

Rural Australia: Anatomy of Policy Failure

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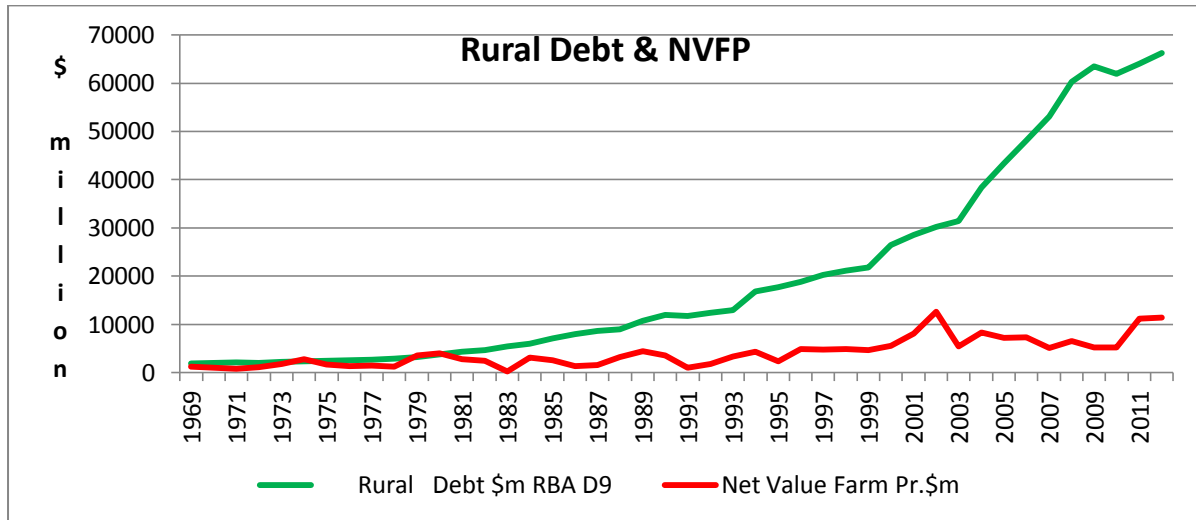
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Abstract



Across Australia, the GFC was the catalyst that exposed protracted long term policy failure. Physical characteristics of policy failure are: low commodity prices, low farm incomes, debt to equity finance, falling land values, bank foreclosures, despair and suicides. For each industry, there is a particular catalyst that triggered crisis. Widespread national drought has compounded underlying policy failure

This paper outlines the reasons why policy transformed a small farm low income problem of the 1960-70's to become a modern crisis of low income, large farm debt crisis. Implicitly, the submission raises concerns over the competence of rural leadership at all political levels. Publically available data was simply ignored as political ideology overrode sound economics. The GFC rudely exposed rural policy as little more than politically bastardised economics. A debt crisis of unprecedented levels now threatens the stability of rural Australia, its regions and communities.

Two steps are necessary in returning rural Australia to financial stability and profitability. The first step is financial stabilization through the Australian Reconstruction and Development Board. The second step must be a change in rural policy direction through this White Paper. Failure to understand that this review has to be about fundamental policy change rather than mere tweaking of existing policy will fail not only the rural sector but national food production

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1 Introduction

“The Committee is convinced that sound financial management skills are the key to a robust, competitive, profitable and flexible farm sector”

Rural Adjustment, Rural Debt and Rural Reconstruction

Dec. 1994, page xi

“the efficiency and competitiveness of inputs to the agricultural value chain- such as skills, training, education and human capital.”

Terms of Reference/ Agricultural Competitiveness White paper

There is a hint of similarity in the Terms of Reference of the proposed White paper and the findings of the 1994 Senate Report. The inference contained in both quotations is that there exists possible failure of one of the main assumptions of a purely competitive market, perfect knowledge,. Theoretically, then the White paper hopes that addressing this troublesome assumption will solve the fundamental policy problem. This leaves policy to remove structural impediments and tweaking existing policy to “sharpen” competitiveness and lift farm profitability. All admirable goals; but, in reality, little more chance of success than the 1994 senate Inquiry into the debt build up post financial deregulation 1983.

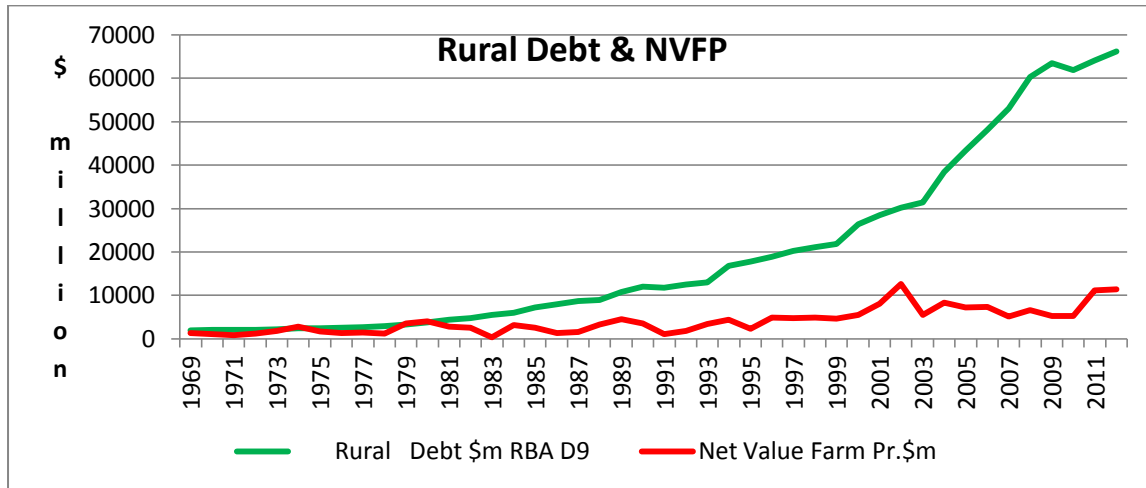
It will be a pity if this opportunity to address policy failure is squandered by theoretical tweaking of policy. What is needed is a new direction for Australian farm policy. The level of debt now at crisis point amongst the large farm group is a clear signal that past policy has failed. It failed because an important assumption that underlies structural adjustment and total factor productivity theory falsely views agriculture as operating under constant returns to scale. Combined with a supply and demand theory that assumes supply creates demand; and, that all markets clear at a price that contains a normal profit, Australian rural policy has been more about ideology than practical policy for the real world

After four decades of “one shoe fits all”, agricultural policy has produced a two tiered farm sector in which twenty percent of farmers produce eighty percent of production whilst the remaining eighty percent of farmers remain small scale survivors not recognized as seriously contributing to national food production. This in itself is sufficient evidence to argue the failure of Australian agricultural policy.

National food provision and sustainability are now heavily dependent upon the top twenty percent of farmers. This makes the contemporary financial crisis that now threatens the twenty percent of large industrialized farmers far more important than ideological tweaking of existing policy. There is a need to go back to Economic 101, and understand the profit motive in business. Pay a decent price for farmer’s time, effort and return on capital and food production becomes, profitable and sustainable ensuring the futures of rural and regional communities.

2 Long Term Policy Failure

Graph 1



Compiled from: NVFP, ABARES Commodity Statistics 2012

Rural Debt RBA Statistics online Table D9

Graph 1 graphically encapsulates the nature and composition of long term policy failure characterized now as a rural debt crisis. NVFP which is an approximation for net farm income excluding depreciation has basically flat lined since 1969. Rural debt rises steadily to 1993; but then, appears to develop a life of its own. The only explanation of the rapid divergence between debt and NVFP curves is debt to equity lending under a macroeconomic policy of asset inflation. Empirical evidence demonstrates that NVFP could never repay rural debt; but, that is exactly what is being demanded of farmers as post GFC bankers seek to rebalance portfolios. The GFC has rudely exposed long term policy failure

The genesis of policy failure lies in the response to the small farm low income problem that began to emerge in Australia over the late 1960's. In 1968, the Commonwealth Government announced a plan to promote farm amalgamation to consolidate small dairy farms. Financial assistance would be provided to those that would choose to leave dairying¹. Several changes to the nature and structure of the original policy announcement in 1968 have occurred in response to changing circumstances.

Long term rural policy failure did not just happen. At the centre of policy formulation lies entrenched neoclassical economic philosophy. For the purpose of advising governments on policy, legislation was passed in 1974 to create the Industries Assistance Commission complete with the neoclassical model Orani. Neoclassical economic modelling and projected policy advice has continued right down to its modern counterpart the Productivity Commission. The supply and demand theory of neoclassical economic modelling is Say's Law of Markets which assumes agriculture operates in a purely competitive economy in which all markets clear. Policy failure follows from underlying assumptions of neoclassical economic theory:

“Our criticism of the accepted classical theory of economics has consisted not so much in finding logical flaws in its analysis as in pointing out that its tacit assumptions are seldom or never satisfied, with the result that it cannot solve economic problems of the actual world”

J.M.Keynesⁱⁱ

It will be argued here that Keynes' 1936 criticism of the classical economics is just as applicable to the neoclassical successor. Another particular assumption of concern in structural adjustment is constant returns to scale in rural production.

3 Institutionalization of Neoclassical Economics

“The Australian low farm income problem first appears to have been seriously recognised in McKay's Paper”ⁱⁱⁱ as far back as 1967. McKay was then the Director of the Bureau of Agricultural Economics. By the early 1970's agricultural policy had become a political issue. In 1973, Prime Minister Whitlam sought to expand the powers of the then Tariff Board to create an Industries Assistance Commission which would be expected to advise on agricultural policy^{iv}. Sir John Crawford was invited to advise on the functions, structure, membership and procedures of the proposed institution. In December 1973, the Industries Assistance Commission Act was passed.

Guidelines for the Industries Assistance Commission stressed resource allocation, adjustment to change, and integration of assistance measures with overall government policy. Policy approach by the IAC was conservative economics favouring free market efficiency and minimum government intervention^v. Since its inception IAC has been restructured several times; and, today is known as the Productivity Commission.

Over 1970-72, Evans developed the first general equilibrium model of the Australian economy^{vi}. His work became the forerunner of the IMPACT model. In 1975, the IMPACT Project was initiated to provide analytical advice on implications of social and economic change as well as policies. The project was initiated by the IAC; but, included a number of other departments^{vii}: Departments of Industry Commerce, Employment and Industrial relations, Environment Housing and Community Development, and Australian Bureau of Statistics. The Project structure comprised two models for analysis of both medium and future time horizons. The medium term module MACRO consisted of an annual general equilibrium model ORANI; and, a longer- term demographic model BACHEROO. The MACRO medium term model was structured to link sequences of annual projections. The purpose of the long term model, SNAPSHOT, was to provide analytical information on the economy at some arbitrary future point in time.

