

Rural Debt and Viability

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Abstract

Following the collapse of the fixed exchange rate regime in 1971, Australian agricultural policy was restructured to conform with the international move to monetarism and market economics. Post 1983, further change embraced agricultural policy with the move to globalisation. These changes in underlying economic philosophy required agricultural policy to move its stance from high levels of protection to embrace market driven policy.

Change should have been smooth. However, after four decades of market driven policy encouraging economies of scale, rising efficiency and increased productivity, the reality is that in agriculture employment; and, population levels have declined whilst in the wider community the converse is true of these important economic variables. The contraction of regional economies and erosion of social fabric in regional communities has now reached a level where established policy settings are being questioned.

In the real world of rural Australia, perverse policy outcomes have reached a level where political discontent is being related to inappropriate policy direction and policy outcomes. The loss of employment though is still glibly explained as resulting from technological advances. This paper discusses in terms of economic theory these unwanted outcomes; and, concludes that the “magic pudding” of economies of scale has not delivered.

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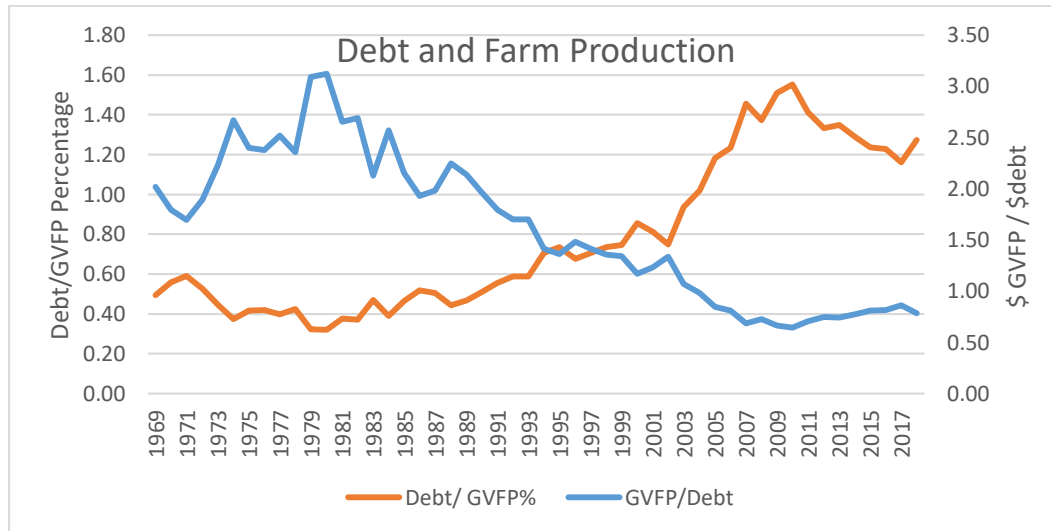
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Section 1

1 Introduction.

Graph 1



Compiled from; ABARES commodity Statistics 2017

RBA Rural Debt Table D9 online 2018

Graph 1 demonstrates graphically, the declining performance of Australian agriculture over the period 1969 to 2018 (blue curve). Whilst agricultural production has increased substantially over that time, the performance of the sector has deteriorated. Graphical evidence demonstrates that production has become heavily dependent upon debt finance. In 1980, a dollar borrowed supported \$3.12 in production. From then on, agriculture deteriorates until 2003-04, a dollar borrowed produces a dollar of output. The situation worsens and bottoms out in 2010 where only 64 cents production is achieved through a dollar of debt finance.

The orange curve is the mirror image of the blue curve i.e. (debt/ GVFP). The orange curve shows that in 1980, 32 cents of debt produced \$1 of production. Again the critical point is over 2003-04 when a dollar of debt is required to support a dollar of production. The orange curve identifies the sharp deterioration of Australian agricultural performance between 2003 and 2010 where a dollar of output was supporting \$1.55 of debt. The situation improves until 2017; but, reliance on debt funded production returns again in 2018 when a dollar of production supports \$ 1.27 of debt.

The period under analysis covers many varied experiences of droughts, recessions, political disruptions; and, includes economic philosophical change. As all economic policy is based upon economic philosophy, analysing symptoms of policy failure such as a particular drought,

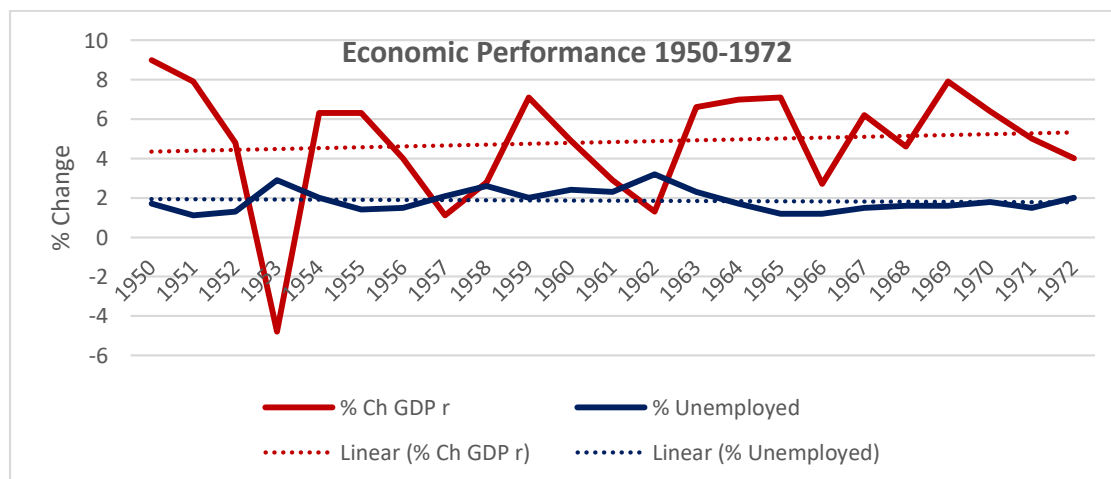
recession, or taxation incentive becomes a pointless exercise. The purpose of this paper therefore will be to discuss the appropriateness of philosophical change; and, the impact of that change on agricultural policy and outcomes post 1971. Hopefully that will lead to a better understanding of what economics can do to improve the lives of people both rural and urban

2 Changing Economic Philosophy.

This section provides an historical overview of economic policy and underlying economic philosophies from which agricultural policy derives. The comparative overview covers economic performance of the Australian economy and the economic philosophies that prevailed from 1950 to 2017. Consequently, there are three important periods each with different economic philosophies. Firstly, the economics of Keynes prevailed from 1945 until the collapse of the Bretton woods fixed exchange rate regime in 1971. From 1972 to 1983, Milton Friedman's modern monetary theory began to emerge and influence macroeconomic policy within a highly protected real sector of the economy. From 1983 onwards, the Australian economy moved to embrace globalisation; and, become a competitive player in international markets. Globalisation is the populist understanding of global monetarism

2.1 Economics of Keynes 1945-1971

Graph 2



Compiled from: RBA Occasional Paper No.8, Australian Economic Statistics, 1949-50/1989-90

(a) GDP Expenditure, Table 5.2b, and p.p. 192-193

(b) Unemployment Table 4.15, p. 172

In 1945, Prime Minister Curtin released his *Full Employment White Paper*, based upon the economics of Keynes. The economics of Keynes' demand management theory provided the framework for economic policy until the collapse of the Bretton Woods international monetary system in 1971. That period is sometimes referred to as the period of certainty.

Certain principles formed the framework of the *Full Employment White Paper*ⁱ. For this discussion, three of those principles are important:

- Principle (1) believed that the people of Australia expected the Government to ensure full employment.

- Principle (5) charged the Government with responsibility for ensuring a level of expenditure sufficient to maintain full employment.
- Principle (7) stated the objective of primary industry policy would be to develop measures that would ensure the improvement and stabilizing of primary producers standard of living

A post War Rural Reconstruction Commission was established to provide a report detailing policy measures necessary to meet Principle (7) to improve and stabilise primary producer's standard of living. As primary production was an important source of foreign reserves under the fixed exchange rate regime, the sector became heavily protected.

Post World War II to 1971, the Bretton Woods fixed exchange rate system, determined agriculture policy. Over that period agriculture was an important source of foreign currency to counter balance of payments constraints upon economic growth. Consequently, the sector was heavily protected through a range of policy instruments such as; home price schemes, tax concessions, subsidies, agricultural research, extension services , and, rural infrastructureⁱⁱ. After the mid 1960's, the mining sector began contributing to external earnings and foreign currency balances. This turned policy attention to structural reform of agriculture and the closer settlement policy which had been based upon breaking up properties considered too large. In 1977, closer settlement as the basis of agricultural policy was replaced with rural adjustment designed to address the small farm low income problem associated with former closer settlement policy

It is noteworthy that from 1950 to 1971, economic growth averaged annually 4.9% which included the worst economic contraction in 1953 (-4. 8%) since the 1930 Great Depression. Despite this historic economic contraction, unemployment averaged 1.9%. Indeed, in 1965, The Vernon Report defined full employment as a range lying between 1% to 1.5% unemploymentⁱⁱⁱ.

