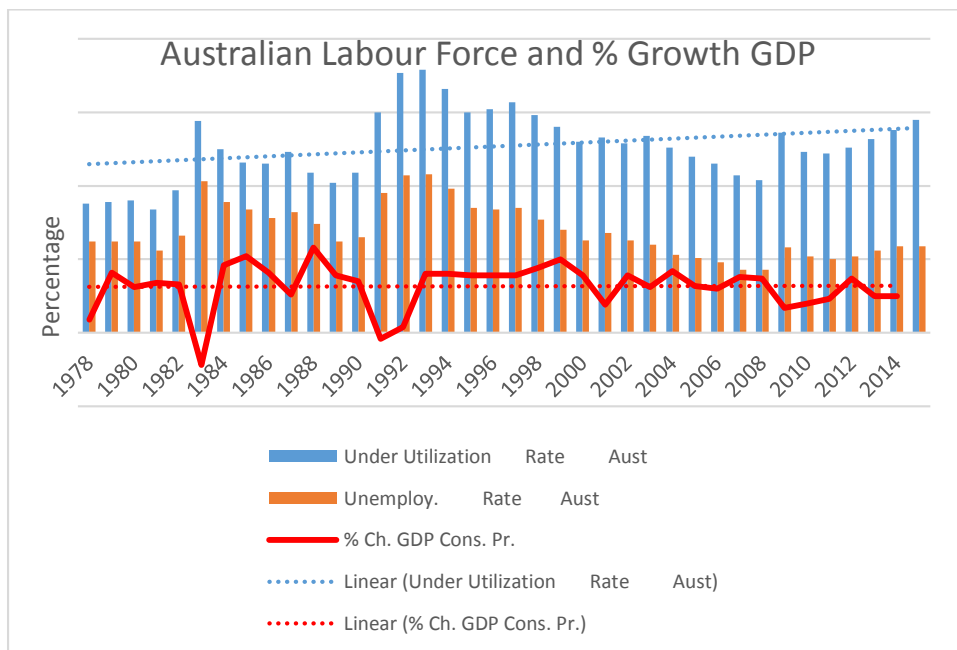
New Zealand	1983
Singapore	2003
Thailand	2005
USA	2005

Chile	2009
AANZFTA	2010
Malaysia	2013
Korea	2013
Japan	2014

Other FTA's under negotiations are with China, India, Indonesia and the TPP. An empirical analysis of Chart 4 would suggest that FTA's have had little real impact upon farm profitability.

A similar story of policy failure extends across urban Australia

Chart 5



Compiled from ABS Labour Force Table 6020, XCEL files, May 2015

GDP from ABARES commodity statistics 2014 Table 6, p.6

Note: GDP for 2014-15 not available at time of writing.

From Chart 4, the wider economy has not benefitted from neoclassical market economics and subsequent FTA's. The underutilization rate of the labour force is currently above the upwards sloping trend line. The fact that the trend line is upward sloping confirms long term policy failure for the Australian work force; and, for the wider community, increasing mal-distribution of income and falling living standards.

The GDP figure has a downward sloping trend post 1978. This indicates that the underlying problem in employment is inadequate economic growth suggesting a contracting or inadequate underlying production base. The under-utilization rate of the labour force would indicate a growing revenue problem for public finance in Australia as both company tax and P.A.Y.E. revenue would be below potential.

There needs to be a rethink of Australia's post Bretton Wood's commitment to neoclassical economics more popularly recognized as supply side economics, or economic rationalism. Chart 4 suggests that agricultural policy is not the only policy area that needs philosophical reform

#### *8 Debt Conference 2012.*

In 2012, the member for Kennedy Hon. Bob Katter, responding to a rural debt crisis evident in his electorate, obtained a commitment from the then Federal Treasurer, Wayne Swan, to hold a rural debt conference. This Conference was held in Brisbane CBD on October 17<sup>th</sup> 2012. The meeting was a closed Conference for invited participants. Some eighteen participants were drawn from all mainland states. Attendees comprised a range of talents from economists, practicing rural accountants, university academics, farm groups, and ordinary farmers representing their industries and regions. The Federal Minister of Agriculture was also in attendance. The discussion concentrated on the debt crisis and its impacts upon rural and regional Australia.

The following day, an open meeting was hosted by QUT Business Department. Any interested person was welcome to attend. This meeting moved two resolutions that were accepted for further action. The first resolution moved by northern cattle industry people argued for debt trading to be introduced in Australia. The second resolution accepted was that a reconstruction and development finance facility be investigated.

A Committee was elected to pursue these two resolutions. The Committee was named the Rural Debt Round Table Committee. As all good committees do, the number of members grew. The original skills base of the Committee expanded to include additional rural professional people which included chartered accountants, veterinary surgeons, rural business people, rural journalists, and rural producers. It was an

impressive group of people from all aspects of rural Australia concerned over the impact of the post GFC debt crisis.

### *9 Regional Rural Concern Expressed.*

Subsequent to the Brisbane Conference, in April 2013, a farmer meeting at Merredin WA attracted 1000 plus farmers concerned over the financial crisis. In April 2013, over 200 Victorian dairy farmers attended a crisis meeting at Colac concerned with \$1 milk and drought. Federal politicians attended both meetings

In May 2013, around 500 northern cattle producers and the Minister for Agriculture and Minister for Primary Industries attended a crisis meeting at Richmond Queensland concerned with closure of live cattle exports.

In March 2014, 450 NSW and Queensland farmers along with the Minister for Agriculture gathered at St. George Queensland for a rural crisis meeting. In December 2014, over 350 northern cattlemen attended a crisis meeting at Winton. The Winton meeting was attended by the Minister for Agriculture and broadcaster Allan Jones.

Despite these crisis meeting across the nation, Commonwealth politicians of all political parties continue to deny there is a financial problem in rural Australia that has at its centre the GFC and subsequent collapse of land values. The political spin unwaveringly claims rural dislocation is confined to drought districts in Queensland and northern NSW. Additional and improved drought aid is their public offering. Drought aid is not helping those crippled by debt as those in desperate need are excluded by a long term viability clause. Consequently “drought aid” becomes public posturing for urban voter benefit.

### *10 Conference Resolutions*

Debt trading did not survive except within the original group of northern cattlemen. Benefits from tax trading appeared to be overly optimistically assumed by the proponents of the proposal. A number of difficulties were involved. As there is no provision in the Taxation Act for such a program; legislative change was required. Banks already have tax advantages for write down of doubtful debt so enhancement of this provision would be untenable in to sectors of the community. Overseas, tax trading experience provided mixed messages. The proposal failed from lack of wider support

Reconstruction and development finance did continue and was developed by Group member and QUT lecturer, Dr. McGovern. The proposal was to establish a Reconstruction and Development Board within the Reserve Bank system. The role of the new Board would be to oversee reconstruction and development finance in Australia. Rural debt would then be restructured under the supervision of the RBA.

Legislation was developed and introduced into the Australian Senate by independent senators Nick Xenophon and John Madigan after the 2013 election. The proposed Legislation was referred to The Senate Economics and Legislative Committee; but, ran into headwinds of political ideology and the true believers in market economics.

A Senate Inquiry was finally convened in March 2015. This cannot be describe as anything but a farce. The Inquiry was held on the Wednesday and the Report published on Friday of the same week. Three representatives of the Rural Debt Round Table were invited to argue the case for the Legislation. Opposing the Legislation were invitees from the RBA, Australian Treasury, Department of Agriculture and ABARES, and Australian Bankers Association. The list of participants tells the story. The political objective could be none other than kill off the Reconstruction and Development Board

### *11 Political Will Required*

Pre Bretton Woods collapse, 1971, Australian political parties were prepared to intervene to an extent necessary to ensure economic stability, economic growth, full employment and rising living standards. Agriculture benefitted from orderly marketing that ensured a necessary redistribution of income back to the sector. The political will to intervene in distribution of income post 1972 has been lost.