Provision of the IAC and other government departments with neoclassical general equilibrium models institutionalised market theory as the analytical basis of Australian policy analysis and development. A market clearing assumption within neoclassical general equilibrium models reinstates Say's Law of Markets as supply and demand theory. Under Say' Law, supply creates demand. This assumes away deficiency of demand under flexible markets. Competition, efficiency and productivity become key industry policy objectives.

4 Policy: Direction and Strategy

Historically, rural adjustment policy dates back to latter stages of the Great Depression. In 1935, the Commonwealth adopted a debt reconstruction scheme^{viii}. Very different economic circumstances pertained in the early 1970's when debt reconstruction was adopted to address a contemporary small farm low income problem emerging across the dairy, wool, wheat and fruit growing industries^{ix}.

Policy response to the low farm income problem of the early 1970's sought to address farm viability. Neoclassical theory required a policy direction of farm build up to capitalize on economies of scale. This was expected to lift efficiency and raise enterprise productivity. Policy strategy was directed towards adjusting small inefficient farmers out of the industry through farm amalgamation. Applied policy supported farm build up through a system of rural adjustment.

Whilst theoretical failings of rural policy are discussed in companion papers, it is suffice to say here that the theoretical weaknesses in rural policy lie in underlying assumptions of orthodox economic i.e neoclassical theory of the markets. As neoclassical models used in policy development do not reflect the behaviour of the real world, they have proven incapable of explaining the real world outcomes of the policy of farm build up accruing an ever increasing debt burden. Furthermore, economic models could not project post 1983 consequences of competitive banks chasing market share that led to debt to equity lending on a large scale.

The weakness and accompanying danger in debt to equity finance was identified in the 1994 Senate Inquiry into Rural Adjustment, Rural Debt and rural reconstruction. In conclusions on page 99, the Inquiry identified that banks were chasing market share; and, were lending on debt to equity terms. Debt to equity lending assumes unrealistically that asset prices will continue rising indefinitely.

The Inquiry also found that risk margins being charged on such loans produced actual interest rates in the order of 30%. Despite these 1994 findings of flaws in applied policy, farm policy was not adjusted; but, continued on assuming farm build up would deliver economies of scale, increased efficiency and ever rising productivity. This confusion of productivity with profitability is consistent with Say's Law of Markets that assumes supply creates demand and that a market clearing price contains a normal profit. Real world experience has proven that assumption invalid in the real world.

Across Australia, the GFC was the catalyst that exposed the weaknesses of theory that led to policy failure. Financial dislocation from the GFC flowed back to real assets upon which farm mortgages had been raised. As debt to equity lending by banks depended on asset inflation, the GFC brought asset inflation to an abrupt end. Suddenly, farmers were asked to repay loans from income. The difficulty was that debt to equity lending had never been designed to be repaid from incomes. Consequently, overvalued financial assets of banks were written down to more realistic market levels. The effect of falling bank asset prices flowed back to farm valuations land undermined the solvency of farmers who had borrowed in the halcyon days of debt to equity lending and ever rising land values.

Physical characteristics of protracted rural policy failure are: low commodity prices, low farm incomes, debt to equity finance, falling land values, bank foreclosures, despair and suicides. For each industry, there is a particular catalyst that triggered crisis.

- Northern cattlemen: closure live cattle export market.
- Wheat industry: post GFC falling land values eroding credit worthiness
- Dairy: monopoly power in retailing forcing down farm gate prices
- Horticulture: low commodity prices, cheap imports, and contracting processing sector

Wide spread national drought has compounded the underlying problem of long term policy failure. More recently, the high value of the \$AUD has been unhelpful to all export industries. Rural Australia has been no exception.

5 Failure of Central Assumption: Constant Returns to Scale

Table 1

Political Administrations

Year	Administration
1968-71,	Gorton (Coalition)
71-72	McMahon (Coalition)
1972-75	Whitlam (Labor)
1975-83	Fraser (Coalition)
1983-91	Hawke (Labor)
1991-96	Keating (Labor)
1996-2007	Howard (Coalition)
2007-10	Rudd (Labor)
2010-2013	Gillard (Labor)
2013-2013	Rudd (Labor)
2013	Abbott (Coalition)

The small farm low income problem of the 1960's-1970's was a worldwide phenomenon in mature economies and produced a number of applied solutions ranging from direct government assistance by other advanced economies to Australia's structural reform programs. Australia sought to build a prosperous farming sector through farm amalgamation, economies of scale, and international competitiveness. In neoclassical theory there are three types of economies of scale which describe how output responds in the long term to a proportional increase in inputs:

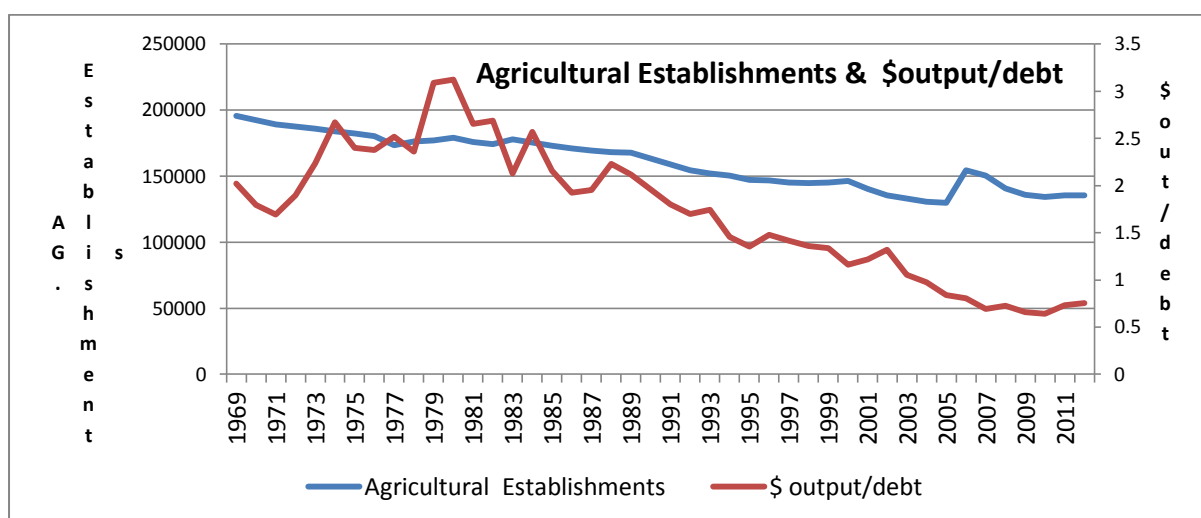
- Increasing returns to scale
- Decreasing returns to scale

- Constant returns to scale

If a proportional increase in inputs expands output by more than the proportional increase in inputs, then returns to scale are increasing. However, if the proportional increase in output is less than the proportional increase in inputs, then returns to scale are decreasing. Should output increase by the same proportion as the increase in inputs, then returns to scale are said to be constant. For Australia's farm build up solution to be successful in overcoming the small farm low income problem, economies of scale had to be either increasing or constant returns to scale.

It is the failure of successive Governments, their advisors, academics and Agricultural departments to understand the correct returns to scale applicable to agriculture that underwrites the implosion of structural adjustment. The failure of financial houses to understand the correct returns to scale in agriculture explains the massive build up in debt amongst the contemporary large farm group.

Graph 2



Compiled ABARES 2013, Table 21,

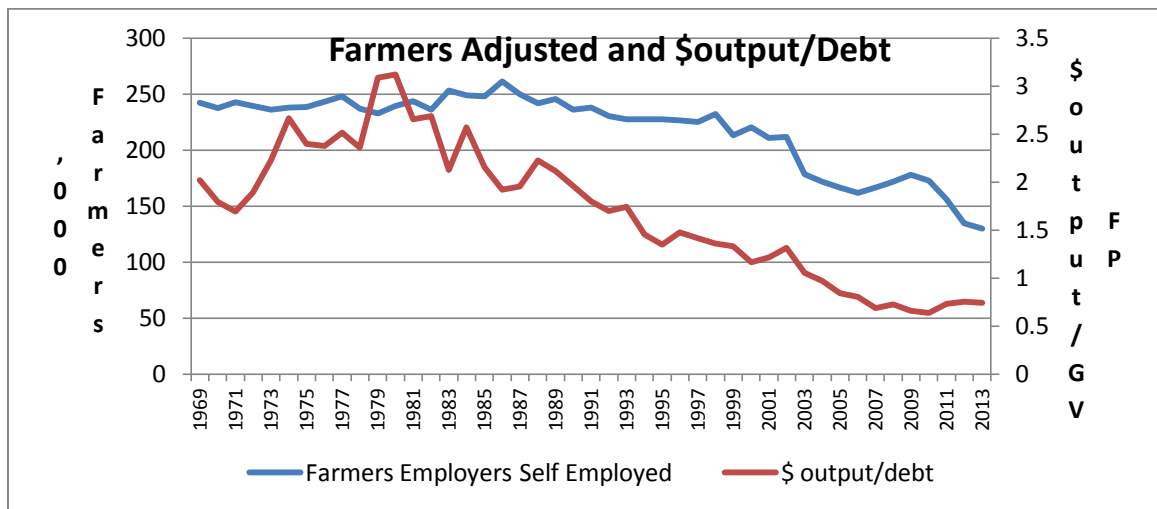
Rural Debt RBA Statistics online Table D9

Graph 2 demonstrates that the dollar value of output supported by debt declines as the number of farm establishments contract. This suggests an industry facing imperfect markets; and, farm businesses operating under decreasing returns to scale. Decreasing returns to scale imply that an optimum production level will be reached beyond which profit levels decline until continued production generates losses. It follows that rural adjustment policy under a deregulated industry structure, could never be successful over the long term under decreasing returns to scale and the withdrawal of government intervention. For policy direction to remain unchanged for over four decades reflects badly upon the competence of rural political representation at all levels.