2.2 Monetarism and Neoclassical Economics 1971- 2018

"Our criticism of the accepted classical theory of economics consists not so much in finding logical flaws in its analysis as in pointing out that its tacit assumptions are seldom or never satisfied"

Keynes^{iv}

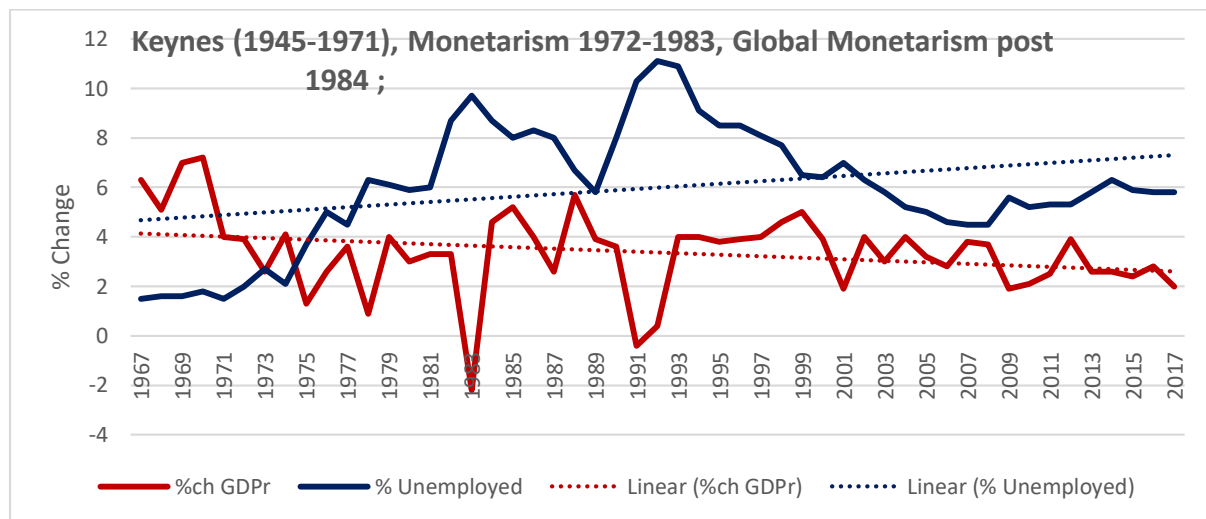
Over the 1960's there emerged a declining faith in Keynesian demand management policies. This led to the adoption of monetarism and neoclassical economics of markets^v. In 1976, Article 4 of the IMF Charter was altered to read *"a principle objective [of the system] is the continuing development of the orderly underlying conditions that are necessary for financial and economic stability" (i.e. price stability)—not exchange rate stability—as a basic goal of international cooperation^{vi}*". This institutionalised monetarism internationally as the preferred monetary system characterised by adoption of flexible and floating exchange rate systems.

Post Bretton Woods, neoclassical economics of markets became the preferred philosophy for reform of real sectors in western economies. Both monetarism and neoclassical philosophies

share common underlying assumptions which assert that under flexible markets, an economy operates at full employment output. To the neoclassical school, free trade becomes the measure of an economist. Without a belief in free trade, protectionists are an inferior class^{vii}.

As the modern quantity theory has no defined real sector in its model, neoclassical theory of markets was a necessary accompaniment to structurally reform formerly highly protected Keynesian demand management real sectors. A composite policy framework emerged from the two different philosophies over the late 1970's and early 1980's; and, became known as supply side economics.

Graph 3



From: (a) Unemployment RBA Bulletins from Dec. 1981; and online RBA Statistical Tables.

(b) From ABARES commodity statistics 2017, Table 2.1 Australian main macroeconomic indicators

The transition from Keynes to monetarism occurred slowly in Australia, Late in 1974, the RBA switched from pursuing an interest rate rule to a policy of monetary supply control^{viii}. In the Hayden Budget of 1975, the principles of the Friedman/Phelps inflationary expectations and associated natural rate of unemployment are evident^{ix}. Treasury accepted the Friedman/Phelps inflationary expectations theory in the 1975 Budget Discussion Papers^x. In 1975, the Liberal Party published an economic policy document endorsing monetarist principles by calling for managing the rate of growth in the money supply^{xi}. In the latter half of 1975-76, the Australian Treasurer committed monetary policy to an 11%-13% annual target growth in M_3

Whilst monetarist principles were adopted by major political parties, there were limitations to Friedman's modern quantity theory. Friedman believed that fiscal policy had little relevance to the real sector and level of employment^{xii}. In 1975 the limitation of monetarism's real sector relevance was overcome by institutionalising neoclassical economic modelling within a number of Commonwealth Government Departments: IAC, Departments Industry and Commerce, Employment and Industrial relations, Environment Housing and Community Development, ABS^{xiii}. The IAC is now the Productivity Commission.

Global monetarism was confirmed in 1996 when the RBA was granted independence to manage monetary policy. The prime focus of monetary policy is an inflation target to maintain price movements in the real sector within a band of 2%-3%. This is achieved by managing the cash rate to influence the cost of credit; and, the stability of the exchange rate.

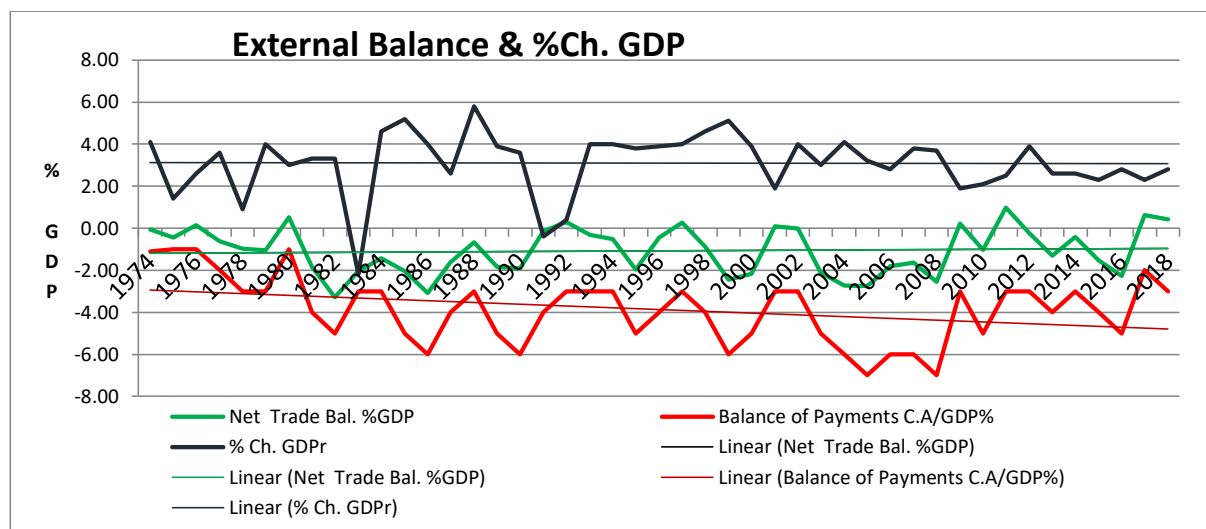
The composite applied policy model, supply side economics, swept the western world like a bush fire over the 1980's and 1990's. Supply side economics relied upon two policy levers cutting marginal tax rates to stimulate real sector growth; and, monetary policy to manage prices.

2.3 Global Monetarism.

Both Laffer and Mundell whilst at the Chicago School were prominent in developing global monetarism^{xiv}. Underpinning global monetarism is a belief that macroeconomic phenomena is best understood in terms of the relationship between the supply of and demand for money on a global scale. The global concept arises from a view that the world comprises not a collection of independent national economies; but, one single integrated closed economy^{xv}.

From this conceptualisation of a global economy, exchange rate movements are ineffectual as a balance of payments policy over the long run. External balance is removed as a specific policy target as automatic adjustment occurs through a floating exchange rate system. Consequently, the automatic adjustment mechanism will restore internal and external balance occurring from external dislocations. Flexible or managed exchange rates become a negative influence upon world economic welfare because they impair international pooling of risk and efficiency advantages of international monetary flows.

Graph 4



Compiled from ABARES commodity statistics 2018, Tables 1.1 and 2.1

The Australian experience suggests that the automatic adjustment assumption does not work in the real world. Under the monetary model of balance of payments theory, external balance becomes the summation of both capital and current accounts. Graph 4 illustrates that

Australia runs a chronic current account imbalance (red curve). Whilst the trade balance is volatile, over the long term, the trend line shows it is persistently slightly negative. The difference between the trade balance and current account balance is net income flow which comprises net dividend payments on foreign investments and interest flows on external debt.

Australia's chronic current account imbalance directly affects domestic economic growth. Net exports which comprises exports less imports (X-M) is insufficient to meet annually national liabilities comprising dividends on overseas investments and interest on overseas borrowings. Consequently, Australia must repay overseas liabilities from domestic economic growth. If Australia had a true floating exchange rate, the external imbalance would be adjusted by a depreciation of the currency. The reason why that is not happening is directly related to the independent RBA managing the cash rate at a level to attract capital inflow sufficient to fund the chronic external imbalance. In other words, monetary policy stance is structured to maintain an overvalued exchange rate. Theoretically, an overvalued exchange rate reduces the cost of imports at the expense of domestic industrial expansion, employment, income distribution and living standards.

Underlying global monetarism are a series of heroic assumptions.^{xvi}

- Exogenous income assumes a classical world in which real output is constant at full employment output.
- All prices including wages are fully flexible
- There is an absence of money illusion
- Stable demand for money function

These heroic assumptions carry implications for fiscal policy. They assert that fiscal policy is Impotent and unable to influence any aspect of the economy including the price level.

Globalisation is simply an adaptation of Reagan's "trickle down" economics^{xvii}. The concept was sold on the basis of some simplistic assertions important amongst which was the inevitability of globalisation. Other important principles were assertions that the nation state was obsolete and anachronistic; and, should be replaced by a system of international rules implemented through trade agreements, multinational organizations, and a system of international regulators. Benefits would be assured in economic progress and political harmony. In 2019, political disharmony across nation states that have embraced globalisation is substantial and threatens the model which identifies with global monetarism.