In his *General Theory of Employment Interest and Money*, Keynes had this to say about income and wealth distribution:

*“The outstanding faults of the economic society in which we live are its failure to provide full employment and its arbitrary and inequitable distribution of wealth and incomes”*

*General Theory, p. 372*



A steadily increasing level of real incomes for wage earners depends upon<sup>xviii</sup>:

1 Increased productivity in which the fruits of increased efficiency is distributed through increased money wages, lower prices, or both

2 Maintenance of full employment to ensure potential income is not lost through involuntary idleness of workers with subsequent loss of production

3 Adequate redistribution of income through progressive taxation and provision of welfare services.

For producers of agriculture, rising real wages in the wider economy is important for growth in domestic demand for agricultural output.

Post Bretton Woods neoclassical theory appears to focus upon only one facet of rising real wages. That facet is to generate ever lower consumer prices. This policy approach requires ever decreasing real cost of production. With rising input costs determined beyond the farm sector, this narrow policy objective becomes increasingly difficult to achieve. The political attitude then argues that if ever lower real prices cannot be achieved domestically, then the solution lies in imports from cheap labour countries.

The cheapest available product policy inevitably erodes farmer profitability, farmer numbers, and rural employment with consequent negative impacts upon rural communities and the wider social fabric. Flow on or multiplier effects can be expected which will contract the underlying depth and breadth of the national production base. The end result is falling investment expenditure, lower taxation revenue; and conversely, increasing welfare expenditure which generate public sector finance problems for governments at all levels.

Political will must change for policy to become more realistic. The only effective way for farmers to influence the political will is to value their votes in every election be it Federal, State or Local Government. Producers also must reclaim control of producer groups that refuse to recognize the nature of forces driving long term decline in farm profitability. The rural debt experience is an example of unresponsive representation at producer level.

## 12 *Where to now.*

State governments must now provide reconstruction and development finance to rebuild their industrial bases. That includes rural industries. Debt restructure will not of itself bring stability and return rising living standards to rural Australia. There has to be acceptance of a need to redistribute income and wealth to rural communities. That will require a reverse of contemporary policy which seeks increased concentration of wealth and income through debt to equity funded farm amalgamations.

Commodity groups must be reformed. Reform of rural leadership must be considered an essential prerequisite for rural revitalization. These groups were identified in the 1970's as being concerned with survival of commodities not farmers and farm communities. Five decades of rural adjustment should be enough time to come to terms with failure of this policy direction.

Appendix A shows empirically that concern with industry survival has been misguided. Depopulation of large areas of regional Queensland cannot be explained other than failure of industry leaders to concern themselves with prosperity of farmers involved in agricultural production. Supporting rural communities would also benefit from a change in policy direction to concentrate on farmer profitability and prosperity.

Pre 1983, the Australian production cake was divided by the Tariff Board, Conciliation and Arbitration Commission, State industrial Tribunals; orderly marketing of agricultural production and progressive taxation. In our contemporary political environment, the cake is divided by market forces that favour the politically and economically powerful supported by an increasingly less progressive taxation system.

Income redistribution to rural sectors in OECD countries is moving away from price distorting instruments. Payments are increasingly focused upon fixed areas, fixed livestock numbers, and farm income or receipts, which do not directly affect current production decisions. Whether this movement in farmer support proves successful is yet to be proven. Indeed, considerable farmer unrest in Europe is already underway.

Policy direction should consider the following:

1 Environmental payments for stewardship of the land is standard policy overseas. Australia considers that the land holder is solely responsible. That view needs to change and accept international practices.

2 Whilst the beef road project is welcome, North Queensland agricultural production would benefit greatly from the construction of international air freight facilities that can freight fresh product directly into major markets both domestic and international.

3 Meat processors are not strategically distributed amongst Queensland cattle districts. Four are scattered along the Queensland coast from Townsville to Maryborough/Gympie. Seven more are concentrated in the south east corner. It would make economic and competitive sense to build public meat processing plants in strategic regional centres that have adequate water and transport facilities.

This would have a twofold effect. Greater competition would be infused into the market for animal protein whilst reducing producer transport costs of production.

4 Ethanol can be produced from many plant and fibre sources. Ethanol producing plant industries could be easily encouraged in agricultural regions. Sugar cane and sorghum should not be allowed to become the sole producers of the fuels of the future.

An industry policy needs to be developed that thinks beyond the “smart state” industry model. Technologically advanced industries by definition employ small numbers of skilled workers. There are large numbers of workers without those skills that require employment. Industries that can provide employment for all those wanting either full employment or increased employment need to be included in any industry policy.

Whilst underutilization of the labour force damages the social fabric, it also impacts negatively upon demand for agricultural production and regional employment. Distribution of strategic specialist manufacturing capable of providing employment at decent wages in rural towns should be included in any industry policy.

Public sector service industries should be strategically dispersed across the State. That would bring population and industry back to regional

areas, build stable work forces, raise living standards; and, culturally diversify rural communities. The Queensland economy would benefit.

Once the distribution of income problem is addressed, reconstruction of debt could embrace some forfeiture of indebted land. Forfeited land could be made available to young and new farmers wishing to enter agriculture.

Overseas research is saying that smaller farms are more productive than mega farms designed primarily for export markets<sup>xix</sup>. This research also implies that if nations want to be self-sufficient, then productive smaller farms provide an answer. Smaller rural properties made viable will build enterprise, employment, and growth in a fast disappearing rural landscape.

It is time for moral question in economics to be revisited:

*“The moral problem is concerned with conflict between individual interest and the interest of society”*

Joan Robinson<sup>xx</sup>

The moral question must embrace this uncomfortable question:

“Should a wealthy modern economy favourably endowed with land provide food clothing and shelter for its residents; or, should it import the cheapest available product from underdeveloped low cost labour countries that could better employ those resources in developing their domestic economies?”

The answer to this question has wide ramifications for agriculture in advanced modern economies confronting the reality of Engel’s Law

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## Appendix A

### Rural Queensland : A Graphical Snapshot

*“In order that the monetary and pricing system should work with equity it is necessary to achieve a fair distribution of income and property”*

Professor Meade.<sup>xx</sup>

From a total of seventy eight local government districts, Appendix A selects a sample of thirty one for analysis. This is a biased sample as western Queensland local government pastoral districts dominate. Local government district Brisbane (City) and Queensland are included purely as reference data. A small number of regional cities is also included.

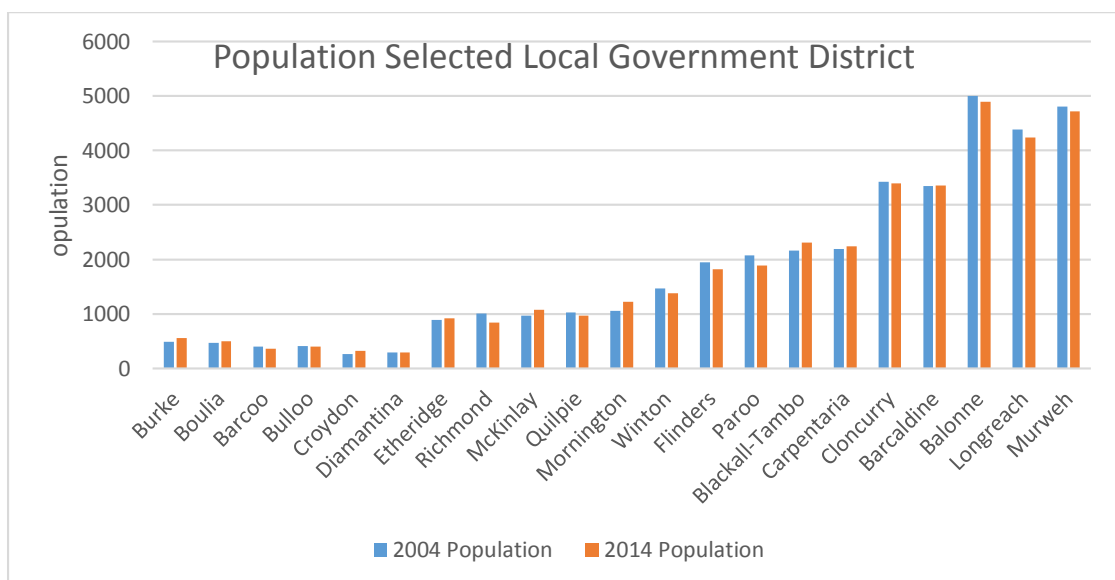
Employment and income charts are derived from Queensland Treasury’s Regional Profile data based upon local government districts. Population data is based upon Treasury’s regional Profile LGD information; and, *Estimated resident population by local government area (LGA), Queensland, 2004 to 2014p*.