The next graph shows empirically the same policy outcome from the perspective of farmers leaving the industry. Contraction of farmer numbers appears to have produced a perverse policy outcome. Again, from the curves, decreasing returns to scale are evident over the

long term. Both graphs of adjusted establishments and farmer numbers provide the same consistent picture of policy failure

Graph 3

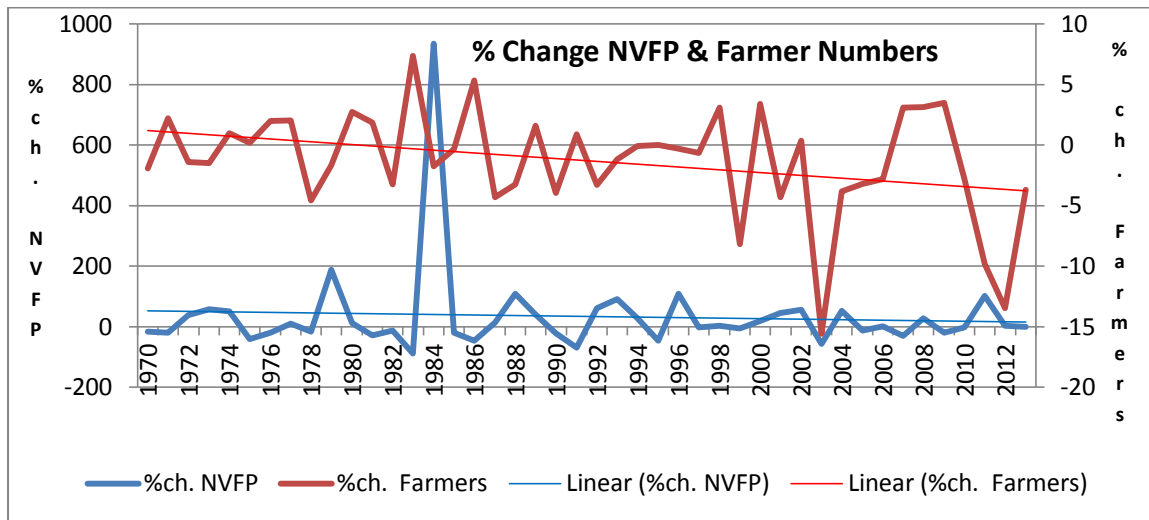


Compiled from ABARES Commodity Statistics 2013, Table 21; and RBA online Rural Debt Table D9

Both Graphs 2 and Graph 3 confirm that rural adjustment policy produced a perverse policy outcome. In 1986 farmer numbers had peaked at 261,300; but, by 2013 farmer numbers had contracted to 130,000. In percentage terms, between 1986 and 2013, 61.2% of 1986 farmer numbers had exited the industry. Between 1986 and 2013 the annual wastage of farmer numbers averaged 2.6% compound. The heaviest farmer wastage years were under the Howard Administration which shows an annual 2.8% compound farmer loss.

As rural adjustment was financed by debt, the other side of the adjustment equation is the level of output supported by each dollar borrowed. \$output/debt peaked in 1980 when each dollar borrowed supported \$3.12 of production. The lowest value of output supported by each dollar borrowed bottomed in 2010 at 64^c. That collapse in \$output/debt represents a 452.2% contraction in agricultural production supported by each dollar borrowed. Annually, this breaks down to a 4.7% annual compound contraction in production per dollar borrowed. Some meagre recovery had emerged by 2013 when \$out/debt had increased to 74^c

Graph 4



Compiled from ABAREs commodity statistics 2013, Tables 13, and 21

Graph 4 illustrates the long term rates of change in both farmer numbers and the NVFP. The long term trend lines show the comparative failure of farm policy to deliver rising profitability. Whilst the rate of change in farmer numbers leaving the sector is highly volatile, farmers leaving the sector decline over time. However, the periods of heavy farmer loss can be clearly identified against Administrations.

The NVFP rate of change trend line also declines. This is contrary to policy expectations that a program of structured adjustment of small farmers out of the industry would raise both efficiency and productivity; and hence, farm profitability. The curves suggest both productivity and efficiency failed to respond as theory and policy anticipated. The curves though are not inconsistent with a sector operating under decreasing returns to scale. Rural adjustment it appears pursued neoclassical theory models and chose to ignore real world policy outcomes.

6 Productivity

The definition of productivity used as the refuge of policy makers, their advisors, and peak agricultural bodies is Total Factor Productivity. Total Factor Productivity is in itself a questionable concept. It is underwritten by a 1920's neoclassical growth model known as a Cobb-Douglas or a Cobb–Douglas type production function. The model assumes growth is derived from population increases, technological change, and constant returns to scale. Official policy then is directed confidently towards encouraging farm amalgamation and research and development to ensure continued productivity, growth, and prosperity in agriculture.

As the growth model assumes constant returns to scale, if inputs are doubled, output doubles. Inherent in the Cobb-Douglas type production function is a supply and demand theory: Say's Law of Markets i.e. supply creates demand. So given supply creates demand, and constant returns to scale, productivity and competitiveness become the only important barriers to a profitable agricultural sector. Under Say's law of markets, as supply creates demand, productivity and profitability become interchangeable terms.

The real world difficulty for neoclassical policy based upon Say' Law of Markets is another unrecognized phenomenon: Engel's Law discussed in Section 11 below.

Keynes had this to say about Say's Law of Markets or supply creates demand:

"the conclusion that costs of output are always covered in aggregate by the sale proceeds---- has great plausibility", but, "is confused with another, indubitable similar looking proposition that the income derived in aggregate by all the elements in the community concerned in a productive capacity has a value exactly equal to the value of the output"^x

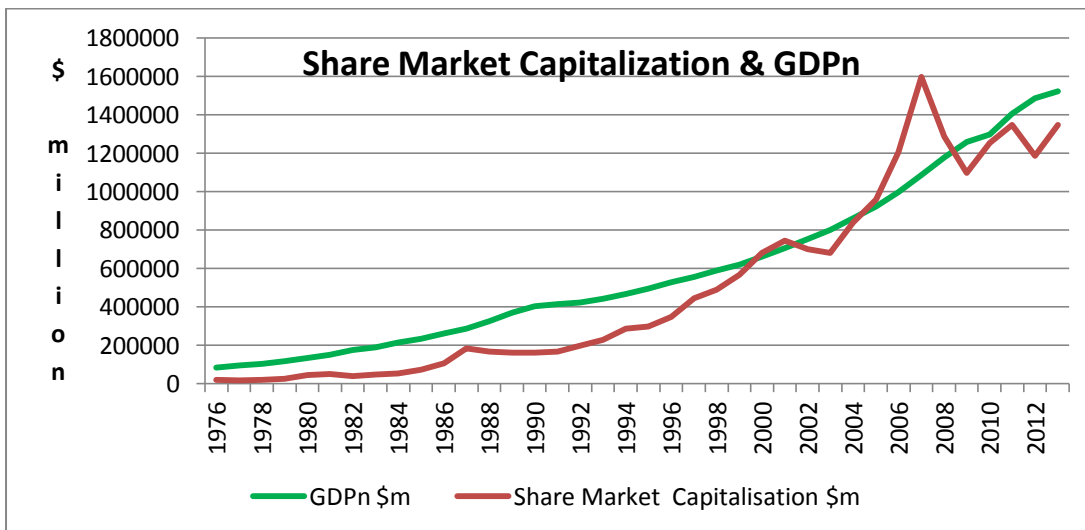
7 Debt to Equity Lending

"There is little doubt that following deregulation in 1983-84 the banks, in pursuit of market share in the face of heightened competition, made loans based on security levels offered by existing equity but without sufficient regard to the capacity of clients to repay".

Senate Inquiry 1994^{xi}

Though recognized in the 1994 Senate Inquiry, It is surprising that major political parties and agro political organizations did not recognize behaviour of banks fighting for market share was a policy problem. Evidence presented in this submission demonstrates debt to equity lending continued; and indeed, gathered momentum from 1999 onwards. The only improvement in NFVP coincides with the implementation of the GST over 2001-02. The GFC brought debt to equity lending to an abrupt halt; and, that has created the need to review policy and restructure debt.

Graph 5



Share market capitalization Compiled from RBA Statistics Bulletins and online Table F7

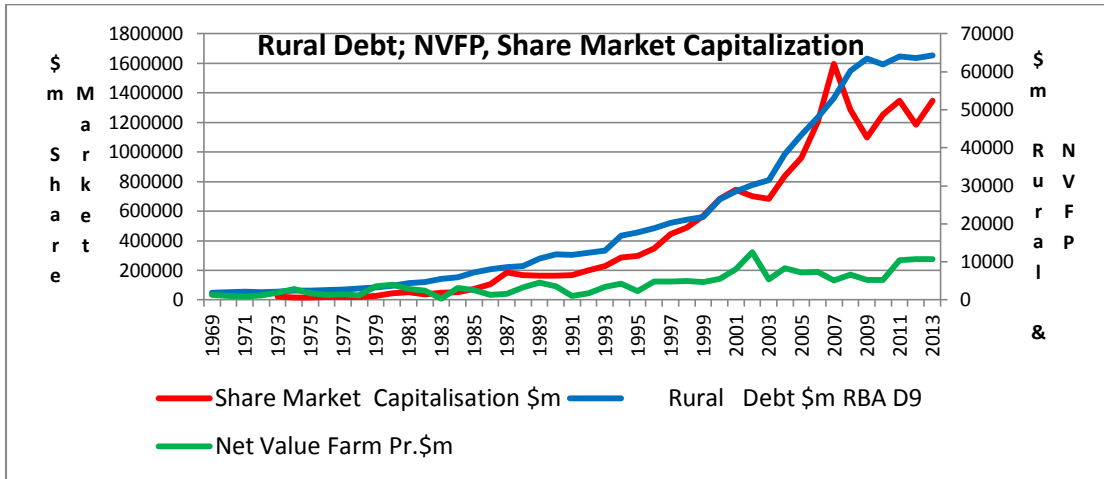
GDP from ABARES commodity statistics 2013 Table 1

Western economies used asset inflation to recover from the economic dislocation of the 1980's. In economic literature of the time, a macroeconomic policy direction of asset inflation is referred to as "financialization of households"^{xii}. The objective behind this policy strategy is to stimulate economic recovery through consumption expenditure. Theoretically

discretionary policy increases household wealth through asset inflation. The implicit assumption is that rising wealth encourages households to finance consumption through debt. That policy strategy came unstuck badly when the GFC emerged in 2008.

Between 2008 and 2013 the Commonwealth Government allocated \$20 billion dollars to support the residential mortgage backed securities market worth \$45 billion. Financialization of households proved a very costly policy direction. The question that Government needs to answer is: why not support similarly securitization failure in rural debt?