Principles of global monetarism^{xviii}:

- World financial markets are linked by technology
- Capital readily moves electronically across the world
- Manufacturing and services industries move amongst countries allowing across border networking
- Markets supplied at will from flexible sources
- Ideas, information, and techniques move amongst countries
- Borders become increasingly unimportant as markets fully integrate
- National sovereignty attenuated through international free trade treaties

The major weakness in these free market principles are constitutional democracies. Australia is one such nation. The Australian Constitution was written during an earlier period of globalisation which ran from the nineteenth century of Liberal reform of mercantilism until the early twentieth century^{xxix}. It is significant that the Australian Constitutional forefathers of that earlier period wrote into the Constitution instruments capable of structuring industry policy which protected the interests of Australian industry, labour, and, income distribution.

Under constitutional democracies, there might well prove barriers to global monetarism. The objective to attenuate national sovereignty through trade agreements could prove a stumbling block. Under the Australian Constitution, international treaties are signed under the External Affairs power, Section 51 (xxix). In 1936, the High Court identified five limitations to Section 51 (xxix)^{xx}.

- The international agreement must not be a 'mere' device to attract domestic jurisdiction
- Implementing legislation must conform faithfully to the terms and even words of the treaty
- .The subject matter must be somehow external in character
- The exercise of the power is subject to express prohibitions contained elsewhere in the Constitution
- The Court will not allow the external affairs power to be used for the purpose of invading the reserve powers of the states

3. Supply Side Economics

"Under a system of perfectly free commerce-----pursuit of individual advantage is admirably connected with the universal good of the whole"^{xxi}

Supply side economics emerged as a composite policy framework combining both neoclassical theory of markets (real sector) and monetarism (financial system). Free Market supply side economics began in Britain and America in the early 1980's under Thatcher and Reagan. Many formerly democratic socialist governments converted to supply side economics. Hawke and Keating brought the model to Australia^{xxii} complete with the monetarist's belief in natural rate of unemployment.

Seven principles emerged under Thatcherism which characterised the policy framework of supply side economics^{xxiii}:

1. Reduce Government involvement in wage determination
2. Amend legal position of trade unions
3. Increase denationalisation
4. No support for lame ducks
5. Enterprise to reap rewards of success
6. Abolish many administrative controls

Supply side economics is viewed as *"a renaissance of the classical economics of Adam Smith and Jean Baptiste Say"*^{xxiv}. Architects of supply side economics was a small group of politically powerful people which included Wall Street Journal editor Robert L Bartley and editorial

writer Jude Wanniski^{xxv}. Other prominent members of this select group were Chicago School economists Robert Mundell and Arthur Laffer. At meetings Mundell (Nobel Prize winner 1999) would lecture the group on policy. He argued that to beat stagflation of the time, two policy levers were needed. Tight monetary policy was required to beat inflation whilst fiscal policy should cut marginal tax rates to generate economic growth.

Wanniski was a formidable financial journalist; and, in his work *“The Way the World Works”* he argued that the Smoot-Hawley tariff triggered an ensuing trade war^{xxvi} causing the Great Depression. Another important original supply side architect was Bruce Bartlett^{xxvii}. Bartlett says that supply-siders drew on thinking of Nobel Prize economists: Robert Mundell, Milton Friedman, James Buchanan, and Friedrich Hayek^{xxviii}. All except Buchanan had at some time in their careers taught at the Chicago School of Economics; but, Buchanan had been a student of the Chicago School.

David Ricardo’s Comparative Advantage Theory also features in supply side economic theory. David Ricardo, 1792-1823 extended Smith’s invisible hand to international trade. Ricardo’s theory of comparative advantage showed how two countries could maximize economic welfare through specialization and trade.

Free market supply siders rejected the Keynesian full employment model achieved through demand management policies. Supply siders believed in the Friedman Phelps monetarist rational expectations definition of the Phillips Curve which argued that there was a level of unemployment at which inflation would be stable. Any deviation from this level of unemployment would be temporary. The term “Non-Accelerating Inflation Rate of Unemployment” was coined to describe this equilibrium point. NAIRU is commonly referred to as the natural rate of unemployment^{xxix}

Section 2

Real Sector Policy Outcomes

Post 1971, there emerged in Australian politics a growing acceptance of the “new economics” or supply side economics. The first steps were to change policy direction with a review of industry protection. Agriculture was one of the first major industries to experience the winds of change following the election of the Whitlam Government in 1971.

4: Theory of Markets, Institutionalised

Post Bretton Woods, market theory first appears officially in the Rattigan Committee Report on Tariffs in July 1973^{xxx}. Appendix C contains a neoclassical partial equilibrium model. In 1974, Klijn used a general equilibrium model in his presentation to 18th Annual Conference of Agricultural Economic Society, *Revaluation and Changes in Tariff Protection*^{xxxi}. In 1973, Prime Minister Whitlam instituted the Coombs Committee to review the broad spectrum of assistance enjoyed by various industries^{xxxii}. The Crawford Report, in June 1973, recommended replacement of the Tariff Board with a new body the Industries Assistance Commission (IAC) which was established in 1974; and, is now the Productivity Commission. In December 1973, Whitlam commissioned Dr. Stuart Harris to produce a Green Paper

delivering a comprehensive review of rural policy; and, to produce a set of principles for future policies.

In 1975, the IAC initiated the IMPACT Project based upon the early 1970's general equilibrium model of Evans^{xxxiii}. The IMPACT Project involved a number of important Commonwealth Departments: Industry and Commerce, Employment and Industrial Relations, Environment Housing and Community Development, and the ABS. The legacy of the IMPACT Project has been institutionalised neoclassical economics of markets and general equilibrium modelling as the basis of Australian economic policy. Since 1975 and implementation of the IMPACT Project, general equilibrium modelling has become important in determining Australian economic policy direction.

The origin of General equilibrium theory is attributed the neoclassical economist Leon Walras (1834-1910)^{xxxiv}. *Walras general equilibrium theory comprised a system of simultaneous equations that under certain circumstance, a purely competitive economy will achieve a general equilibrium of prices and quantities such that the position of any participant in the economy cannot be improved without diminishing the position of any other participant.* It is at this point of general equilibrium that a competitive economy achieves an efficient allocation of resources.

Flexible labour markets are critical to the functioning of general equilibrium modelling. Professor Pigou in his publications between 1927 and 1945 stated many times that *under free competition wage rates will tend to be related to demand that everybody is employed*^{xxxv}. Pigou's statement and restatements of the importance of flexible labour markets is regarded in economic literature as a modern restatement of Jean Baptiste Says Law of Markets (1767-1832). The familiar contemporary calls for structural reform of the labour market become identifiable with Pigou's interpretation of Say's Law of Markets

The 1970's becomes a critical period in identifying the underlying economic philosophy that reformed the highly protected post War Australian economy. Industry acceptance of nineteenth century economic theories are implicit in the 1995 statement of the NFF

"The downward trend in real commodity prices need not of itself produce a loss of national income nor a decline in the profitability of producers if the decline in real commodity prices or manufacturers prices is the result of higher productivity"

NFF, 1995^{xxxvi}

This NFF implicitly reflects a belief in Say's 1803 theory of supply and demand.

The other IMPACT link with nineteenth century economic theory is through David Ricardo's comparative advantage theory. The general equilibrium model of the Australian economy developed by Evans has one stream of his model based upon multi commodity generalisation of Ricardo's trade theory^{xxxvii}. For the neoclassical school, a belief in free trade is consistent with the individual pursuit of profit^{xxxviii}. Free trade exhibits an equilibrium outcome in which competition produces maximum utility both domestically and internationally.

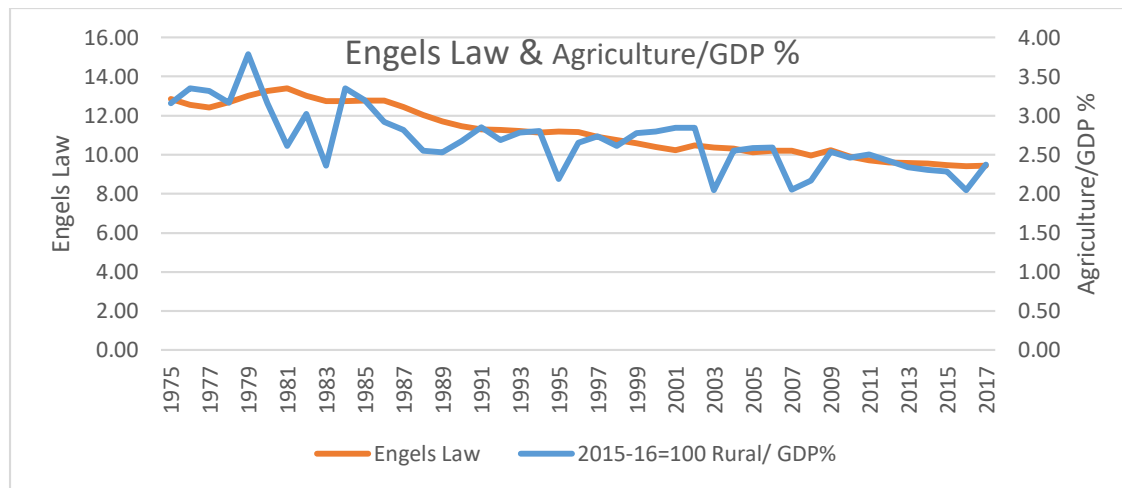
The influence upon agricultural policy of nineteenth century theory of markets has been profound. However, in the real world of agricultural production, there is another important

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Law ignored by general equilibrium modelling. That Law is Engel's Law named after Ernst Engel who developed his hypothesis in the 1850's a half century later than Say with his supply creates demand.

"a rise in income will lower the share of consumer expenditure spent on food -----of all the 'Laws'tested by economists, this is the most firmly established. It shows up whether we are comparing the behaviour of individual households or the behaviour of several nations or the behaviour of one nation over time""xxxix

Graph 5



Compiled from

- (a) Engels Law ABS Households Final consumption expenditure Food
- (b) Agriculture/ GDP ABARES commodity statistics 2018 Table 1.1 Australian gross product by sector

In 2011, Richard Anker from University Massachusetts, Amhurst, published a research paper *"Engel's Law Around the World 150 Years Later"* in which he argued that Engel's Law is just as relevant today as the day it was developed in 1857. It applies equally to both domestic and international demand for agricultural products. Consequently, at some point, the internationalisation of Australian agriculture under monetarist economic philosophy must fail the agricultural sector and the nation.