Income data is based upon 2011 Census. Whilst the current drought has impacted eighty percent of the State, it does not influence income and employment data in this analysis. Changes to income since 2011 in pastoral dependent local government districts would be expected to have deteriorated. How badly incomes have deteriorated will not be known until the next Census.

Nonetheless, the graphs provide an empirical indicator analysis of economic performance across population, employment, income and income distribution.

## 1 Population

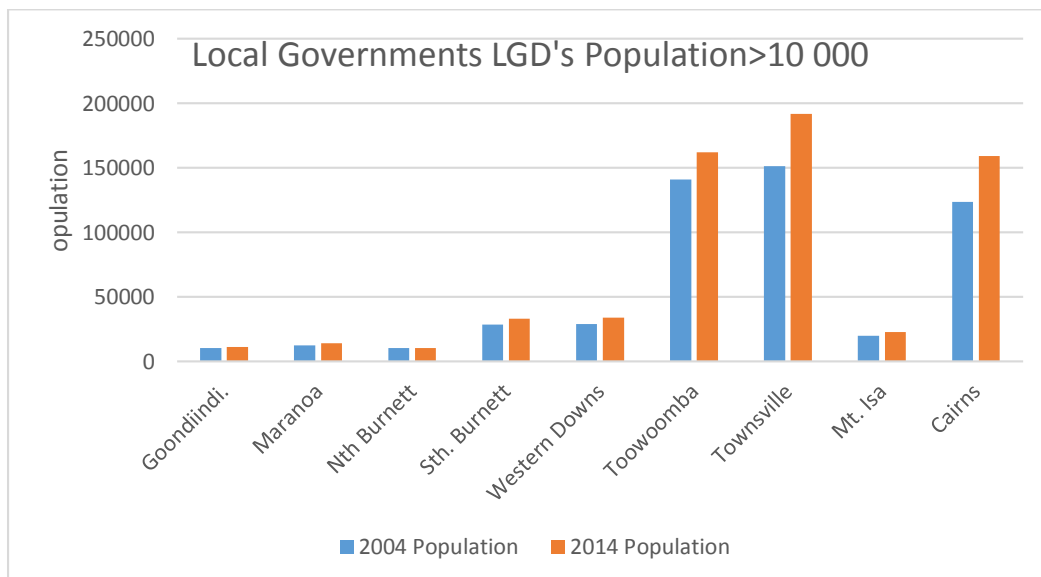
Chart 6



- Chart 6 is focused upon LGD's with populations below 5000 residents
- A small cluster comprise 2000 to 5000 residents.
- Only a small group range between 3000 residents and 5000 residents.

- Six LGD's have resident populations ranging between five hundred and one thousand five hundred residents.
- Half LGD's selected have populations below 1000 residents.
- There are five remote Local government districts with a population base below five hundred residents. Two which have fewer than three hundred residents. From a population perspective, these five LGD's are extremely fragile.
- The stability of the underlying production bases in these regional districts becomes very important to the fabric of these communities.
- These remote LGD's would be expected to have higher transport costs impacting upon both production costs and cost of living. Employment opportunities would be limited. Young people would tend to move from these small communities to larger ones that offer more opportunities.

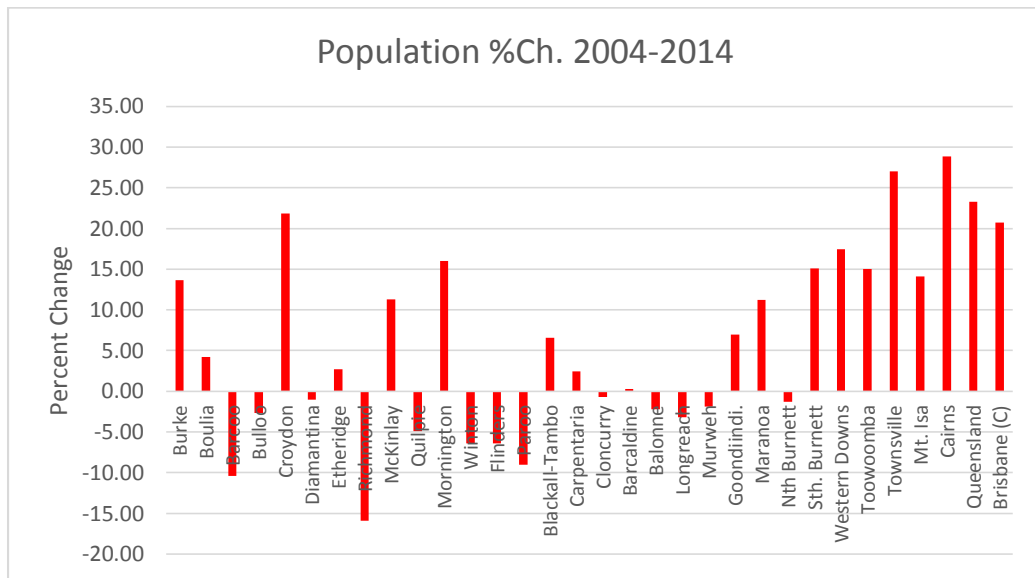
Chart 7



- These local government districts have populations above ten thousand residents.
- Three regional urban LGD's are dominated by the two coastal cities and Toowoomba in SE Queensland
- They range across pastoral, mining, and agriculture

## 2 Population Change

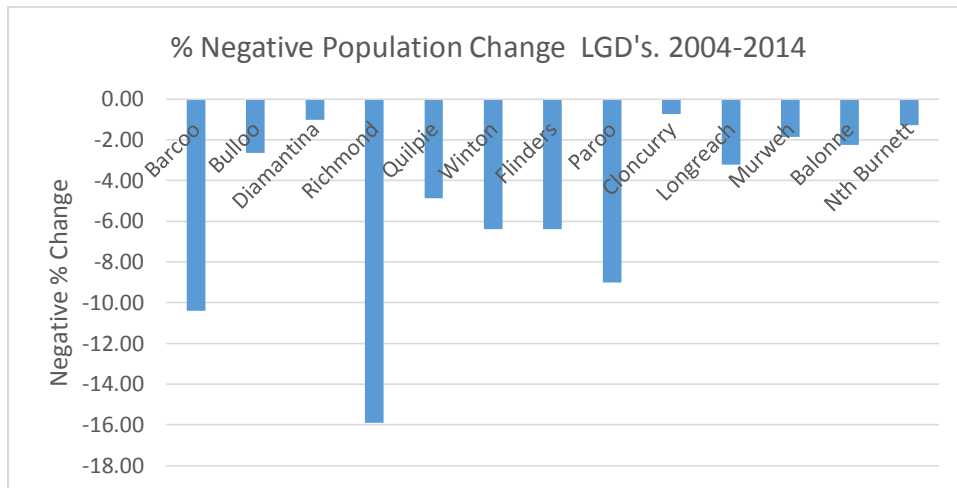
Chart 8



- This chart shows population change between 2004 and 2014 among the sample LGD's
- Two north Queensland regional city LGD's have population growth rates in excess of Queensland.
- Highest population growth rate is the LGD of Cairns
- Second highest regional population growth rate is in LGD of Townsville.
- Croydon, has the third highest growth rate in the State.
- Brisbane (City) population growth is below the State growth rate
- A number of regional LGD's show negative population growth rates

Chart 9





Of the thirty one selected LGD's, twelve have experienced negative population growth over the decade 2004-2014. Data is unavailable to determine which industry or industries contributed to population loss. That research needs to be done.