Graph 6



Compiled from: ABARES commodity statistics 2013, Table 13 Farm Returns,

RBA Statistics online, Rural Debt Table D9, Table

Share market capitalization, RBA Statistical Bulletins; and online, Table F7

Graph 6 shows a definite disengagement between rural debt and NVFP as early as 1983. From 1983 onwards, there emerges a strengthening relationship with asset price movements in the wider economy as represented by the share market capitalization curve. By the early 1990's, rural debt shows no relationship to NVFP or capacity to repay debt from income. Rising asset inflation appears to be the only reasonable explanation underwriting the level of rural lending.

The changing relationship between GDP and share market capitalization curves shown above suggests Australia was an enthusiastic member of the asset inflation club. The significance of a discretionary policy of asset inflation pursued in an economy implicitly accepts that neoclassical market models do not hold in the real world. The policy admits that the real world does not comply with a central tenet of purely competitive markets: perfect knowledge. If perfect knowledge was universal, asset inflation could never occur as every economic unit would know that the end game is the bursting of the asset bubble. Yet, asset inflation was used knowingly to underwrite rural structural adjustment. To now argue that government has no responsibility with the end result of such discretionary policy is an abuse of the moral question in economics

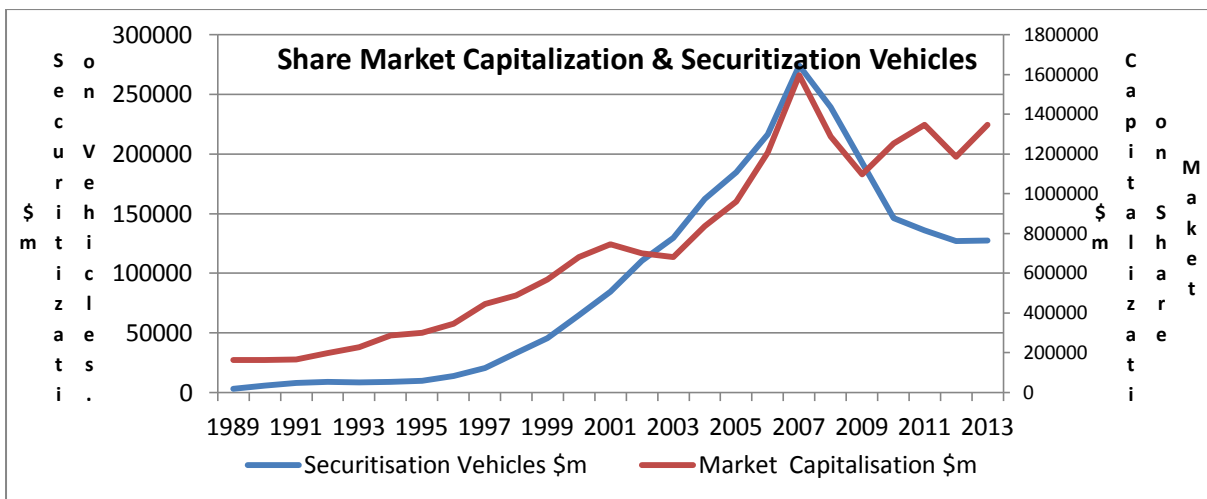
8 Originate to Distribute Banking: Securitisation^{xiii}

The high inflation era of the 1970’s changed the traditional banking model of originate and hold to something very different. Foremost in the development of the new banking model was the US Federal Reserve Chairman Volker and US inflation over rates the late 1970’s and early 1980’s. At that time, unregulated financial institutions could offer higher market interest rates than the regulated banking sector. Consequently, regulated traditional banking institutions found it difficult to compete for deposits with emerging unregulated money market institutions. The bank’s response was to develop the “originate to distribute” model. Originate to distribute banking captured the international banking system by storm .Abuse of this model led to the GFC and international financial dislocation of a magnitude not seen since the Great Depression.

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.

A macroeconomic growth policy of asset inflation was a friendly environment for originate to distribute banking. Whilst ever government policy promoted “financialization of households”, debt to equity basis made sound business sense. Rising asset prices were not constrained to urban housing markets. Rural land prices rose in sympathy. Under a decade of collapsed commodity prices, debt to equity lending made possible the funding of rural policy based upon farm amalgamation and economies of scale. Graph 8 illustrates this point as the issue

Graph 8



Farm Debt: RBA Table D9, online and Securitisation: RBA Table B19. Online

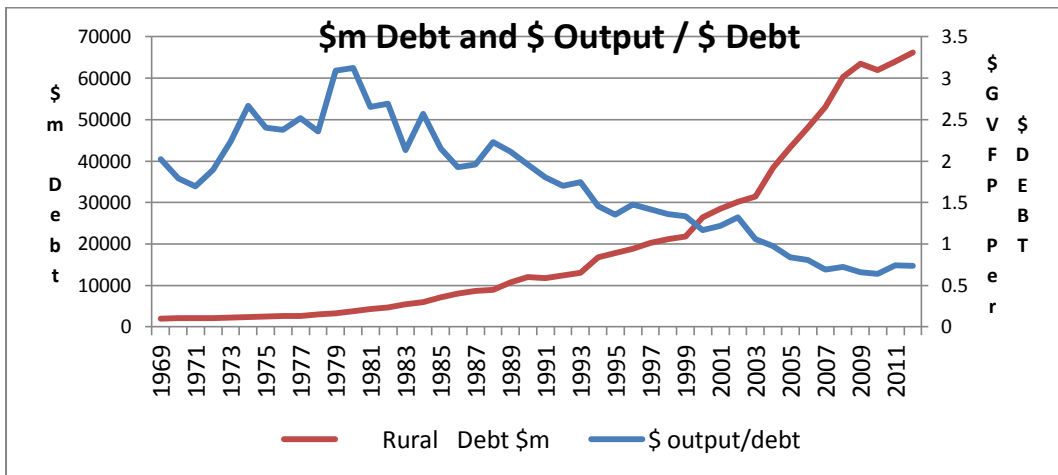
The rapidly expanding application of originate to distribute banking in Australian rural finance can be inferred from the curvilinear relationship in Graph 8. When the GFC brought an end to debt to equity lending over 2007-08, commodity prices had just returned to the real prices levels of 1989. This meant that the farm sector was facing repayment of debt to equity

liabilities based upon real incomes with the purchasing power of 1989. Bank foreclosures and insolvencies became inevitable as banks moved to protect their portfolios.

The difficult head wind that made “originate to distribute” banking falter was about confidence of investors in the quality of underlying asset pools. Any asset class that struggled to maintain service commitments ceased to be attractive. Such asset classes became viewed as “toxic”. Financier lending standards to such groups of borrowers became the issue. Lack of capital market investor interest in securitised assets structured on unsound lending standards flowed back to impact upon the market value of underlying real assets – the farm. Given the relationship between the Debt and NVFP curves, it can be inferred that rural lending practices were under pressure from 2008 onwards. Simultaneously, the GFC exposed the weakness of both debt to equity lending; and, macroeconomic growth policy structured upon asset inflation.

In Australia today, the questionable assets are farm mortgages subjected to erosion of farm valuations, unsustainable debt levels, and inadequate income flows. There appears to be some wishful thinking on the part of politicians and central bankers that a post GFC re-run of asset inflation will reflate the economy. Speculators trading financial instruments are expected to re-generate the financialization of households stimulating consumption expenditure, investment, and job creation. The reality of contemporary policy settings of growth through asset inflation is not flowing to rural households. Farm foreclosures, insolvencies and rural suicides are proof that this model cannot provide a way forward for rural Australia.

Graph 9



Compiled from ABARES Commodity Statistics 2012 and RBA online Rural Debt Table D9

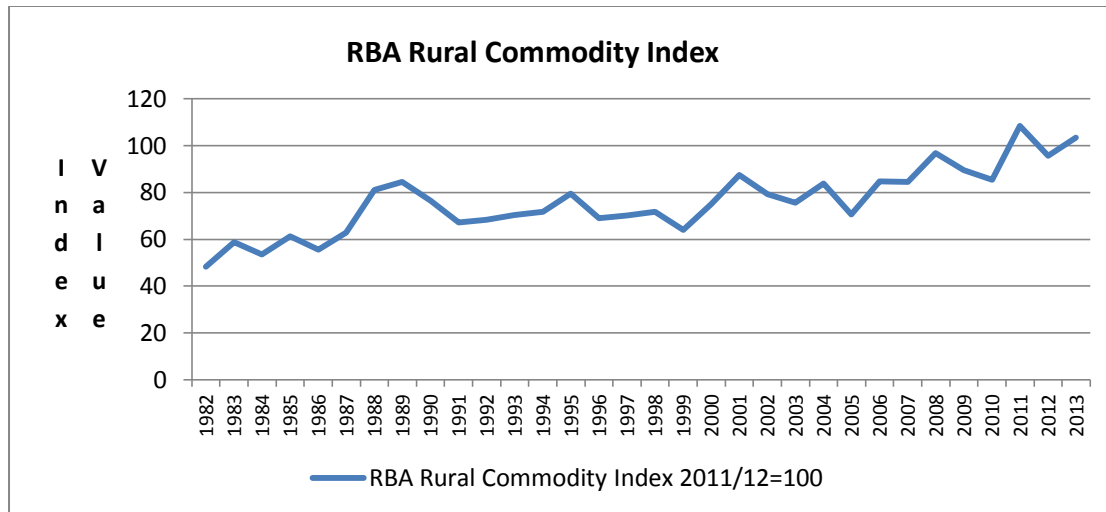
Graph 9 provides the picture of policy failure from the financial sector perspective. Output per dollar of debt peaked in 1980 at \$3.12. From then \$output/debt curve begins a long steady decline. Significantly, by 2003-04, equilibrium between debt and output is reached where each dollar borrowed supports one dollar of output yet policy direction does not recognise the ramification for policy.

By 2010, \$output/debt had fallen to 64^c. No level of agricultural political representation appears to have understood that Australian agriculture could not remain viable if it continued

to borrow to meet the demands of an unrealistic rural policy direction. Failure of the debt financed structural reform to lift farm profitability is again consistent with failed economies of scale modelling that did not reflect the real world of agricultural production.