Graph 5 demonstrates the reality of Engel's Law in modern Australia. Engel's Law describes an imperfect market structure for agricultural output. It follows that policy structured upon nineteenth century Say's Law of supply and demand is at best inappropriate for the twenty first century; or, at worst must fail. Graph 5 also demonstrates the reality of domestic agricultures contribution to production and consumption; and, hence GDP. As shown in Graph 4, rural exports become exhausted in net exports contribution to external imbalance. Policy emphasis given to rural exports over domestic production and consumption would appear misguided.

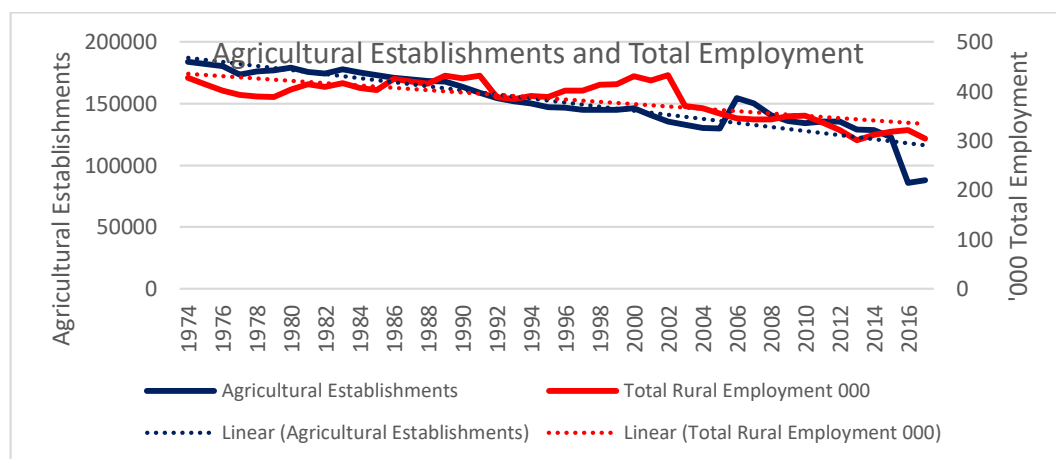
5 Reform Agricultural Policy, 1970's

5.1 Agricultural Reform, Stage 1

Much professional debate over agricultural protection had occupied economists during the 1960's and early 1970's. Harris argued in 1970, that government involvement in agriculture was necessary to address slow rates of adjustment in agriculture which produced concentrations of submarginal producers^{xi}. Consequently, government involvement in agriculture was considered necessary to improve the rate of adjustment and bring agricultural incomes more in line with the rest of the economy.

Whilst the 1973 across the board tariff cut of 25% is often thought to be the first step toward rural adjustment, it was not until January 1977 that rural adjustment replaced rural reconstruction which had been introduced to address recession over the late 1960's across both wool and wheat industries^{xli}. Rural adjustment sought to restore economic viability to perverse outcomes of closer settlement programs by building the capacity of farmers to maintain long term viability^{xlii}. Underlying this policy direction was neoclassical theory of the firm seeking economies of scale to lift both firm and sectoral output through rising productivity, efficiency, and international competitiveness. Rural adjustment became the policy direction to capture theoretical advantages of economies of scale.

Graph 6



Compiled from: ABARES commodity statistics 2018, Table 3.1,

Graph 6 provides empirical evidence of policy outcomes after four decades of rural adjustment. The critical variables analysed are: farm establishments and rural employment. According to ABARES commodity statistics, in 1977, there were 173,625 agricultural establishments. By 2017, Australia's number of farm establishments had fallen 49.3% to 88,073. Over the same period rural employment contracted from 414,000 to 329,000 or 20.5%. The policy direction of rural adjustment maintained over four decades effectively removed 49% of farm establishments and 20.5% of total employment in rural Australia. The loss of farm enterprises and employment would flow on to impact negatively upon regional population and stability.

Policy outcomes measured by comparison to the wider economy cannot be justified other than blind faith in failed economic theology. Calculated from ABARES commodity statistics 2018, (Table 1.1), real non – farm GDP grew by 275.2% between 1974-75 and 2017-18, whilst

real farm contribution to GDP grew by 137.4%. From 1971-72 to 2017-18 national employment increased by 136.6% whilst rural employment contracted by -29%. Statistically, the comparison of national economic growth and employment with rural growth and employment unequivocally demonstrates agricultural policy as inept at best, or, incompetent at worst. Rural Australia has good reason to question the quality of political representation at all levels from farm gate to Federal Parliament.

5.2 Agricultural Reform, Stage 2

Following a series of reports by the IAC recommending uniform tariff cuts^[xxxii], in 1988, Treasurer Keating announced all tariffs would be reduced to 10% or 15% by 1992^[xxxiii]. The private motor vehicle industry (PMV) and textile clothing and foot-ware (TCF) sector were excluded from the severity of the across the board tariff cuts; but, were expected to reduce tariffs. Further tariff reductions occurred in 1991 under Prime Minister Hawke's *Building a Competitive Australia* Program. Under Hawke's Program, tariffs were to be cut to 5% by 1996. The PMV industry was expected to reduce tariffs to 15% by 2000. Whilst the TCF lost quotas in 1993, tariffs were reduced to 25% by 2000. A uniform low rate of tariffs does not provide industry protection; but, becomes a revenue tax.

In 1992, the Productivity Commission national drought review recommended that assistance should be restricted to farms that contribute to GDP^{xliii}. This extended the principle of rural adjustment to drought policy. As policy consistency was established across overall agricultural policy supporting only "viable" farmers, two of Thatcherism's supply side principles^{xliv} were in place.

- No support for lame ducks
- Enterprise to reap rewards of success

The Productivity Commission's assertion that only "viable" farmers contribute to GDP becomes a critical weakness in rural adjustment policy whether it be either agricultural policy in general or drought policy in particular. It is an assumption that does not reflect the real world of GDP composition. For example, imputed rent of owner occupied homeowners is included in calculation of GDP. Consequently, to argue that small farmers earning income from both on farm and off farm activities do not contribute to GDP is patently flawed economics. Nonetheless, the principles of supply side economics was in place; and, corporatisation of agriculture was under way.

Reform of agricultural orderly marketing began over 1989-90 with both wool and wheat. Competition Policy would move against orderly marketing of sugar and dairy over the early 2000's. Once orderly marketing was discontinued for the wool industry, it collapsed. In 1990-91, there were 163 million sheep in Australia^{xlv}. By 2002-03, sheep numbers had fallen to 99.3 million. Sheep numbers nationally bottomed out at 67.5 million in 2015-16. The real loss to rural economies though came from the disbanding of the large itinerant labour force known as the shearing industry which followed industry seasonal demand for labour across Australia.

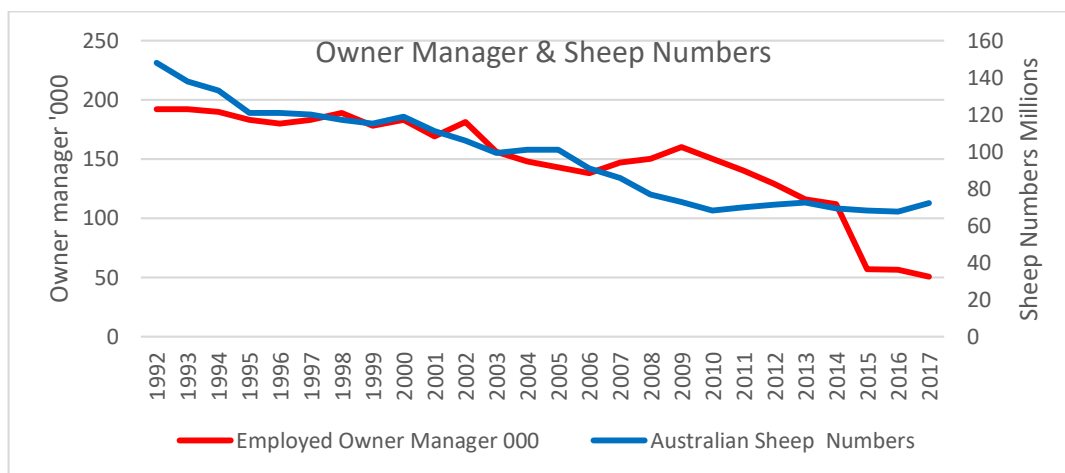
The implicit malleable capital assumption underlying neoclassical theory would expect beef to replace wool production; but, that did not happen. In 1990, there were 22.3 million beef

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cattle in Australia rising to a peak of 29.3 million in 2012-13 before declining to 25 million in 2015-16^{xlvi}. The loss of 100 million sheep was replaced by 4.2 million beef cattle. It can be assumed in more favourable rainfall areas; and, where irrigation was available, former wool producing land moved into capital intensive farming. Capital intensive farming required debt funding which exposed regional economies to financial risks should seasonal conditions deteriorate. This happened when the Millennium drought occurred from 1996-2009.

The decline of the wool industry combined with protracted drought would prove the policy of rural adjustment inappropriate. Retaining only viable producers whilst shipping out “lame ducks” inevitably eroded the fabric of rural communities. Once drought or other dislocation arose, employment and population decline was inevitable. Graph 6 identifies the impact of declining sheep numbers on owner managers.