- At 15.9%, Richmond has the highest population loss among the selected LGD's
- Next highest population contraction is Barcoo -10.4%
- Paroo is third worst population performance -9.01%
- Winton lost -6.38 % Flinders lost -3.7%
- Longreach is a pastoral LGD with a large business centre serving central western Queensland. It boasts a flying doctors service; but, lost -3.22% of residents.
- Murweh LGD contains Charleville which again is a major business centre in South West Queensland and boasts a long association with health services to western Queensland
- Five of these LGD's have populations below five hundred people
- Diamantina with the most fragile population base of under three hundred residents lost -1.02%
- This selection of LDG's comprises 41.9% of the sample group. Excluding North Burnett, the remainder describes a semi- circle of Queensland pastoral industry reaching from Flinders in the northern cattle country, through Diamantina in the SW, across to Paroo and Balonne on the NSW border
- The more sobering statistic is that all these regional local government districts form a cluster linked by adjoining boundaries: Flinders, through Richmond, Cloncurry, Winton, Longreach, and Diamantina down to

Barcoo, Quilpie, Murweh, Bulloo and Paroo, Balonne. They comprise :  
“western Queensland”

- All these regional districts have experienced population contraction for over a decade. That in itself is confirmation that agricultural policy has failed. Political and rural representation cannot escape responsibility for this failure.

### 3 Importance of Income

*“There are valuable human activities which require the motive of money making and the environment of wealth ownership for their full fruition”*

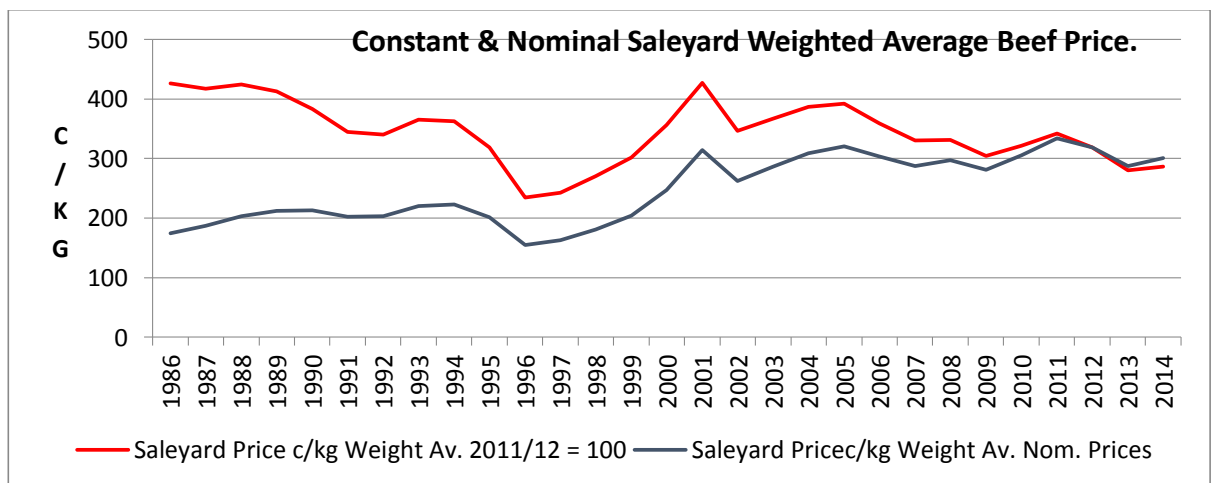
*J.M. Keynes*

*General Theory ,p.374*

Income is an important factor in regional stability. It drives investment, employment and builds social fabric. LGD’s under analysis are predominantly dependent upon agricultural and pastoral industries. Such mono-cultures become subject to commodity price movements for profitability and growth. As the cattle industry dominates this regional analysis, cattle price movements are graphed

Chart 10 traces out both nominal and real change in the weighted average saleyard price for cattle between 1986 and 2014. All LGD’s previously identified as losing population are cattle producing regions.

Chart 10



Compiled from ABARES commodity statistics 2014, Table 128 Australian Saleyard prices of livestock.

In constant 2011-12 prices, between 1986 and 2014, the real purchasing power of this weighted average saleyard price has fallen 29.4%. Population decline has been identified in this analysis as occurring between 2005 and 2009. Between 2005-2009, the weighted average constant saleyard price fell 22.5%.

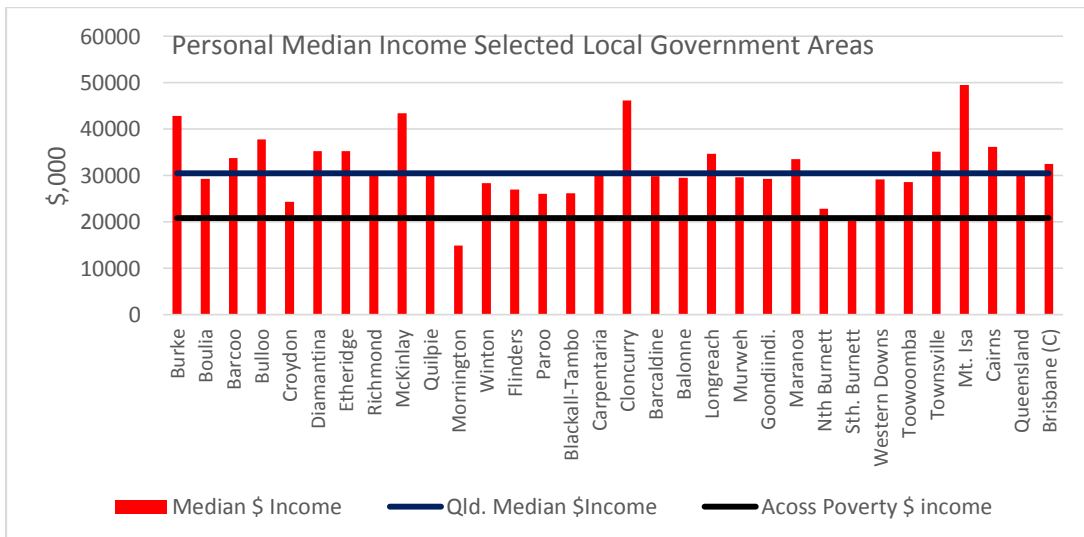
In other words, the purchasing power of cattle producers across pastoral Australia experienced a contraction in real income of 22.5%. Prices recovered from 2009 to 2011; but, then fell again 14% by 2013. Between 2005 and 2013, the purchasing power of the weighted average cattle price fell 26.8%. Over the longer term, between 1986 and 2013, the real or purchasing power of the weighted average saleyard price fell 29.4%. It is not surprising the LGD's with strong pastoral dependence lost population.

In nominal terms contraction in pastoral incomes fell by 12.2% between 2005 and 2009. In nominal terms prices recovered; but, in 2014 still remained 6.1% below the 2005 price. This fall in saleyard prices for cattle would flow through to all incomes. Regional communities would suffer along with producers. It is the long term purchasing power of cattle prices though that drive farm profitability and regional stability.

#### 4 Median Income

This section examines median income distribution across the selected regions. Firstly, personal median income is examined. Secondly, income by percentage distribution is analysed against Queensland and the ACOSS poverty line of 2011. ACOSS poverty line is from 2011 which is consistent with 2011 Census data