9 Erosion of Farm Profitability

Graph 10



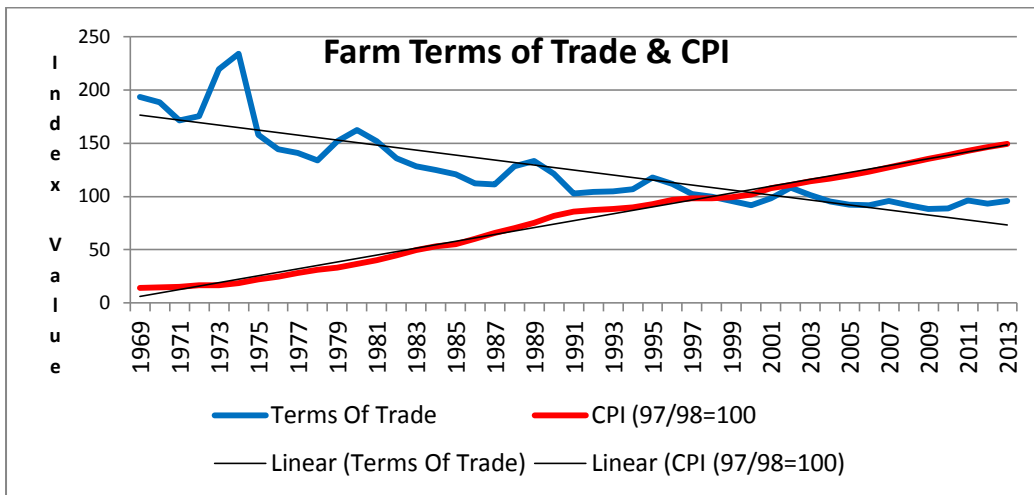
Compiled from RBA Statistical Tables online Table G5

From Graph 10, financial dislocation that beset rural Australia can be traced out in part by the movement of the rural commodity index curve. The RBA Commodity Index had been steadily rising from the early 1980's to peak at 86.1 in November 1989. By February 1991, commodity prices had fallen to an index value of 59.9 before rebuilding. This was a 30.4% contraction in rural commodity prices. It would be February 2001, before rural commodity prices regained the level of 1989. Consequently, rural Australia was in severe recession for over a decade.

At the same time as commodity prices were collapsing, number of market orientated policy decisions were implemented that affected two major rural industries: wheat and wool. In 1989, orderly marketing of wheat ceased. In 1993, the Reserve Price Scheme for wool was terminated. Internationally, the Sino Soviet Union collapsed affecting the international markets for Australian commodity prices^{xiv}. Between 1989 and 1993, the auction price for greasy wool fell from 647.3^c to 313.5^c. The unit value of wheat fell from \$212 a tonne in 1989 to \$132 a tonne in 1993. Meat was not affected until later in the 1990's ;but, the averaged live weight weighted saleyard price for beef fell from a peak of 222.6^c a kilo in 1994 to 138.9^c in January 1997. Whilst broadacre agriculture was facing severe market dislocation, political enthusiasm for market economic theory remained unabated.

Other policy decisions affecting agriculture were made in Prime Minister Hawke's March 1991 Industry Statement. He undertook to reduce remaining agricultural assistance in line with the reduction in tariffs for manufacturing. By the mid 1990's, the pork industry was in trouble with Canadian imports of processed pork. Prime Minister Keating commissioned the Hilmer Report on Competition Policy. This report was handed down in 1993; but, removing orderly marketing for dairy and poultry were left to the Howard Administration to implement.

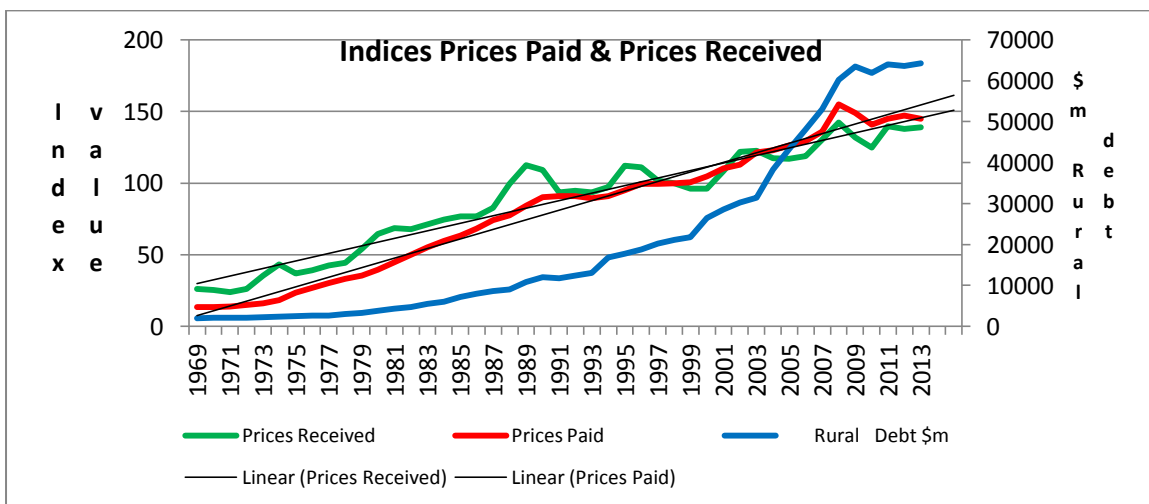
Graph 11



Compiled from ABARES commodity statistics 2013, Table 13

Farm terms of trade and CPI curves tell the story of policy failure. In the early 1970's when the policy decision was taken to restructure the farm sector to exploit economies of scale, Farm terms of Trade had a value of 219.9 in 1973. When the commodity price collapse began in 1989, Farm terms of Trade had fallen to 133.2. When the GFC occurred in 2007-08, farm terms of Trade was 91.7. A marginal improvement is evident in 2013 with the farm terms of Trade rising to 91.8. Given the long term oscillations around the trend line, the marginal improvement would be expected to be short lived

Graph 12



Compiled from ABARES Commodity Statistics 2013 Table 13 ;and RBA online Table D9

What is evident from Graph 12 is the changed relationship between output prices and input prices that occurred over 1989-91. This was the period when commodity prices collapsed. Post 1989-91, the indices remain closely aligned; but, by 2002-03, costs rise more rapidly than outprices. The new relationship between the curves becomes the norm yet bank lending to the rural sector takes on a new upward dimension from 2004 onwards.

The phenomenon demonstrated in both Graphs 11 and 12 suggests mal-distribution of market power working against rural Australia. Rural policy post 1983 sought to increase competitiveness of the farming sector. This implies a policy direction that ensured Australian agriculture more closely represented a purely competitive market structure. Certain characteristics are required to ensure a purely competitive market^{xv} :

- A large number of buyers and sellers which ensures no one firm or buyer can unduly influence the market determined price
- Product homogeneity requires the sellers to produce a homogeneous product which by definition excludes product differentiation
- Free entry and exit of firms excludes the dominance of large producers that could be in a position to influence price.
- Profit maximization confines production to a single focus of maximizing profit
- No government intervention in the market in the forms of tariffs, subsidies, quotas or prohibitions on production

Should any one or more of these assumptions be breached, no purely competitive market can be assumed to exist.

Brought into a framework of market structure, policy failure of post 1983 structural reforms of agriculture are theoretically explainable. Whilst the farm sector was restructured to closely resemble a purely competitive market, successive governments failed to address monopoly power exercised in input and output markets for rural production. Failure of policy to pursue purely competitive structural reform in the non agricultural sectors meant that the Australian economy was not a purely competitive economy. Consequently, the rural sector was placed in an economically invidious position. Providers of agricultural inputs and buyers of farm production remained able to exercise monopoly pricing power in setting prices whilst the purely farm sector had no option but to buy inputs and sell output in monopoly powered markets.

This alchemist policy mix inevitably contributed to the erosion of profitability in the farm sector. It can be explained only in terms of “political bastardization” of economics. Implicitly, the “bastardization” of economics meant that expanding farm production must be debt dependent rather income driven. Inevitably a debt crisis had been structured within policy settings. It was just a matter of time and circumstances for rural Australia to implode from debt. There have been two recognized debt crises since 1983 structural reform of agriculture: Senate Inquiry 1994 and the GFC. Policy comes down to either bad economics, or political exploitation of a sector.

Concentration of ownership and control in non-agricultural markets is neither well documented nor well understood. Information is scarce and difficult to obtain. However, increased market power in the retail sector is widely understood. In the late 1970's, market share dominance was distributed among three large retailing outlets^{xvi};

- Foodland warehouses, 23.5%
- Woolworths, 18.6%
- Coles; 17.5%

Coles and Woolworth market share in 1977 was 36.1%. It is now widely accepted to be in the order of 80%. Market structure of Australian retail has changed from an oligopolistic one in the late 1970's to what is now a virtual duopoly. Duopoly power in the retail sector has significant ramifications for the other three levels of the food chain: farm production, manufacturing and consumption. For example, the duopoly is in a position to bestow patronage through choice of suppliers; and, expect the chosen suppliers to jump to the tune of the duopoly. In the end choice for consumers comes down to the products the duopoly decides to place on their shelves.

Duopolies lead to undesirable corporate behaviour. For example they can engage in predatory pricing. The \$1 milk fiasco is a classic example of undesirable behaviour by powerful retailers. The ACCC seems either unwilling or unable to intervene in market behaviour by the retail giants. Perhaps, the Senate Economics Reference Committee should re-visit its 2004 Report on The Effectiveness of the Trade Practices Act, 1974, in protecting small business especially Recommendation 12 Divestiture. Divestiture was rejected by the Government on the curious grounds of the Dawson Report that highly concentrated markets can be competitive.

The question implied here is in whose interest does a highly concentrated market operate?

- Self interest of the firm and shareholders
- Self interest of consumers
- Self interest of suppliers
- National interest?

If the answer is consumers, then the answer implies consumer sovereignty is sacrosanct. In economic theory certain conditions are required for consumer sovereignty to be sacrosanct. For example, resources must be allocated efficiently. This requires a perfectly competitive market and the following conditions^{xvii}

- Output is produced at minimum feasible costs
- Consumers pay minimal costs which covers the marginal cost of the product
- Plants operate at full capacity
- Firms earn only normal profit

If these conditions are all present, then further conditions still remain:

- Consumer sovereignty expressed by the price system correctly reflects preference ranking of consumers
- There are no un-exhausted economies of scale in any one industry
- For a given resource allocation and technology, there is no growth or change in technology

Any market that displays a level of monopoly power does not meet any of the conditions necessary for consumer sovereignty to apply. It would seem, the political assertion that a highly concentrated market is competitive is little more than rationalizing a political decision. The Australian retail sector does not meet the necessary requirements of economic theory that allows consumer sovereignty to prevail. On the other hand, it can be argued that the highly concentrated duopoly market in Australian retailing directly disadvantages the purely competitive farm sector in domestic price determination and hence profitability.