Graph 6



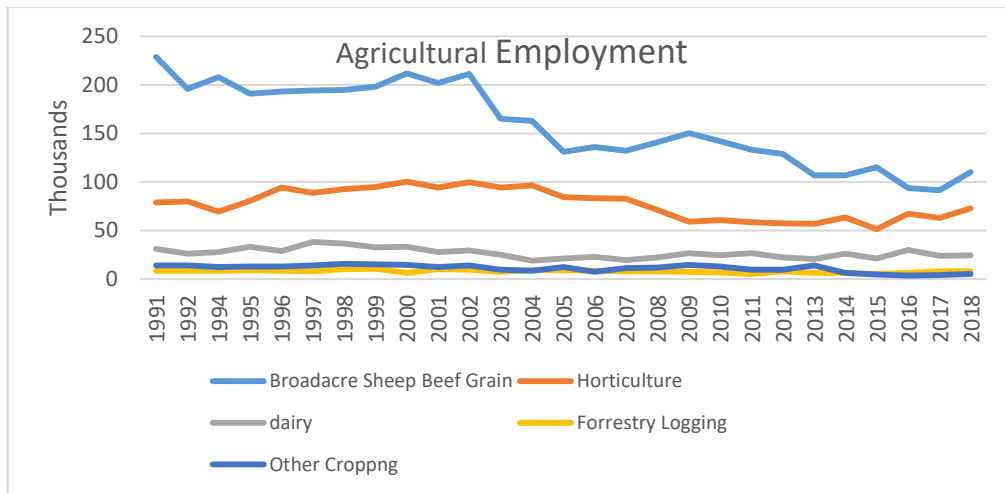
Compiled from: ABARES commodity statistics 2018

- (a) Number of agricultural establishments and rural employment Table 3.1
- (b) Summary of Australian statistics for meat Table 12.1

The loss of the wool industry by a political decision without a structured replacement industry reflects badly upon supply side reformers. From 1992 to 2006, owner manager rural employment decline follows closely the gradient of the sheep number curve. That relationship ceases from 2006 to 2009; but, the impact of the GFC post 2009 appears to become a strong influence upon owner manager decline. Rather than rural adjustment, there should have been a return to rural reconstruction similar to that provided over the late 1960's during the wheat and wool crises. In other words, agricultural policy should have sought to stabilise and reconstruct regional communities rather than apply the principle of no assistance, or, “ship out” lame ducks.

Graph 7

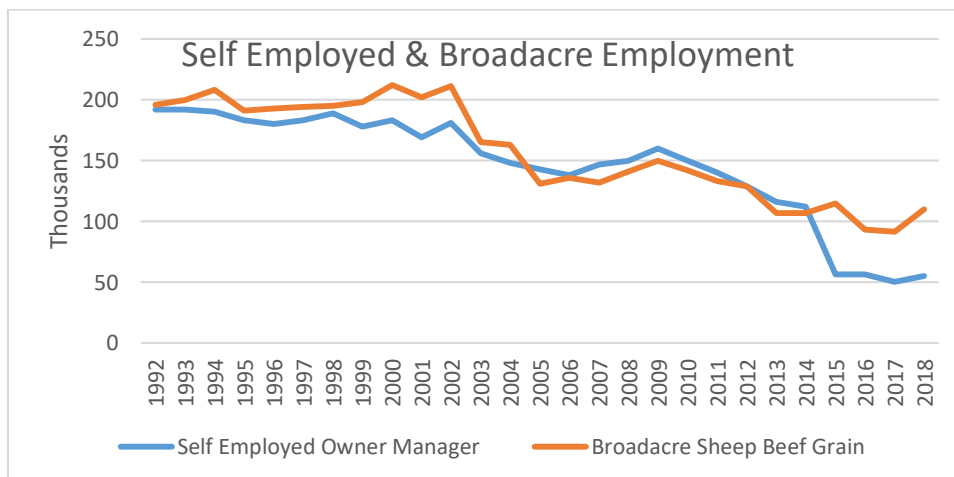
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Compiled from: ABARES commodity statistics 2018, Table 3.2 Persons employed in agriculture, fisheries and forestry

Broad acre agriculture appears the most affected by employment loss. Horticulture has shed workers but nowhere near the loss in broad acre agriculture. Employment loss in broad-acre agriculture fell 60% between 1990-91 and 2016-17 from 229 thousand employees to 91.5 thousand. Such a significant loss in employment explains the decline in regional economies and negative demographic change. Employment decline appears to gather momentum from 2002 onwards. However, the change in broad-acre employment suggests that former wool wheat zone farmers moved to grain production. Whilst grain production requires fewer employees than other major rural industries, the need to purchase expensive farming technology upon rural indebtedness should not be underestimated.

Graph 8



Compiled from: ABARES commodity statistics 2018

(a) Table 3.1, Number of agricultural establishments and rural employment in Australia.

(b) Table 3.2 Persons employed in agriculture, fisheries and Forestry

In Graph 8, the self-employed owner manager curve is virtually a trend curve for the broad-acre employment curve. The number of self-employed owner managers fell by 74% between

1991-92 and 2016-17. Over that period there were significant events that tested policy. Over the Millennium Drought period, 1996 to 2010, protracted drought exposed the ideological foolishness of rural adjustment policy. Instead of stabilising regions in times of distress, rural adjustment added to regional dislocation.

In 1998, there were 189,000 self-employed owner managers across rural Australia. By 2006, self-employed owner managers had fallen to 138,000 or 27%. As drought conditions eased, the numbers of self-employed began to rebuild. By 2009, there were 160,000 owner managers. However, the GFC effect can be seen from then on. By 2018, owner managers had fallen to a low of 55,000. Protracted drought combined with financial crisis reduced self-employed owner managers by 134,000 or 71%. Rural adjustment policy failed rural Australia in time of need.

Effects of both protracted drought and financial crises are reflected in sharp inflections in the Broad-acre sheep beef and grain industries. In 1991, the broad-acre sector employed 229,000 employees. By the time the Millennium Drought began, employment had contracted to 194,000, or 15.3%. By 2009, broad-acre employment had contracted to 150,000, or 22.7%. Employment continued to contract to 91,500 in 2017. Over the period 1991 to 2017, broad-acre employment contracted 60%. That in itself is a sad indictment of agricultural and drought policies.

Since European settlement there have been a number of protracted droughts. Some more severe than others^{xlvii}: 1838-40; 1864-66; 1880-86; 1895-1903; 1911-16; 1939-45; 1963-68; 1972-73; 1982-83; 1991-95, 2002-2009. Eight of those droughts lasted five years or more 1880-86; 1895-1903; 1911-1916; 1939-1945; 1963-68; 1991-95, 2002-2009; and, the current drought unfolding post 2013. When one protracted drought, the Millennium Drought, exposes rural adjustment as flawed agricultural policy, it becomes an open question how rural Australia would have developed if rural adjustment had structured agricultural development since European settlement.

6 Rural Adjustment Policy Analysed.

All economic policy and government budgets can be analysed within a structured framework. This section applies a structured analytical framework to rural adjustment.

Policy Objective

Supply side reform to create a prosperous internationally competitive agricultural sector to ensure market forces efficiently allocate agricultural resource thereby minimising government sectoral support

Policy Stance

Support only efficient enterprises will be contractionary to regional economies

Supply side Policy Structure

- Encourage economies of scale
- Lift efficiency and productivity
- Encourage foreign investment

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- Encourage large scale domestic investment
- Support efficient enterprise through fiscal policy instruments
- Income safety net for domestic lame ducks

Policy Instruments

- Long term concessional loans
- Taxation concessions to encourage agricultural investment

Expected Outcomes

- An independent corporatized viable agricultural sector
- Minimise government expenditure.

Graph 9

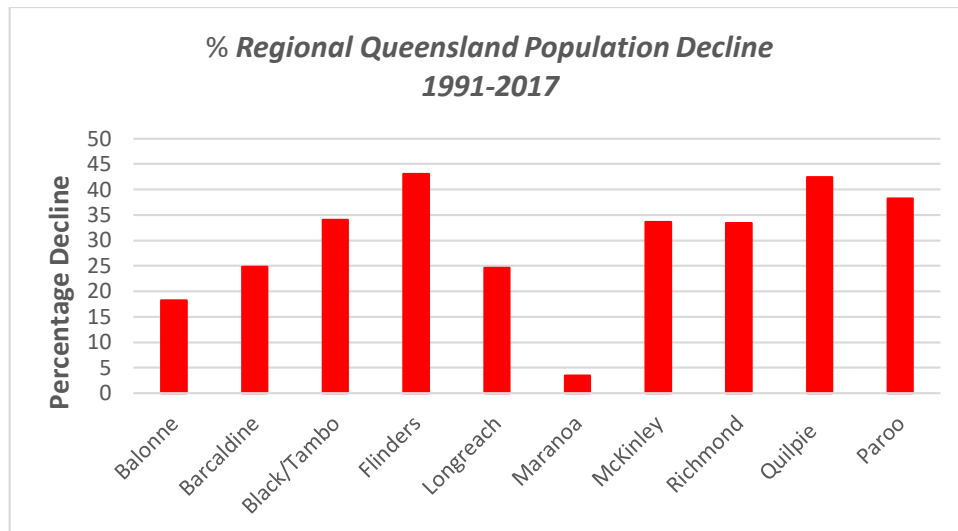


Reproduced from: AgJournal, Who Owns Australia, first edition, May 2019 , The Herald and weekly Times, p.p 20-21

In terms of agricultural policy, it would appear that corporatized Queensland has been an outstanding success. The difficulty is that the population decline and dependence upon urban charities is now critical across arid zone corporatized regions.

Graph 10

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Compiled from: Queensland Treasury Estimated Population by LGA 1991-2017

Under structured analysis, corporate agriculture might have been achieved; but, at what cost to regional communities?