Chart 11

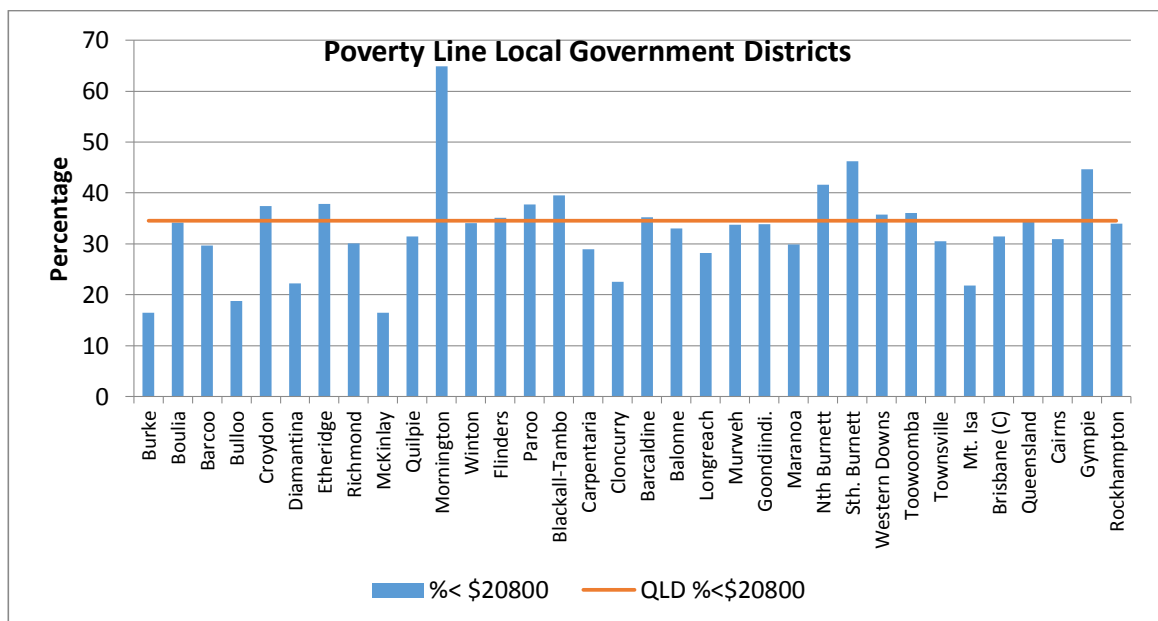


Median income is the level of income above which half the resident population lie whilst the other half lie below the median income. In simple words, median income divides the resident population in half i.e. above and below the median income.

- 41.9% of districts have median incomes above the Queensland average
- 58.1% have personal median incomes below the Queensland State median income.
- Two LGD's Mornington and South Burnett have median incomes below the ACOSS Poverty Income. In South Burnett, in 2014, 16,500 residents had personal incomes below the ACOSS poverty line.
- Both Western Downs and Toowoomba have median incomes below the State median income. When South Burnett is added to these two districts, they form the bulk of the Darling Downs agricultural region. Prosperity appears to elude residents in this recognized rich agricultural production region.
- Five LGD's with negative population growth have median incomes above the State average. Three of these LGD's have resident population below five hundred people.

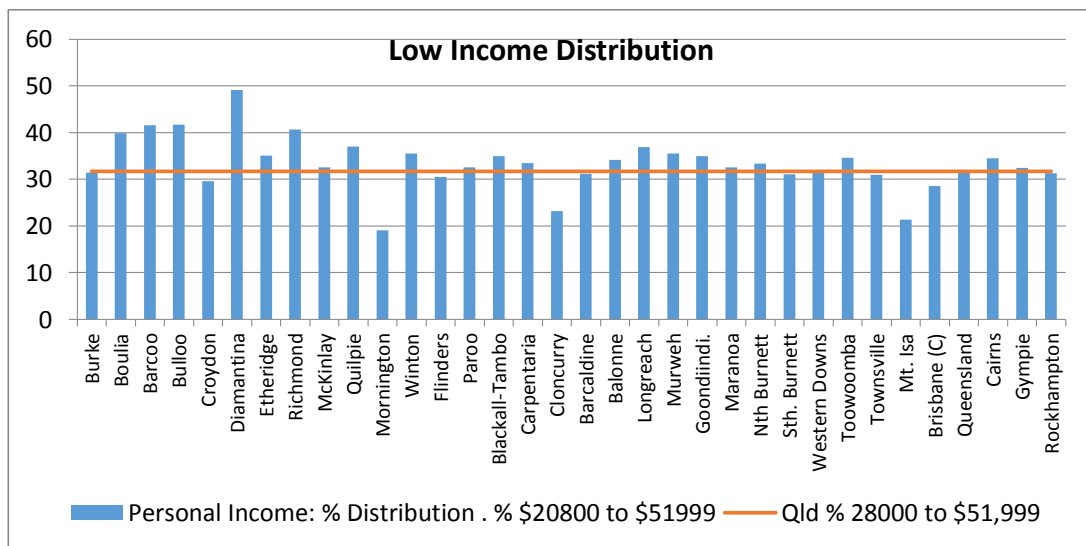
### 5 Percent Income Distribution

Chart 12



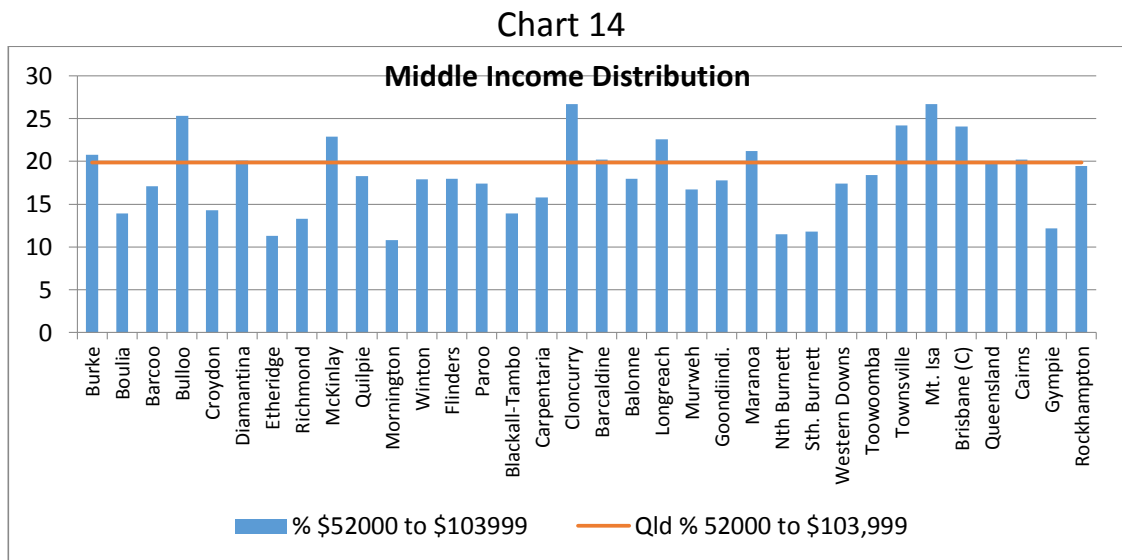
- 45.2% of sample LGD's have poverty line percentages on or above the Queensland average
- Five LGD's with negative population growth and high median incomes have percentage levels below Queensland. In 2014, Barcoo had 362 residents, Diamantina 292, Burke 559
- Mornington has 64.9% of its residents with personal incomes below the poverty line.
- South Burnett, North Burnett and Gympie all have poverty line percentages between 41% and 46%.
- Eight districts or 26% of LGD's have poverty levels well above the Queensland percentage. This suggests poverty is an entrenched policy problem in pastoral Queensland.
- North Burnett, South Burnett, Toowoomba and Western Downs have poverty percentages above the Queensland average

Chart 13



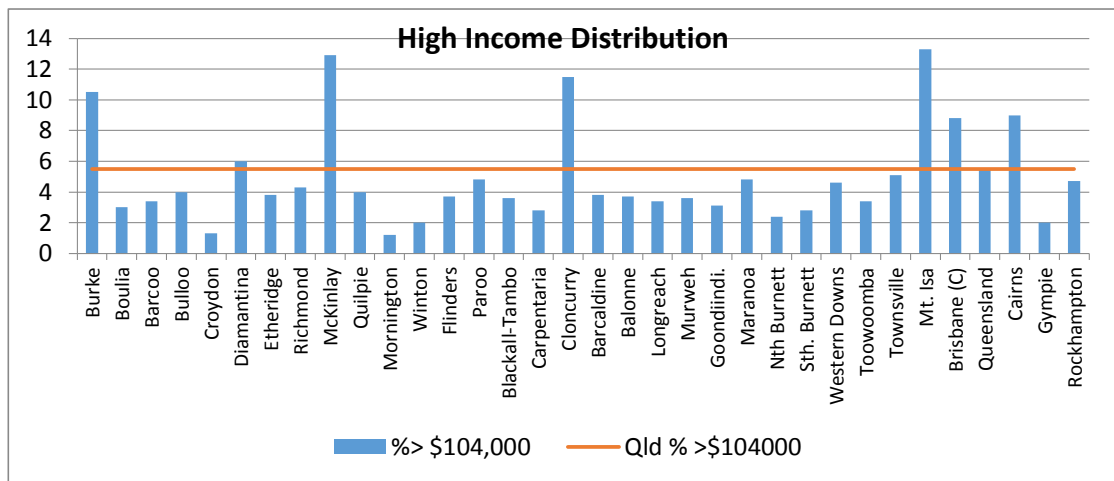
- With 77.4% of the sample group equal to or marginally above the state statistic this low income percentage dominates income distribution amongst selected LGD's
- Only three are substantially below the Queensland average: Mornington, Cloncurry and Mt. Isa
- This dominant low income distribution in regional analysis identifies that Queensland has inequitable distribution of income.