Export marketing is also heavily influenced by monopoly power. The meat sector is one for which some information is available^{xviii}. In 2006-07, The Brazilian multinational processed an estimated 24% of Australian red meat. The US giant Cargill processed 8% of red meat production. A further 6% was processed by the Japanese firm Nippon Meats and the Cayman Islands Harmony Company. These foreign owned red meat processors accounted for 38% of Australian meat processing. Foreign dominance in the red meat processing section that sells mainly to export markets must raise concerns about international red meat demand being managed in the interests of the international processors supply obligations and the situation of their processing plants. The international giant car manufacturer GMH has come to the conclusion that competing against itself with manufacturing plants in diverse locations has not proven in its best interests. The question that needs answering for red meat production is in whose interest these international companies operate: their own or Australian red meat production.

Dairy manufacturing has some limited information on market dominance. New Zealand's Fonterra and Japanese Lion manufacture around 45% of Australia's milk production. A further 5% is produced by Italy's Parmalat. Australia's Murray Goulburn accounts for around 35%. Despite this concentration in ownership and control of milk processing, Coles and Woolworths can force \$1 a bottle pricing in the domestic milk market. As the saying goes in the bush; "something is very wrong Tallerook". Monopoly divestiture powers would seem an imperative in any change to rural policy.

Financial Australia is little different. It is claimed that the big four banks exercise control over close to 90% of financial transactions^{xix}. It is also argued that the four big banks have considerable overseas ownership by mutual fund arms of US international financial institutions: CBA, 29.4%; NAB 34.74%; Westpac, 32%; ANZ, 39.94%. The issue here is the right of large international financial institutions to appoint board directors and influence management control and decisions. The question again should be: in whose interest do these powerful international institutions operate-national or self interest?

The tentacles of big business do not respect market boundaries. Listed in the NFF web site as NFF partners are: Woolworths; Bayer; Westpac; Prime Super. A reasonable question is just who does the NFF actually represent: farmers or big business partners?

To structurally reform Australian agriculture to meet the conditions of pure competition whilst leaving the non farm sector to indulge in monopoly power games has been a political abuse of economic theory. Such policy does not comply with the moral question in economics.

10 The Moral Question in Economics

"The moral problem is concerned with conflict between individual interest and the interest of society"

Joan Robinson^{xx}

"In pursuit of self-interest, he (the producer)—is led by an invisible hand to promote an end which is no part of his intentions"

Adam Smith^{xxi}

“Frequently professional economists make pronouncements -----rooted in their value judgements that the competitive market solution is best”

Gruen 1978^{xxii}

Rural Australia has endured four decades of policy devoid of any pretence to recognize the moral question in economic policy. The industry is now in financial turmoil, it is time for the moral question in economics to be reinstated in rural policy.

11 Rural Policy Constraint: Engel’s Law

In 1857, Ernst Engel observed budgets and expenditure patterns over a large sample of European families^{xxiii}. Engel found that the income elasticity of the demand for food was low. In other words, the percentage of income expended on food falls as incomes rise^{xxiv}. This Law has been tested over time and is accepted as “firmly established”^{xxv}. Recent research has confirmed Engel’s Law being just as relevant today as it was when first published. The Law applies to contemporary household consumption, national consumption; and, international trade^{xxvi}.

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

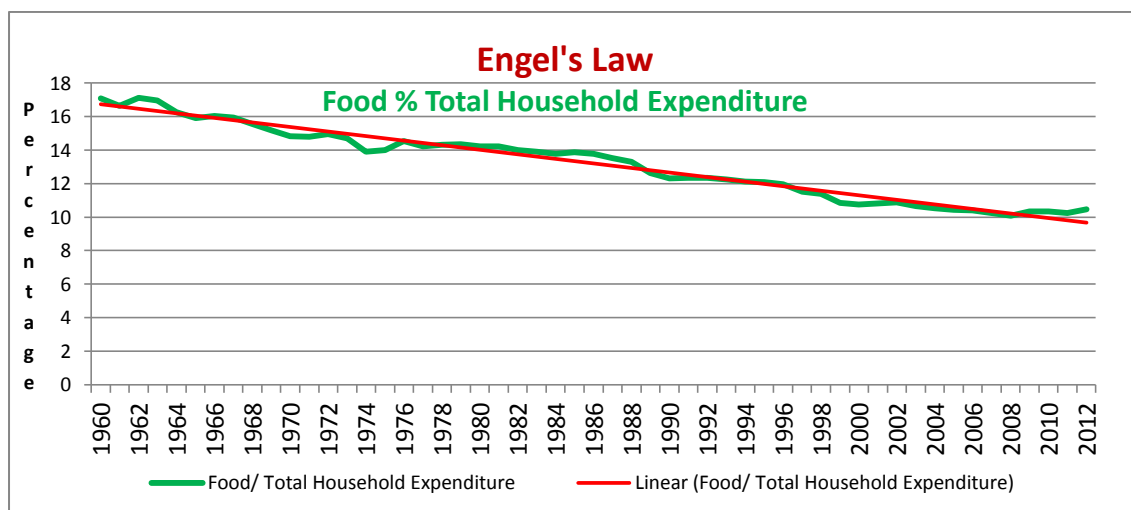
“Engel’s Law continues to be relevant today across countries as well as across households within countries”

Richard Anker, Jan. 2011^{xxvii}

Engel’s Law is an empirical law of consumption which offers an explanation of why low farm income is an entrenched feature of agriculture in mature growing economies. Because this Law identifies an imperfect market structure, applied neoclassical supply and demand theory; and, trade theory based upon purely competitive market assumptions must produce perverse policy outcomes. Either Engle’s Law, or, Say’s Law describes the real world of agriculture. They cannot both be true.

The farm sector becomes the “*meat in the sandwich*” between applied neoclassical policy based upon assumed supply and demand theory; and, empirical evidence of research that contradicts those underlying model assumptions of neoclassical supply and demand theory. Simplistic efficiency and productivity solutions run into an Engel’s Law constraint on both domestic and international policy fronts. An understanding of the Law is a theoretical rebuttal of the underlying assumption of constant returns to scale in agriculture. Engel’s Law becomes part of the explanation why the real world of agriculture operates under declining returns to scale

Graph 13



Source: Table 8 Household Final Consumption Expenditure, Time Series Spread sheet Publication 5206 ABS , Australian national Accounts

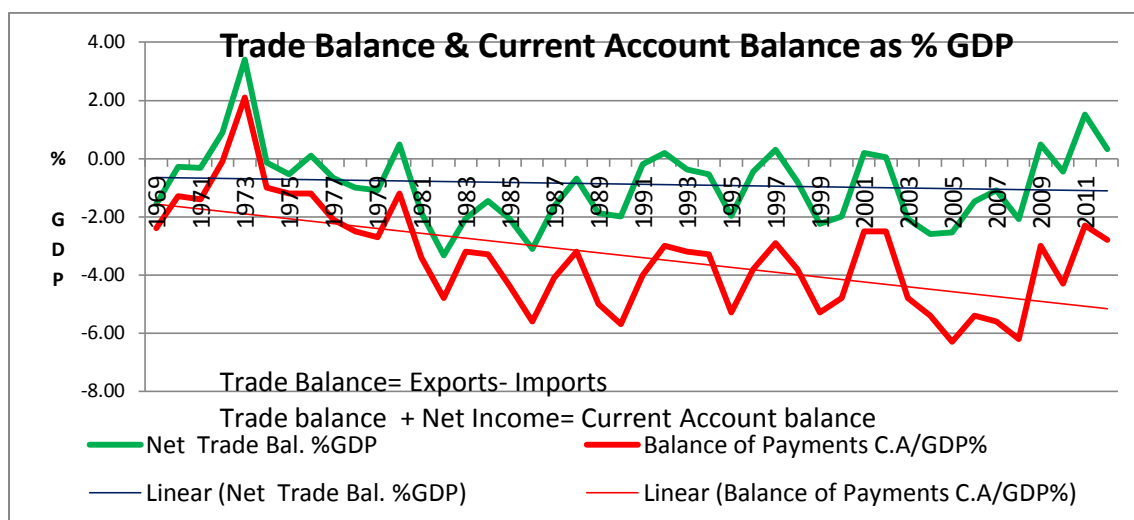
Graph 13 presents empirical evidence of Engle's Law present in Australian Household consumption patterns with the food component expressed as a percentage of total household expenditure. The graph calculated from household expenditure data understates the true nature of Engel's Law. This unfortunate situation results from inconsistent data in Australian National Accounts. Household expenditure is available in chain volume tables (constant prices) whilst household income is given in current prices. This unfortunate situation is overcome by using household expenditure as a proxy for Household income. Consequently, Engel's Law will be understated in the graph.

12 External Balance: the Forgotten Policy Constraint

A nation's currency value is the most important price in an economy. Resource allocation responds to changes in the value of a national currency. A low currency value stimulates export production and sales which in turn flow back to the domestic allocation and distribution of resources to export production. Similarly, an overvalued currency shifts resources into the non trade sector.

Currency stability depends upon the demand and supply of \$AUD. That demand is in itself influenced by external balance. External balance is defined as a zero balance across both the current account and capital accounts. Australia has an entrenched substantial current account deficit which requires an offsetting inflow on the capital account to maintain external balance and currency stability.