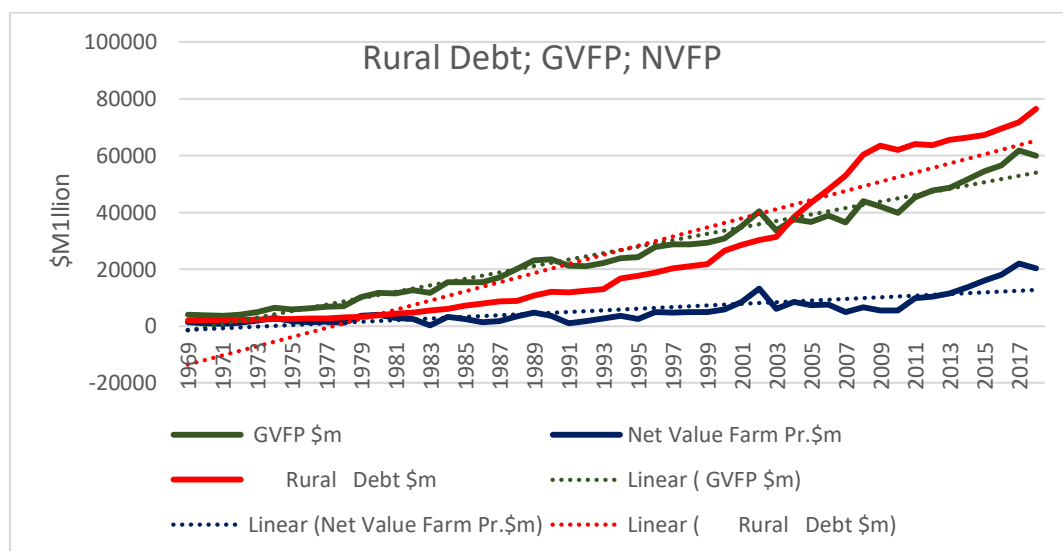
Evidence based analysis suggests regional policy failure would now be triggering political discontent. It is time that supply side agricultural policy was reviewed and replaced. It has not served regional economies at all well.

Section 3

Monetarism & Farm Sector Asset Inflation

7. The farm Sector; Background

Graph 11



Compiled From: ABARES commodity statistics Australian farm returns, costs and prices, 2006& 2018

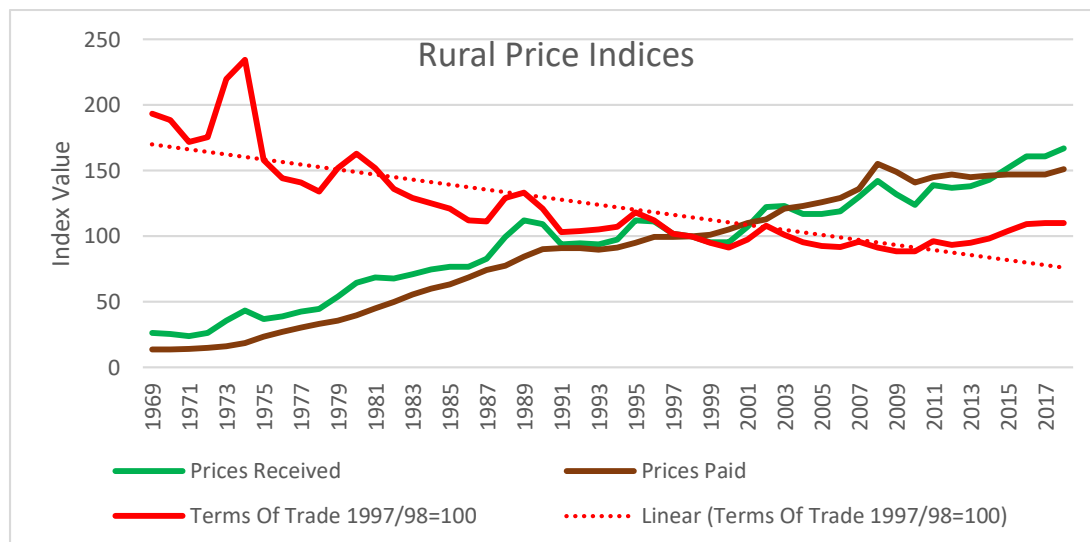
Rural Debt from RBA, Table D9 Rural Debt, RBA Statistical Tables, online

On the election of the Hawke Keating Administrations in 1983, Australia joined other social democratic governments and adopted the monetarist club originated by Thatcher and Reagan^{xlviii}. The first step was the deregulation of the financial sector in late 1983. In 1996, the monetarist RBA was granted independence to manage monetary policy. Accordingly, monetary policy, combined with necessary flexible labour market reform, became the main focus of economic policy. Industry policy to manage the rural sector lay well beyond monetary policy.

Graph 11 illustrates the impotence of the RBA to deliver required real sector policy. By 1983, GVFP was rising at the expense of NVFP. Beyond 1983, any relationship between debt and GVFP NVFP evaporates. Upward inflections in the debt curve are identifiable in 1988 and 1993 following tariff reform. Any relationship between GVFP and debt cease to exist beyond 1993; and; finally in 2003-04 the debt curve rises steeply cutting through the GVFP curve. Finally the GFC effect slows down the rural appetite for debt. From 2017, the debt curve gradient begins rising more steeply than the GVFP curve indicating that rural production is again being funded by rising indebtedness. Some good old fashioned fiscal policy was badly missing.

8 Fiscal Policy Missing in Action

Graph 12



Compiled from: ABARES commodity statistics 2018, Table 3.4 Australian farm returns, costs and prices

Graph 12 confirms major change to rural sector input and output markets post 1969 following the collapse of the fixed exchange rate regime. Under Whitlam and Fraser Administrations, orderly marketing and other industry protective instruments remained in place. Over that period, prices received remain above the prices paid curve. However, the prices received curve turns down sharply in 1989 following Treasurer Keating's move against industry protection instruments; but, the prices paid curve remains steady. This suggests a redistribution of market power from the farm sector to the input supply sector.

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By 1988, both curves intersect and prices received increase more slowly than prices paid. Except for a brief period 2002-04, prices paid remain constantly above the prices received curve. Significantly, these inflection points are reflected in the debt curve. Indeed, it is over 2003-04 that the debt curves breaks through the GVFP curve and continues to rise sharply until the GFC. A discretionary macroeconomic policy of asset inflation provides the only rational explanation to the growing indebtedness of rural Australia. That would require cooperation of both Government fiscal policy; and, RBA administered monetary policy.

The policy answer lay in Section 51 (iii) (bounties); but, fiscal intervention lay beyond neoclassical market theory whilst monetarist had no real sector answer to market power redistribution except to indirectly influence the wealth variable “W” in the monetarist model.

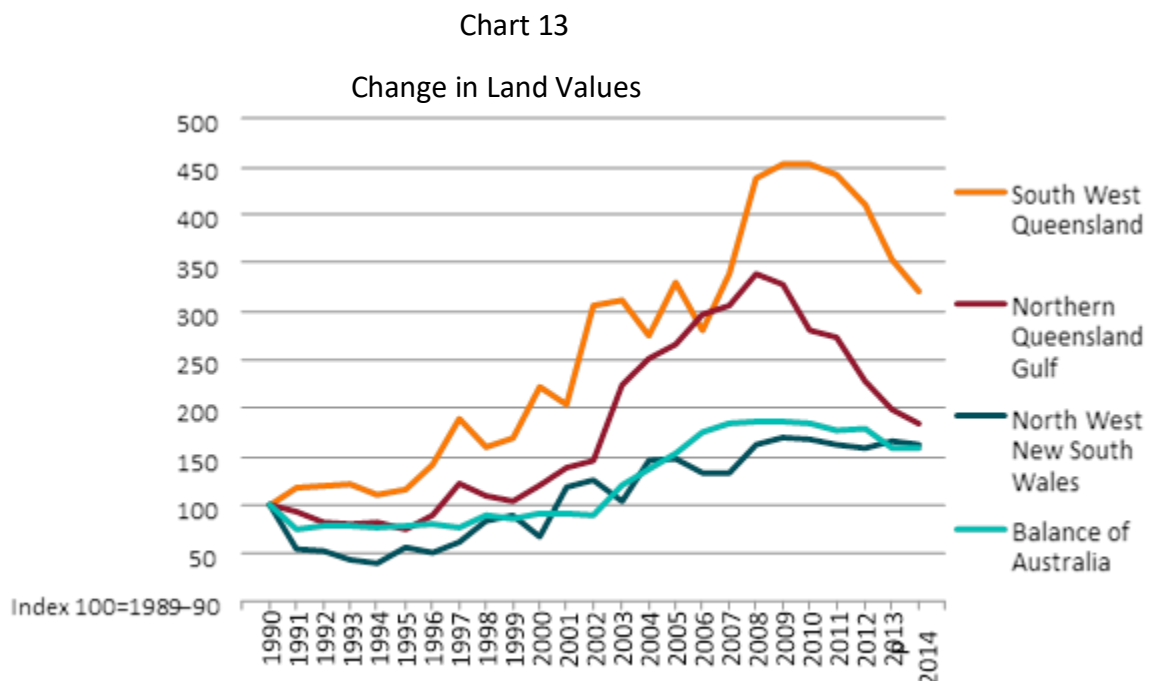
9 Asset Inflation in Agriculture.

The Law of Scarcity

“Economic Scarcity refers to the basic fact of life that there exists only a finite amount of human and non-human resources--- Nowhere on the globe so plentiful or the tastes of the populace so limited that every person can have more than enough of everything” is the supply of goods “^{xlix}

“an asset offers a prospect of yielding during its life services having an aggregate value greater than its initial supply price is because it is scarce”

J.M. Keynes^l



From: ABARES Regional Farm Debt Report, Northern Queensland Gulf, south west Queensland and north-west NSW. 2014, p. 32

Deregulation of banks post 1983, provided fertile ground for a policy of asset inflation. By 1994, rural Australia was identified as engaging in debt to equity borrowing.