- Social welfare safety nets will not address inequitable income distribution. Inadequate profitability within the underlying industrial base lies front and centre to this policy problem



- Middle income distribution comprise less than a third of selected LGD's with percentages above the Queensland average. Two are regional cities Townsville 24.2% and Mt. Isa 26.7%. The other is Brisbane City 24.1%
- Two remote LGD's join Mt. Isa above the State average: Bulloo 25.3% with Cloncurry and Mt Isa on 26.7%.
- South Burnett, North Burnett, Gympie, and Mornington continue to underperform in Queensland income distribution
- Concentration of low incomes in the cluster of North. Burnett, South Burnett, and Gympie in S.E. Queensland becomes a sad comment on political and agricultural leadership in these regions

Chart 15



- This high income distribution has only six LGD's with percentage distribution substantially above the Queensland average.
- Three high income districts are cities: Brisbane, Cairns and Mt. Isa.
- In this income percentage distribution, four regional LGD's lead Queensland: Mt. Isa, McKinlay, Cloncurry, and Burke
- Mt Isa, 13.3%
- McKinlay ,
- Cloncurry, 11.5%
- Burke, 10.5%
- Cairns, 9%
- Brisbane City, 8.8%
- The regional LGD Diamantina is marginally above the Queensland statistic.

Four regional LGD's with such a high income distribution can be explained only by industry structures.

### 6 Employment by Industry

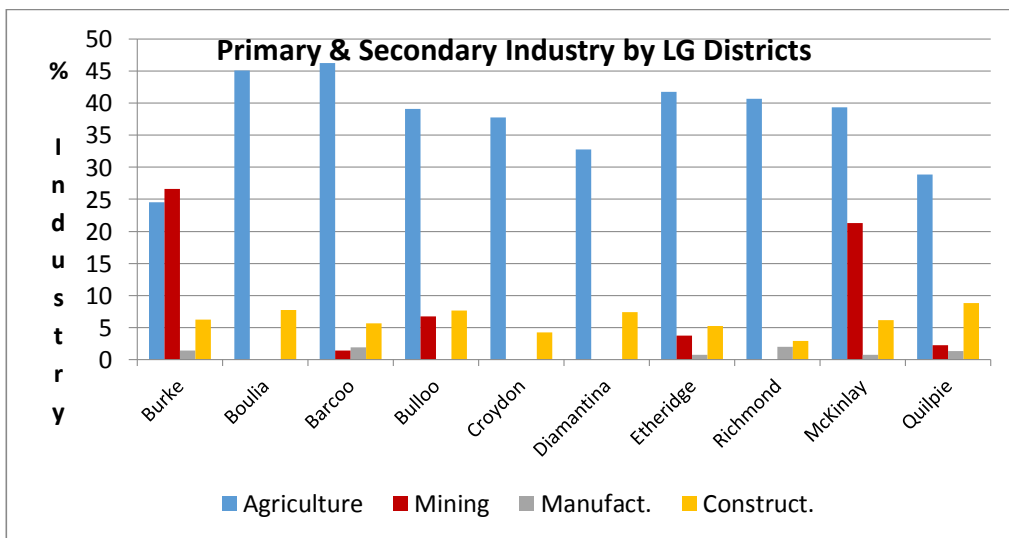
This section examines employment by industry structure in the sample group of LGD's. Of particular interest will be the industry structures in the negative population districts of Barcoo, Bulloo, Diamantina, Richmond, Quilpie, Winton, Flinders, Paroo, Cloncurry, Longreach, Murweh and North Burnet.

A second area of interest will be the four LGD's with high income distribution substantially above the Queensland average: Mt. Isa, Cloncurry, McKinlay, and Burke

A Third area of interest will be the two LGD's with high percentage income below the poverty line: Mornington and South Burnett.

Graphical analysis is one based upon employment levels in industry. Employment in primary and secondary industries are graphed separately. For each LGD, primary and secondary Industries are disaggregated into Chart A, Primary and Secondary Industries; and, Chart B, Service Industries

Chart 16 A



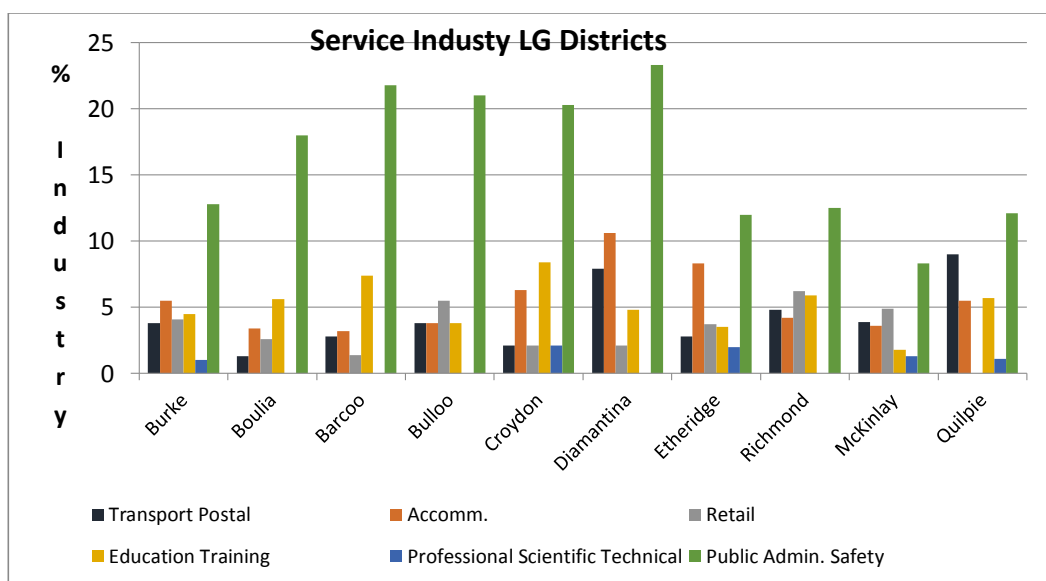
- Burke and McKinlay were two LGD's identified with high income percentages. Whilst Burke has a more balanced industry structure than McKinlay, mining contributes substantially to employment in



both. Resource industry salaries would offer an explanation of high income performances in these two regions.

- Quilpie Barcoo and Bulloo have negative population performances. Their small mining components have not been sufficient to offset negative population growth
- Low poverty percentages in both Burke , and McKinlay should not be a surprise given the industry structures in both districts
- Other LGD's that experienced negative population growth over the period 2004-14 were: Diamantina, Richmond, and Quilpie. All have pastoral dependent economies.