Graph 14



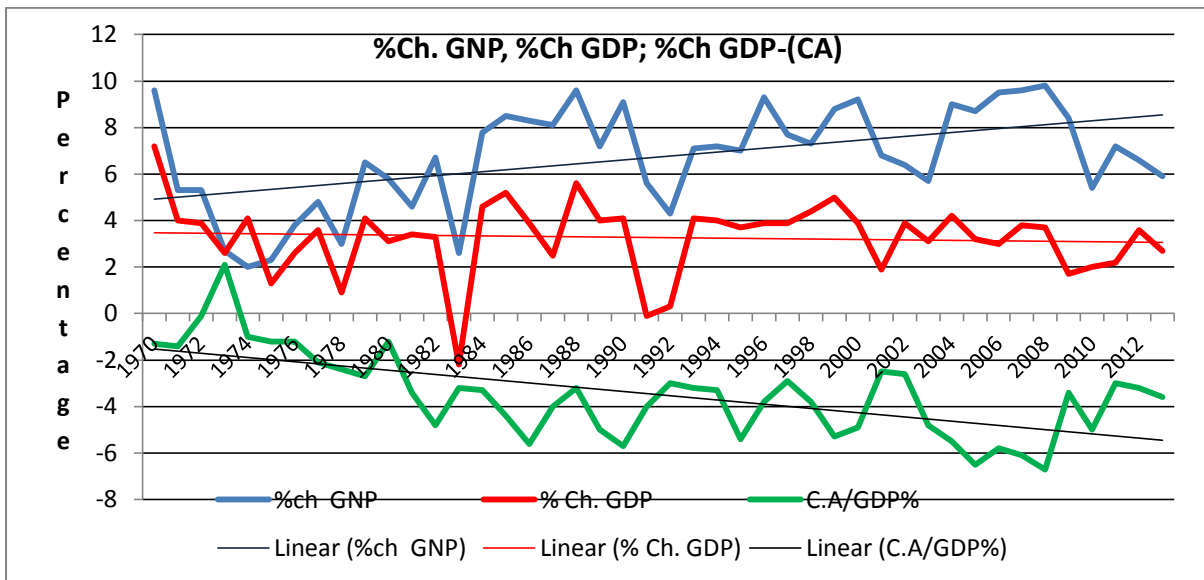
Compiled from: ABARES commodity statistics 2012 Table 7

The trade balance is only part of the story of current account balance. The other major component is net income flow which is the difference between the two curves in Graph 14. Net income flow comprises dividends on foreign investment and interest on overseas debt. Net income flow has been in serious decline since 1983. The net income flow is now a policy issue in itself.

The long term current account deficit, is evidence of monetary policy supporting an overvalued currency rather than allow a market devaluation of the \$AUD. This support of currency stability has produced the perverse outcome of a serious net income flow constraint on economic policy. RBA monetary policy has been to administer short term interest rate policy to support an artificially high currency value. To attract necessary capital inflow, policy settings have maintained a positive interest rate differential between Australian official interest rates and international official interest rates. This has suited the RBA in managing its domestic price stability target. However, export industries have been disadvantaged. Over the long term export industries both in manufacturing and agriculture have lost profitability.

In Graph 14 below, the policy problem is set out as the impost upon GNP. The domestic economic growth implications of long term dependence upon capital inflow can be inferred for: domestic investment, employment and living standards. In Graph 14, the current account deficit has been added back to gross domestic product (GDP) to produce gross national product (GNP)

Graph 15



Compiled from: ABARES commodity statistics 2013, Table 6 ,and Table 7

No nation can continue unmanaged deterioration in its current account balance over the long term as depicted in the graph. This can be demonstrated by the simple proposition that if Australia needs 3% domestic GDP growth, then GNP must grow at 3% plus the current account deficit. Such GNP growth leads to demand overheating, price, and wage increases. The RBA pursuing its inflation target has little option but to raise interest rates hurting domestic investment, export industries, employment, and living standards. Consumers have access to cheap imports; but, at the cost of domestic economic growth, employment, and declining living standards.

"We cannot attract lending from abroad without later paying interest on the newly borrowed funds. Either we pay interest for a while and then repay the principle, or we pay out interest indefinitely while renewing the debt-----the larger the capital inflows triggered by a temporary rise in our interest rates, the greater the later interest outflows that contribute to the renewed payments deficits,"^{xxviii}

A similar argument can be mounted for Australia's insatiable dependence upon foreign investment. Recapitalizing rural Australia will come at the cost of further deterioration in the net income flow and current account balance with subsequent negative impacts upon GDP.

13 Two Steps: Asset Enhancement & Policy Change:

In conjunction with Roosevelt's "new deal" in the US Great Depression years, asset enhancement was used as the model to address the farm debt problem. The same principle was employed again as Brady Bonds in the international debt default of the late 1980's and early 1990's. The model modified once again came to the rescue in the aftermath of the 2007-08 GFC. The US had TARP, the EU used the European Stability Mechanism, Australia endorsed the concept in principle when the AOFM was instructed to intervene directly and purchase residential backed mortgage securities to stabilize the domestic housing debt

market; and, consequently domestic home prices. Asset enhancement is a proven model to address a debt crisis and forms the rationale behind the *Australian Rural Reconstruction and Development Board* proposal

The principle is conceptually simple. A public entity is structured to purchase low quality financial assets from the private financial system at a current market valuation. The current market valuation effectively provides what is commonly called a “haircut” to the nominal value of the mortgages issued in more robust times. The “haircut”, provides debt relief to the mortgagor and enhances credit worthiness. The haircut also becomes the penalty of shareholders and their financial institutions that practised imprudent rural lending

Once ownership of the mortgage is transferred from the financial institution to the public entity, the once low quality asset/ mortgage takes on the characteristic of a public security. As such, it can form the basis of an asset pool from which derivative securities can be sold into the capital market thereby generating a self funding program. It is the process of ownership transfer from the retail financier to the public entity where asset enhancement occurs as the low quality asset transforms to a higher quality public sector asset. Interest rates on the mortgage should then reflect the interest rates of government paper as opposed to commercial penalty rates of the private sector.

The second step is the substance of the White paper on Agricultural Competitiveness. The weakness in the Considerations and Scope of the White paper is the failure to recognize that farm profitability is determined by two factors rent and a fair return for a farmers labour. These two income components determine farm profitability. Rent in economics terms is the return on monies invested or money use whilst the fair return on labour is directly comparable to wages in the income of employees. In a modern growing economy, farm profitability then becomes determined by two factors: Engel’s law and the degree of market structure imperfection in the non-farm sector relative to the farm sector.

14 Conclusions:

For decades, rural policy has failed to deliver a prosperous and stable rural sector. This in itself must signal that rural policy has pursued a direction that does not recognize the real world of agricultural production. Theoretical dependence upon Say’s Law of Markets or supply creates demand has encouraged policy development that has not solved the needs of agriculture in the real world.

Moreover, the failure of Say’s Law of Markets to recognise the role of Engel’s Law in agricultural production is a critical issue in policy failure. Say’s Law, whilst necessary for economic models to run policy projections, does not reflect the real world. Engel’s Law, on the other hand, was been confirmed in 2011 by academic research to be just as applicable now in agricultural production and international trade as it was back in 1856. This conflict between the real world and theoretical world cannot continue if sound policy is to be formulated

The underlying assumption of constant returns to scale lies at the centre of structural adjustment failure. The evidence of policy failure is everywhere to be seen: low farm incomes, unserviceable debt, falling land values, insolvencies and rural suicides. The most

significant evidence of policy failure is the division of rural Australia into two distinct farming groups: small scale farmers and large scale industrial farmers.

In the US, farm policy recognizes a three tiered agricultural sector: hobby farmers, intermediate farmers and commercial farmers. It is time for Australia to look how agricultural policy is formulated in other countries. Europe has farmers rights enshrined in its Constitution (refer Appendix B). Australia has a one shoe fits all policy mentality.

In the financial crisis that emerged post GFC, small scale farmers still do what they always did: survive. On the other hand, large scale farmers who followed the policy line of structural adjustment are now the policy problem group. Large scale farming since the GFC has become characterised as a low income debt crisis group that now threatens the stability and sustainability of national food production.

The considerations and scope assessment of policy should not continue the mistake of ignoring the contribution of small scale farming. Although this group produces only twenty percent of rural production, that percentage contribution could well make the difference in the future to avoid a growing trend of importing food. This neglected group also provide a core population base in rural communities for delivery of services such as education and health to rural communities. Consequently, they contribute more than food production to their community stability and quality of life.

The political bastardization of economic theory post 1983 has driven a discretionary policy direction that restructured agriculture to approximate a purely competitive sector whilst encouraging concentration of ownership and control in the non-farm sector. Subsequent market imbalance now lies as a significant contribution to low profitability. The imbalance in market power has eroded farm value fair price determination. More importantly, nonfarm monopoly protection in the name of consumer surplus sanctity cannot be justified in terms of the structure of the wider economy as well as the moral question in economics.

Finally, the Task force should address the failure of policy that has forced agriculture to approximate a purely competitive market structure whilst the non farm sector has been encouraged to increase concentration of ownership and control. A good starting point for this consideration would be the 2004 Report by the Senate References Committee: "***The effectiveness of the 1974 Trade Practices Act in protecting small business***". Two particular recommendations in the Executive Summary would be: Recommendation 1 market power definition, and Recommendation 12, divestiture.

Should policy recommendations chose to ignore the need for stronger Trade Practice legislation, then some form of countervailing power must be considered for rural producers subjected to market power imbalances. The alternative policy option is to redistribute income from the prospering non rural sector to the declining rural sector. In other words, some form of Treaty of Rome (refer Appendix B) needs to be considered.

If these conclusion points are dealt with appropriately, then the Considerations and scope of the White paper should be met; and, provide a policy framework for rural policy into the future. Remember Economics 101, pay a decent on farm price and food production and food sustainability will follow.

Appendix A:

Economic Theories Behind Farm Policy; A Discussion

Supply Side Economics

Supply side economics swept the western world like a bush fire over the 1980's and 1990's. Two leading supporters were Margaret Thatcher and Ronald Reagan. Social democratic parties also succumbed to the "new economics" which quickly became contemporary economic orthodoxy. Hawke brought it to Australia, Gonzales to Spain, Mitterrand to France, Lange to New Zealand^{xxxix}. Supply side economics is viewed as "*a renaissance of the classical economics of Adam Smith and Jean Baptiste Say*"^{xxxx}. David Ricardo's Comparative Advantage Theory also features in supply side economic theory. Ricardo was a contemporary of Smith and Say.

The dislocation of the 1970's initiated a search for an alternative economic philosophy to that of J.M. Keynes. This led to a growing "*reliance upon monetarism and neoclassical economics of the market*"^{xxxi}. The final form of the search became crystallized by Margaret Thatcher and Ronald Reagan into what became known as supply side economics. The architect of supply side economics was a group of politically powerful vested interest players led by Wall Street Journal editor Robert L Bartley and editorial writer Jude Wanniski^{xxxii}.

These two financial journalists were among a select group of people interested in influencing economic policy. They met regularly at Michael I Restaurant in New York. Other prominent members of this select group were economists Robert Mundell and Arthur Laffer. Whilst both had lectured at the Chicago School of Economics, Laffer was at that time chief economist for the Office of Management and Budget (OMB). At these meetings Mundell (Nobel Prize winner 1999) would lecture the group on policy. He argued that to beat stagflation, 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. It was Wanniski in his work "*The Way the World Works*" that the modern fear campaign about the use of protectionism has its roots. Wanniski argued that the Smoot-Hawley tariff triggered an ensuing trade war^{xxxiii}. Bartley modifies this claim by saying that Wanniski was probably right. Bartley explains that the stock market had begun to slide months before the Smoot-Hawley legislation was enacted. Applying "rational expectations" thinking, Bartley felt that investor expectations of the legislative effects might have triggered the "pricking of the share (market) bubble". Despite this tenuous link, the argument that protectionism caused the Great Depression has become a strong defensive instrument against the anti-free trade movement.