“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 capacity of clients to repay”

Senate Inquiry into Rural Debt and Rural Reconstruction^{li}

In 1997, the Wallis Inquiry identified a number of countries which included Australia as pursuing asset inflation as their macroeconomic policy strategy:

“ According to the Bank for International Settlements (BIS), the relaxation of credit constraints in the finance industry in a group of countries including Australia, when combined with pre-existing tax provisions which encouraged indebtedness, ‘provided fertile ground for a self re-inforcing spiral of credit and asset prices, with faster credit expansion raising asset prices and higher asset prices in turn relaxing credit constraints further’.”^{lii}

Expansionary monetary policy pursued by the independent RBA is clearly evident in land asset inflation from 1996 onwards, particularly in NSW and Queensland. Asset inflation under expansionary monetary policy requires supportive fiscal policy settings to incentivise money flows into asset prices rather than real sector prices. What is concerning is that neither the RBA nor Government policy understood the ramifications of pursuing an asset inflationary policy at a time when the rural sector was experiencing protracted drought. The Millennium Drought began in southern Australia in 1997; but, was certainly well established elsewhere beyond 2002. Yet it was after then that rural asset inflation began to accelerate. It can be assumed that drought compounded rural indebtedness as farmers sought finance to purchase additional properties; and, or hand feed stock.

Asset inflation begins to emerge in NSW north -west from 1996 onwards. Two Queensland regions begin responding beyond 1995; but, accelerate alarmingly beyond 2003-04. Over the rest of Australia, asset inflation emerges beyond 2003- 04 which is when the debt curve breaks any relationship with GVFP curve (Graph 11). Whilst NSW appears to have experienced a steady asset inflationary experience, Queensland land prices seriously inflate beyond 2003-04 at a time when the Millennium Drought was well established. Other factors than drought finance were driving Queensland land prices.

Queensland passed environmental legislation over 2003- 04^{liii} which undoubtedly influenced land prices. In 2003, the Government introduced a moratorium on land clearing. In March 2004, legislation was introduced to end broad-scale land clearing by December 2006. At the time, the P.C. estimated that Queensland had over 170 million hectares of land, 81 million hectares of which were estimated to be woodland and forest ecosystems.

Under the Law of Scarcity, Queensland legislation would be expected to increase values of land excluded from the legislation. More importantly, large scale producers would be expected to move operations into areas suitable for their production systems which they anticipated to have the least impact under broad-scale land clearing legislation. Given the consistency of dates, post 2003-04 asset inflated areas identified in in ABARES map would appear to have been recipient areas of large scale producers.

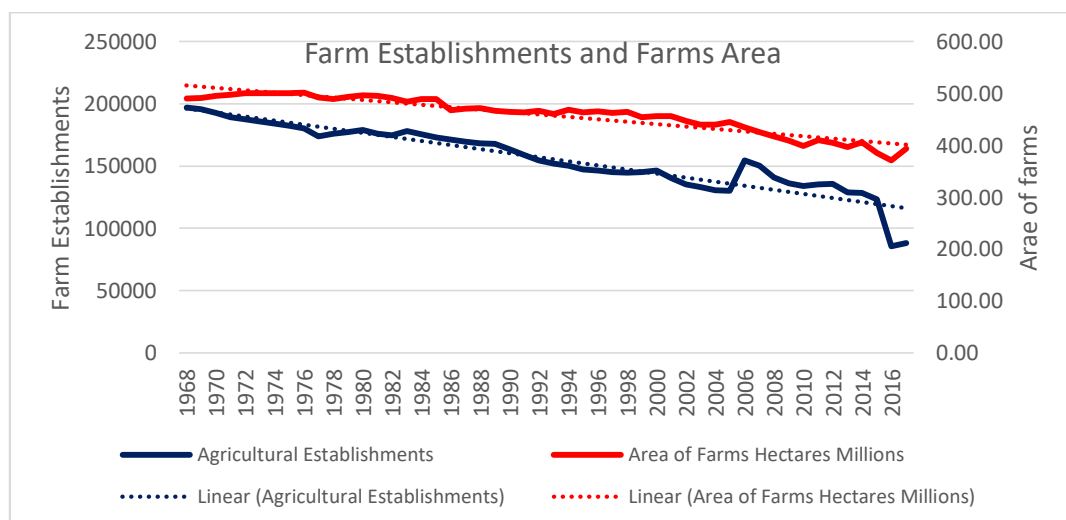
Given the implicit impact upon land prices in Queensland to environmental policy, it can be inferred that land prices across other regions identified in ABARES land value graph similarly responded. Another necessary ingredient to asset inflation would be a financial system in which banks fight over market share. Under inflating land values, debt to equity financing would appear to be supported by that “magic pudding”, economies of scale, rather than capacity to repay.

Despite the protracted Millennium Drought monetary policy supported by fiscal incentives maintained asset inflation across the rest of Australia curve until 2005-06; but, remains evident in all other considered regions until onset of the GFC over 2007-08. North west NSW continued to inflate until 2009 when the Millennium Drought finally broke. The two severely inflating Queensland regions recognised reality in 2008-09 (Northern Gulf); and, 2010 in (South West Queensland). The financial dislocation across both Queensland regions has been severe. Without the emergence of urban charities, rural dislocation would have reduced affected regional economies to resemble third world conditions.

Rural adjustment supported by expansionary monetary policy directed to asset inflation has been exposed as theoretical nonsense. Farmers who borrowed in good faith on rising asset values and relatively stable seasonal and financial conditions, found themselves exposed when seasonal or financial conditions beyond their control suddenly changed. The reluctance of major political parties and peak industry groups to understand policy limitations when circumstances change reflects badly upon rural representation. Rural adjustment should have been replaced with rural reconstruction; and, other fiscal policy instruments available under the Australian Constitution, to stabilise regions experiencing protracted dislocation.

10 Policy Pressure on Land Prices

Graph 14

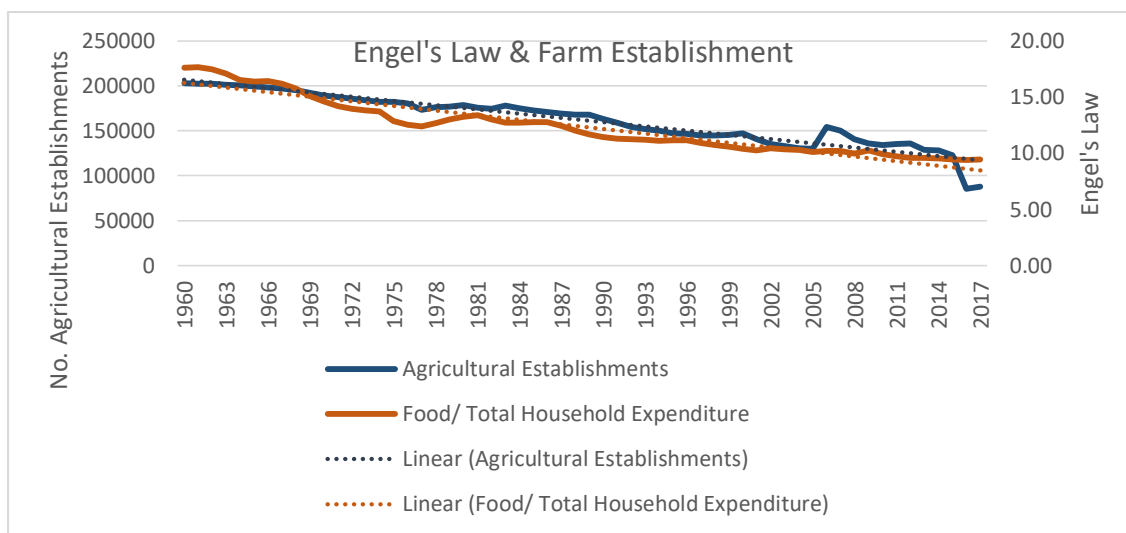


Compiled from ABARES commodity statistics 1997, Tables 22& 23; and 2018, Table 3.1

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The Law of Scarcity influence on land prices can be implied from decline in both farm establishments and land use over time. Farm establishment decline would be affected by amalgamations as the farm sector moves to capture economies of scale. Land use declines noticeably from 1985 onwards and gathers momentum beyond 2005 when all governments had committed to environmental and biodiversity policies achieved through national park programs and land clearing controls^{liv}. For example, in 1987 Victoria legislated for control of land clearing on private land. In 1997, NSW moved to control land clearing; and, moved to prevent broad scale land clearing in 2003 legislation. In 1999 Queensland introduced a permit system to control land clearing and moved to banning land clearing in 2004 legislation. The smaller states also had moved on environmental protection policies; S.A. 1991; W.A 1986; and Tasmania 2002.

Graph 15



Compiled from ABARES commodity statistics 2018; Tba1e3.1; and, ABARES commodity statistics, 1997, Table23

The long term erosion of rural sectors in advanced modern economies is another unrecognised factor affecting land prices. Engel's Law has a 0.91 correlation statistic or linear relationship with agricultural establishments. Whilst correlation does not prove causation, the value of the statistic cannot be ignored. The role of declining proportion of income being spent on food in Australia inevitably encouraged farm amalgamations as farmers sought economies of scale advantage through increasing operational size.

11 Policy induced Asset Inflation: A Theoretically Explanation

As modern quantity theory of money function is concerned with stability of the price level, the modern quantity theory disregards composition of the real sector. Consequently industry policy is abandoned and real sector short term policy becomes dependent upon the wealth variable (W) whilst long term influence is achieved through education and training to lift "h". i.e. ratio of human capital to non-human capital. The equation explained in terms of the demand for money is as follows:

$$M_d = f(W, r - 1/r \, dr/dt, 1/p \, dP/dt, h) P^{1/v}$$

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$M_s = M_d$ = money supply

M_d = Demand for money

r = rate of interest

W = wealth

h = ratio human to non-human wealth

P = price level

Wealth (W) becomes the important short term channel to effect the asset inflation strategy. Policy manipulation of (W) involves the Pigou effect which became important in post- World War II acceptance of monetarism^{lvi}. Pigou identified (W) as a policy “channel” to influence aggregate demand^{lvii}. Consequently, the relationship between the real quantity of money and aggregate demand became known as *the Pigou Effect*.