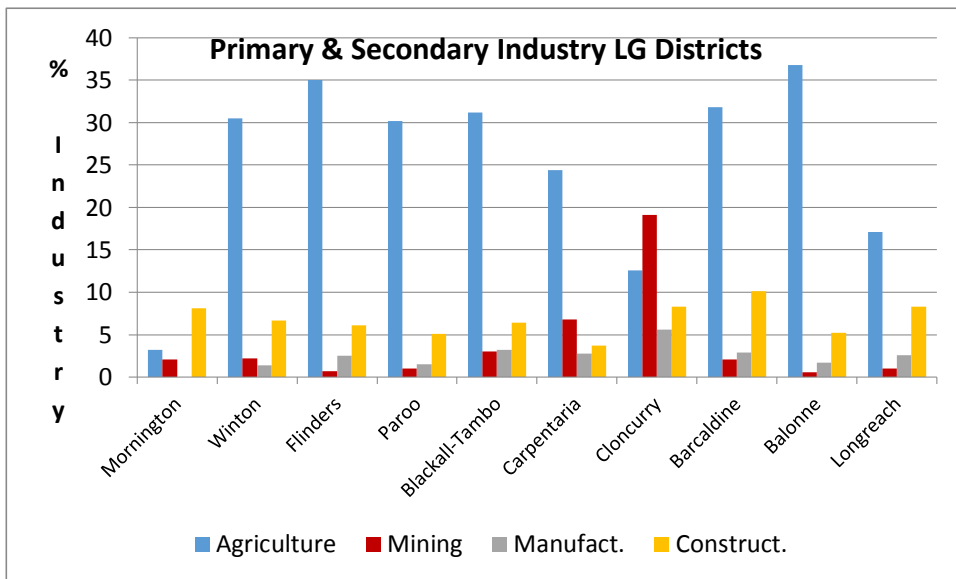
Chart 16 B



- Richmond and Barcoo led LGD population decline with -15.9% and -10.4% respectively between 2004-2014
- Quilpie, Bulloo, and Diamantina also lost population

- A strong public sector contributing above 20% employment has not prevented population decline in Diamantina; Barcoo Bulloo
- At 10.6%, Diamantina has the strongest employment contribution in accommodation and food suggesting tourism could be a factor in industry structure.
- Public Administration and safety dominate service industries in Boulia, Barcoo, Bulloo, Croydon, and Diamantina. Percentage contribution to employment ranges from 18% in Boulia to 23.3 % in Diamantina.
- High public administration employment has not prevented population decline in Barcoo, Bulloo, and Diamantina.
- Diamantina has a High income percentage marginally above the State average. Employment in the pastoral sector is supported by a strong public sector, and tourism. With only 292 resident population base, a few highly salaried public servants would explain the better than average high income percentage.

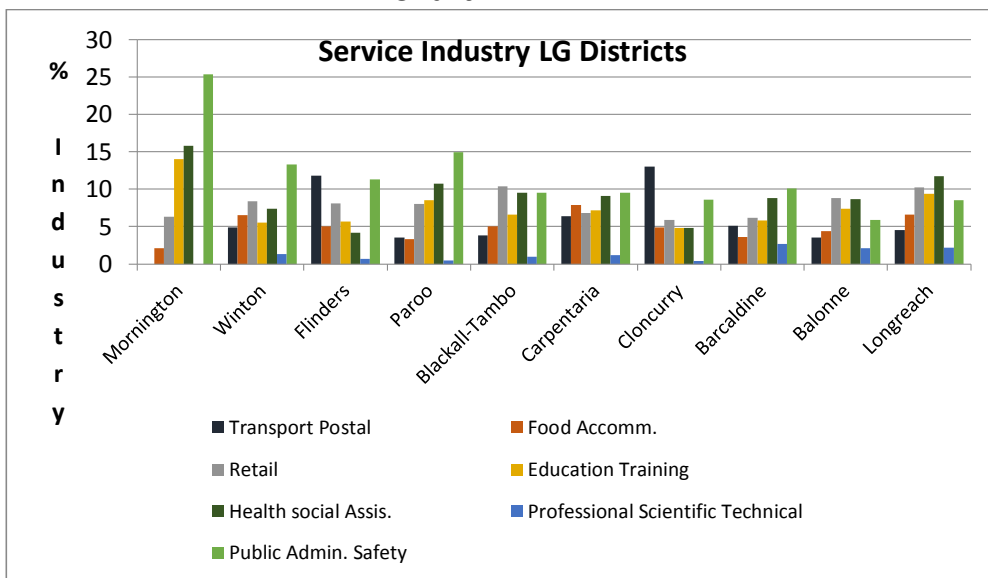
Chart 17 A



- This group captures predominantly northern Queensland pastoral LGD's.

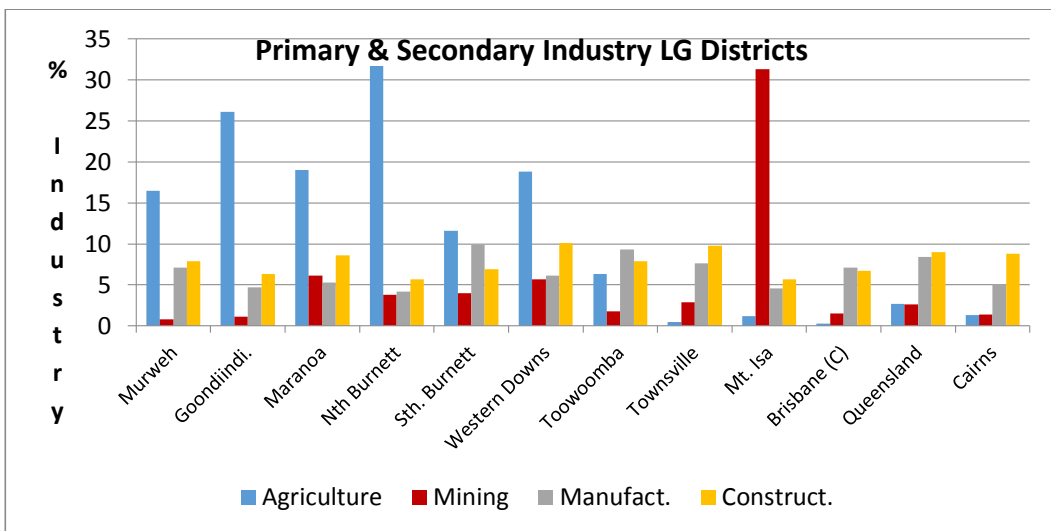
- Negative population growth occurred in: Winton, Flinders, Paroo, Cloncurry, Longreach, and Balonne. Except for Cloncurry, all these LGD's are pastoral industry dependent. The cattle industry would be sensitive to live export markets, falling real saleyard prices, and meat processors situated along the Queensland coastal strip and South east corner of the State.
- Population Growth occurred in Blackall- Tambo, Carpentaria, Barcaldine
- Cloncurry is included in this group. It had a high income percentage of 11.5% above the State average. The dominant industry in the Cloncurry LGD is mining supported by pastoral industries. The mining sector component would explain the high income statistic

Chart 17 B



- Mornington with a median income well below the ACOSS poverty line has a strong public sector: Public Administration 25.3%, Health Social Assistance 15.8%, Education and training 14%. Public sector employment does not by itself ensure a prosperous community.
- Transport employment of 5% and above is evident in a number of northern LGD's: Winton, Flinders, Carpentaria, and Cloncurry.
- Flinders and Cloncurry have above average employment in transport. Mining and transport dominate employment in this LGD which reduces dependence upon employment in the pastoral sector.

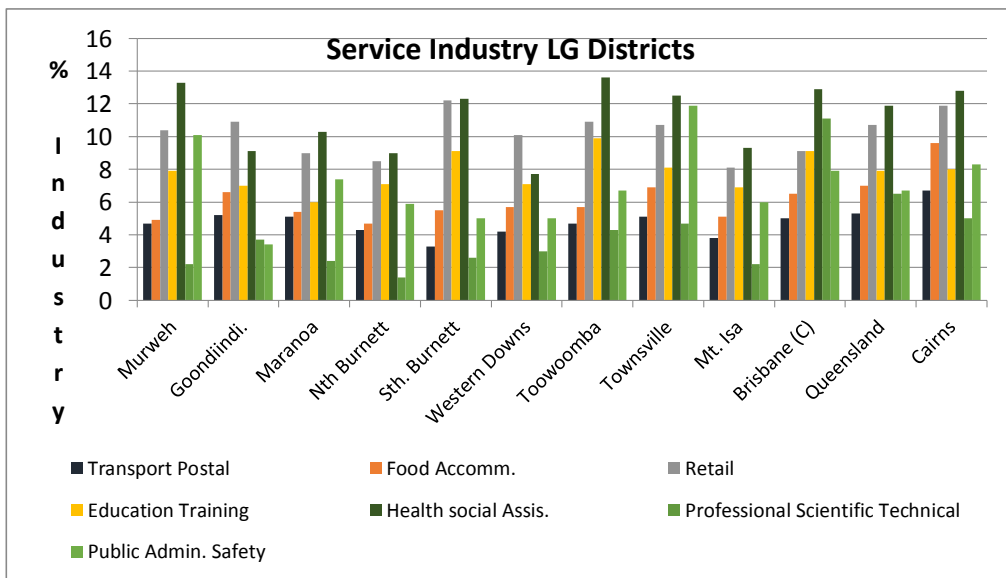
Chart 18 A



Except for Murweh with under 5000 residents, the remainder are large LGD's above 10 000 population bases. The group contains regional cities and Queensland average data.

- Murweh and North Burnett experienced negative population growth between 2004 -2015
- Murweh is centred around Charleville which is the dominant business centre for South west Queensland
- Mt. Isa, Brisbane and Cairns had high income percentages above the Queensland average. Mt. Isa led the sample group in high income distribution. Mining incomes dominate this regional economy.
- Agricultural dominant employment in Murweh, Western Downs, Maranoa, and Goondiwindi. All have below average High Income distributions.
- Murweh has an above average middle income distribution; but, also has an above average low income distribution. Overall, employment is deficient in High Incomes that are needed to rise average income for the LGD.
- Poverty percentages are above average in North Burnett, South Burnett, and western Downs

Chart 18 B

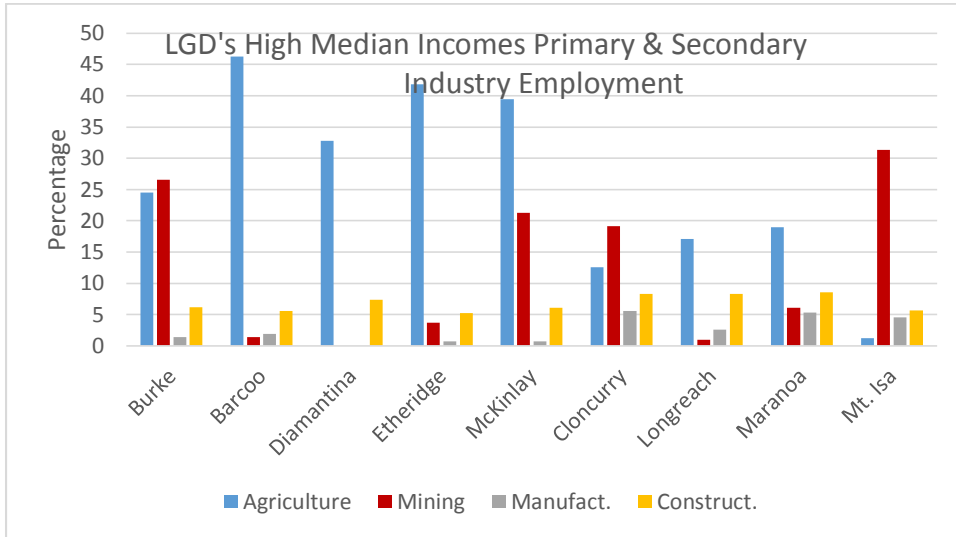


- Regional cities, Townsville and Cairns, are dominated by Health and Social Administration
- Cairns has a strong retail sector supported by accommodation and food.
- Townsville is also supported by Accommodation and food employment
- South Burnett has strong employment service sectors in health, retail and education. Sadly, incomes in three strong sectors outperform the State averages; but, fail to build an overall average income to an acceptable level.
- Murweh Health and Social Administration employment is above the Queensland average. Education is average for the State. These two sectors would explain the strong middle income distribution; but, other industries undermine the median income which is below the State average.

### *7 Findings*

This selection from the sample of regional LGD's have median incomes above the State average statistic. In 2014, they ranged in population size from 292 residents in Diamantina to 22,717 in Mt. Isa. Populations have contracted in Barcoo, Diamantina, Cloncurry and Longreach. Negative population growth in these cattle producing regions would have a high probability of being related to the serious decline in income purchasing power directly related to the sharp decline in saleyard cattle prices discussed in explained in Section 3

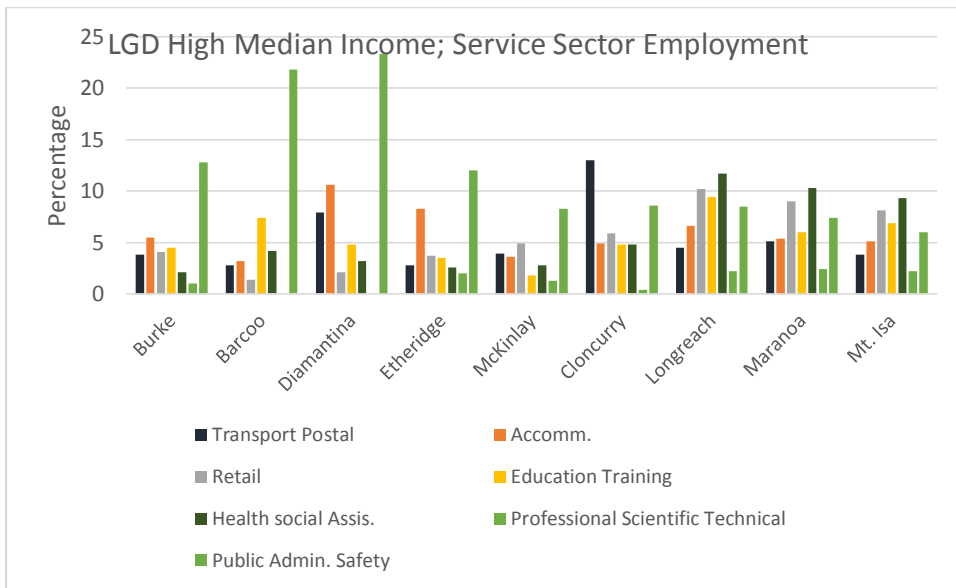
Chart 19 A



Mining dominates in Mt. Isa, Burke, Cloncurry, whilst offering strong employment diversification in McKinlay. The other four have minor employment support from the mining sector.

Barcoo, Diamantina, Etheridge, and McKinlay are dominated by agricultural industries supported by some mining employment.

Chart 19 B



Public Administration and Safety for Queensland comprises 6.5% of employment. All but Mt. Isa have strong public sector employment mix. Barcoo and Diamantina have agricultural dependence offset by employment in Public Administration comprising 21.8% and 23.3% respectively.

Longreach Education and Training employment at 9.4% is well above the Queensland average of 7.9%

Health service employment is below the State average of 11.9% across these LGD's. That needs policy attention

Diamantina has strong employment in transport which is not inconsistent with its geographical situation and isolation in Burke's Corner in the very far south west. Food and Accommodation are above the State average of 7% in Diamantina 10.6% and Etheridge 8.3%

### *8 The Policy Problem*

When employment becomes dominated by low income industries, young people will not remain in regional Queensland. Young rural people cannot be expected to tolerate the lifestyle of their parents. They will seek opportunities in urban areas which offer wider choices.

Industry diversification provides the only explanation for high median incomes in regional Queensland. Agricultural bases mixed with high income industries in mining and public sector employment account for what appears to be at first sight an anomaly in regional Queensland income distribution. The implication is that an industry policy should become a political priority. Industry policy should have a development direction to broaden and deepen narrow production bases in regional Queensland.

Policy strategy should embrace a reconstruction and development institution of some form. The proposed Queensland fund allocating funds on a cost benefit analysis is not the answer. Cost benefit decisions will always favour high density population bases. It will simply continue more of the same encouraging and support depopulation and industrial narrowing in regional Queensland.

This analysis demonstrates empirically that commodity groups concentrating on survival of industries have made themselves irrelevant to the needs of twenty first century rural Australia. High median incomes in selected LGD's show that non-farming sector industries have raised median incomes above the State average. Meanwhile industries represented by commodity groups are floundering in a mire of low commodity prices, high levels of debt, bank



foreclosures, insolvencies, suicides and rising levels of poverty. Reform of commodity representation and their role in policy formation is paramount to returning rural industries to profitability so they can lift regional economic performance.