The Pigou Effect is highly theoretical; but, in simple terms breaks down to the concept that under flexible markets , as wages and prices fall throughout the economy, the value of the real money supply rises. Under flexible markets, rising real asset values or wealth are assumed to stimulate real sector aggregates. An alternative real world strategy to utilise the Pigou effect would be to allow the money supply to increase financial asset prices faster than wages and prices in the real sector. The Pigou Effect is predicated upon Say’s Law of Markets so herein lies conflict with the real sector which is responsive to Engle’s Law. Theory and reality describe very different market structures.

Structured fiscal policy becomes important to support expansionary monetary policy. Taxation incentives favourable to investment in financial asset are required. Expansion of the money supply then stimulates the demand for financial assets and increases the wealth effect (W) which then stimulates consumption, employment and growth. Taxation incentives to encourage borrowing for investment in urban housing and share markets is critical to asset inflation policy. Meanwhile, prices in the real sector are suppressed by setting the price of credit to dampen aggregate demand sufficient to maintain unemployment at the natural rate of unemployment.

The other necessary structural change to support monetarist asset inflation was the change in industrial relations system to manage wage movement effects upon real sector prices. In 1988, The Hawke Administration repealed the historic Conciliation and Arbitration Act and replaced it with the Industrial Relations Act^{lviii} to facilitate a new system of collective bargaining wage determination. In 1993, Prime Minister Keating introduced the Industrial Relations Reform Act which moved industrial relations determination from Section 51 (xxxvii) to Section 51 (xx) of the Australian Constitution^{lix}.

The 1993 Prime Minister Keating industrial relations reform introduced the concept of protected industrial action. The Howard Administration furthered this direction in protected industrial action in 1996 and 2005 Legislation. Protected industrial action requires unions to obtain court approval before taking strike action. The requirement to obtain court approval before industrial action could be taken was a major shift in industrial market power from labour to capital. The historic countervailing power of the strike weapon in the labour

market was effectively attenuated. Protected industrial action transformed the industrial system making it more favourable to the needs of the Pigou effect.

12 Originate to Distribute banking

The “Originate to Distribute” banking phenomena developed during the period of high interest rates under Federal Reserve Chairman Volker over the late 1970’s and early 1980’s. Unregulated financial institutions could offer higher market interest rates compared to the regulated banking market. Consequently, regulated traditional banking institutions found it difficult to compete for deposits with emerging unregulated money market institutions. Their response was to develop the “originate to distribute” model

The “Originate to Distribute” model functions by transferring the original mortgage to a special purpose vehicle (SPV) which then classifies the mortgage into classes of asset pools. The asset classes are then rated by recognised ratings agencies. Securities based upon these asset pools are subsequently sold into capital markets. The model presented several advantages to the banking sector. Reliance upon deposits for asset growth was considerably reduced whilst capital adequacy ratios became less of a burden.

The GFC alerted investor to scrutinise the quality of pooled mortgages upon which securitised assets were issued. Pools of mortgages found unsound were branded “toxic”. Capital market rejection of unsound lending practices that built poor quality securitised investment pools flowed back to impact upon the market value of underlying real assets – the farm. The entrenched practice of debt to equity rural lending became an issue. For the Australian rural sector, farm market values came under pressure as inflated land prices suddenly became recognised for what they were: overvalued. Consequently, market values of farm land fell, and, lenders became concerned over the capacity of farm income to service debt. Financial houses moved to protect rural portfolios, as devalued assets no longer matched liabilities ; and, solvency of enterprises came into question

12 Conclusions

13 Failure of Theory

Evidence presented in this discussion confirms that contemporary dislocation in regional economies is explainable in terms of failure of underlying economic philosophy. Policy has failed because political free market ideology inherent in both monetarism and neoclassical theory of markets dominates agricultural policy. The reality is that agriculture operates under imperfect markets. Regional population decline, falling living standards; and, protracted dependence upon urban charity has little to do with protracted drought; but, has everything to do with conflict between agricultural policy based upon theory and real world behaviour. Drought compounds failure of flawed applied theory

14 Failure of Supply Side Economics

Structural reform of the Australian economy was effected under principles of supply side economics. The composite model emerged under Thatcher in England and Reagan in the US. Seven principles underwrote Thatcherism's policy framework^{lx}:

1. Reduce Government involvement in wage determination
2. Amend legal position of trade unions
3. Increase denationalisation
4. No support for lame ducks
5. Enterprise to reap rewards of success
6. Abolish many administrative controls

These principles underwrote post 1983 structural reform of the Australian economy. For example, Hawkes move to collective bargaining in 1988. Keating's removal of wage determination from Section 51 (xxxv) to Section 51 (xx); and, court approved protected industrial action which attenuated industrial power of unions; and Howard's Work Choices industrial legislation which maintained protected industrial action.

When agricultural policy changed direction from rural reconstruction to rural adjustment in 1977, principles (4 & 5) structured the new policy direction. Translated to agricultural policy, principles (4) & (5) confine support to producers who can demonstrate long term viability. All other producers in distress are offered an income safety net administered by Centrelink. After four decades of policy adjusting farmers out of agriculture, the real world evidence of perverse policy outcomes is everywhere to be seen: population decline, an aged farmer cohort, narrowing industrial base, shortage of skilled labour, and crumbling social fabric supported by urban charities. Realisation that rural dislocation has been policy driven for four decades is not yet understood.

The two policy levers of supply side economics, marginal tax rate cuts; and, monetary policy to control inflation, look decidedly inadequate to address the level of dislocation now evident across rural Australia

15 Failure of Monetarism

As a philosophy, monetarism has nothing to recommend it. It had no answers to the Great Depression; and, similarly has no answers to the dislocation pervading modern agriculture. In 1984 when the financial sector was deregulated, Graph 1, shows that \$1 of debt supported \$ 2.57 of production. From then on, farm performance has been all downhill. In 2010, the low point was reached when \$1 of debt produced a miserly 64 cents in production.

The damning test is 2003-04 when \$1 of debt produced \$1 of production. From then until 2010, debt funded production deteriorated at an alarming rate. Yet no policy response was forthcoming whilst asset inflation in rural land prices emerged as a major problem particularly in two Queensland regions. Asset inflation as a policy, countenanced by industry leaders and politicians, finally collapsed following arrival of the GFC. The mathematical model explained previously reliant upon Government fiscal settings to encourage investment in assets had no answers. Instead, the independent central bank administering monetary policy to control prices in the real sector looked impotent.

The end result in rural Australia has been unprecedented financial crisis which became public in 2012. In October 2012, the Federal Treasurer; and, Federal Member for Kennedy jointly hosted an Australia Rural Finance Round Table Conference in Brisbane. Following that meeting, rural crisis meeting occurred from Merredin in WA, Colac in Victoria, to north western Queensland. At a 2014 rural crisis meeting at Winton Queensland, an urban charity first appeared on the Queensland rural crisis speaking program. Since then, urban charity has assumed all the trappings of a de facto policy arm of agricultural policy redistributing income from urban Australia to rural Australia.

16 Failure of Global Monetarism

The linchpin of global monetarism is the monetary theory of balance of payments which is predicated upon a floating exchange rate. The reality is in today's world there is no such thing as a truly floating exchange rate. Australia operates an "administered" exchange rate which requires the RBA to set the cash rate to ensure a sufficient capital inflow necessary to fund the chronic current account imbalance. Under a true floating exchange rate, the value of the currency would depreciate to adjust and correct the imbalance on the current account.

The exchange rate is the most important price in an economy as it influence the distribution of resources between the domestic and export sectors. Consequently, an exchange rate set to overcome external imbalance cannot achieve domestic balance, and, the converse holds true. Therefore, the central bank management of the economy generates inefficiencies across: distribution and allocation of resources, distribution of income, inefficient use of the labour force, and distorted domestic investment. Over the medium to long term, national living standards must decline along with erosion of the social fabric.

Management of the cash rate to influence a number of economic variables breaches established economic theory. The Tinbergen Rule that one policy instrument should target one policy objective is breached repeatedly as the RBA "manages" the economy to hold real sector prices within a 2%-3% target range

17 Final Thoughts

What is happening in rural Australia has not happened by some quirk of nature. It is the inevitable outcome of decades of agricultural policy predicated upon economic philosophies that do not reflect the real world. Protracted drought is not the cause of these outcomes; but, has compounded them. Consequently, rebuilding regional Australia will require a recognition that almost forty years of agricultural policy underwritten by supply side economics must change. Any new policy direction would be well advised to consider a different approach to past policy based upon "one shoe fits all".

Some thought should be given to structuring agricultural policy to reflect reality of a modern sector comprising different enterprise size, geography, importance to decentralisation, and health of regional economies. For example, environmental policy structured to pay small and medium sized farmers for provision of environmental services would be an obvious starting

point. This would bring Australian agricultural and environmental policy into a line with WTO Agreement on Agriculture provisions Annex 2 Section 12.

Another policy conflict is identified in Graphs 4 & 5. Agriculture's major contribution to GDP comes from domestic food production and consumption. Consequently, export dominant policy simply supports an overvalued exchange rate distorting resource allocation affecting domestic production, employment, domestic investment and consumption decisions.

A new direction for agricultural policy in modern Australia is long overdue. *There is a need to revisit the 1945 Full Employment White Paper and re-acquaint modern industry leaders and politicians with a broader and deeper knowledge of economic philosophy and what is possible under sensible economic management. For Agricultural policy, the relevant section should be the establishment of the Rural Reconstruction Commission and its purpose.*

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