Another important original supply side architect was Bruce Bartlett^{xxxiv}. As a staff member of republican Senator Jack Kemp, Bartlett featured in writing the Kemp-Roth Legislation which Reagan signed into law reducing taxation imposts^{xxxv}. Bartlett also says that supply-siders drew on thinking of Nobel Prize economists: Robert Mundell, Milton Friedman, James Buchanan, and Friedrich Hayek^{xxxvi}. Mundell and Friedman are recognised Chicago School monetarists. Hayek is from the Austrian School of Thought whilst Buchanan is regarded as being sympathetic to Austrian economics.

In the *Economists View* reference, Bartlett's New York Times article is highly disappointed in the direction supply side economics had taken by 2007. He argues that the policy direction developed by the original supply-siders no longer existed. The term supply side economics had been overtaken by political opportunists who had come to think that any tax cut was

supply side policy. The original supply-siders had been concerned with marginal tax rates as a fiscal stimulus policy instrument. By 2007, this was not the case. He thought supply side economics should be given a “decent burial”.

The original two lever approach to policy is very evident in the contemporary Euro area fiasco. For example, the problem is now low growth and high debt. Simplistic supply side policy becomes: reduce debt, growth through monetary expansion. The singular failure of economic policy in Europe confirms that supply side policy was a policy mix for a particular time in history. It has outlived its usefulness. After three decades, supply side policies have also failed to solve the Australian low farm income problem.

Say's Law of Markets

There are two Laws underwriting contemporary agricultural policy: Say's Law of Markets, and Engel's Law. One conflicts with the other. As the two Laws describe different market structures, in the real world of agricultural production they cannot both hold true. If Say's Law is proven correct, then rural sectors operate in an environment of pure competition. On the other hand, if Engel's Law proves accurate, then the farm sector operates under an imperfect market structure. This theoretical difference is important for development of effective rural policy.

(1) Jean Baptiste Say's Law of Markets^{xxxvii}

“The means of payment for commodities is simply commodities; all sellers are buyers; double the supply of commodities and you double the purchasing power”^{xxxviii}.

J.B Say, (1803)

“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”^{xxxix}

Beating the commodity price cycle
NFF, 1995

This modern restatement of Say's Law of Supply and Demand is expressed as a theory of aggregate demand for commodities and manufactures. It implicitly assumes:

- flexible factor markets,
- flexible product markets,
- constant returns to scale prevail.

Under this purely competitive theory of supply and demand there can never be market failure. Policy is directed to removing supply side market constraints that impair the free flow of resources in the production process. Once market reform removes impediments, demand responds automatically to absorb increasing supply.

Structural adjustment programs are intended to reform perceived supply side structural impediments. A necessary assumption is that modern industry operates under constant returns to scale. The 2012 debt crisis which respects neither size nor scale is real world evidence of a perverse policy outcome.

Engel's Law

An empirical law of consumption explains why the low farm income is an entrenched feature of a mature growing economy. Because this Law identifies an imperfect market structure, applied orthodox supply and demand theory; and, trade theory must produce perverse policy outcomes. If this Law is accepted, then the farm sector becomes recognised as operating in an imperfect market system. The low farm income problem and debt crisis become perverse policy outcomes.

In 1857, Ernst Engel observed budgets and expenditure patterns over a large sample of European families^{xi}. Engel found that the income elasticity of the demand for food was low. In other words, the percentage of income expended on food falls as incomes rise^{xi}. This Law has been tested over time and is accepted as “firmly established”^{xiii}. The Law has been identified as applying to contemporary household consumption, national consumption; and, international trade^{xiii}.

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^{xiv}

This well understood Law explains why rural sectors decline relatively to the wider economy in modern growing economies. Simplistic efficiency and productivity solutions run into an Engel’s Law constraint on both domestic and international policy fronts. The Law offers an explanation of protectionist behaviour by governments in mature economies that wish to remain self-sufficient in food production.

Income elasticity of demand is an established tool in commodity consumption analysis. Historically, income elasticity for commodities is known to be inelastic i.e. have an income elasticity (figure 1).

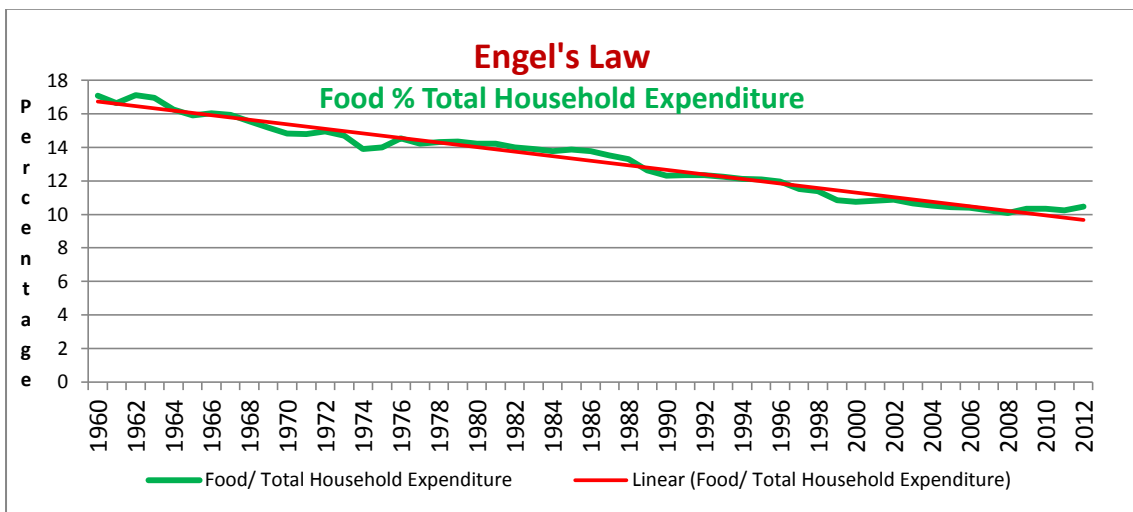
Income Elasticity of Demand: Selected Commodities ^{xv}	
Butter	0.42
Cheese	0.34
Cream	0.56
Eggs	0.37
Fruit and berries	0.7
Flour	0.36

Meat	0.35
Milk and cream	0.07

These commodities are selected from 1953 research by Wold, *Demand Analysis*, reproduced in the reference above. This research confirms Engel’s Law, and was available two decades before Coombs delivered his free market rural policy framework. The Law was ignored by Coombs and subsequent “experts” from politics, industry leaders, media, and academia. If the Law holds true in the real world, the “economies of scale” solution is little more than wishful thinking.

The presence of Engle’s Law in Australian Household consumption statistics with the food component expressed as a percentage of total household expenditure.

Chart 12



Source: Table 8 Household Final Consumption Expenditure, Time Series Spread sheet Publication 5206 ABS , Australian national Accounts

The graph of Engle’s Law calculated from household expenditure data understates the true nature of Engel’s Law. This unfortunate situation results from inconsistent data in Australian National Accounts. Household expenditure is available in chain volume tables (constant prices) whilst household income is given in current prices. This unfortunate situation is overcome by using household expenditure as a proxy for Household income. Consequently, Engel’s Law will be understated in the graph.

$$\text{Household Income} = \text{Household Expenditure} + \text{Savings}$$

$$\text{HI} = \text{HE} + \text{S}$$

$$\text{HE} = \text{HI} - \text{S}$$

Assumption: food expenditure remains the same irrespective of total expenditure.

Trade theory

The intentions of the Hawke and Keating Administration were made clear in 1986 with the formation of the Cairns Group of free trading agricultural nations. This formally declared to the world that Australia saw Ricardo's comparative advantage as land endowment. Specialisation in agricultural trade was therefore determined.

Contemporary trade theory has its basis in the 1817 work of David Ricardo. In that year he published his theory of comparative advantage in Chapter 7 of his book *"On the Principles of Political Economy and Taxation"*^{xlvi}.

"Trade between two countries can benefit both countries if each country exports the goods in which it has a comparative advantage"

International Economics, Theory and Policy^{xlvii}

Ricardo based his model on a two country, two commodity and two factors of production. Country A had a plentiful endowment of land whilst Country B had an abundance of labour. Theory then moved from a position of prohibitive trade barriers to a situation of free trade. Country A specialised in growing cotton whilst Country B specialised in the manufacture of linen. This specialisation in trade was then shown to improve the economic wellbeing of both countries. Ricardo's comparative advantage is recognised as a labour theory of value.

The modern neoclassical model is a little more sophisticated. Three factors of production are used instead of two. Whilst the modern version has three factors of production - capital, labour and land, the model remains a two commodity, two country structure. Theory then moves from prohibitive trade barriers to a situation of free trade. In a modern advanced economy, this model is incomplete and therefore does not reflect the real world of trade between nations.

The contemporary two country, three input model (land, labour, capital) does not have either a financial sector, or a government sector. These fundamental structural imperfections render contemporary free trade theory inappropriate in the real world.

Without a financial system, there is no monetary system. The model presents a make-believe monetary system by imputing a notional price "p" multiplied by wages "w". With no monetary system, what does "p" mean?

- From where does the assumed capital originate?
- Is capital a factory or craft type activity?
- How is the assumed "capital" used in the production process?

As there is no government sector, what decision process exists?

Without a government sector, the model collapses into a tribal barter system in which two tribes exchange goods. In the models, manufactures are exchanged for food.

- How are the exchanged goods distributed amongst the members of the two tribes?
- The model reflects a labour theory of value in which goods are bartered for goods.

When these questions are satisfactorily answered, then perhaps the ideology of free trade will gain some credibility.

Low farm Income: The evidence

The Australian low farm income problem first appears to have been seriously recognised in McKay's Paper^{xlviii} as far back as 1967. McKay was then the Director of the Bureau of Agricultural Economics. Since then there have been various surveys and discussions on rural policy. The next significant contribution was made by "Nugget" Coombs in his 1973 Report.

It was in the early 1970's, the term "get big or get out" gathered momentum. Implicitly this is a supply side concept which implicitly assumes economies of scale overcome the entrenched low farm income problem. In 1977, Arnold and Chatterton made this comment on the "get big or get out" solution:

"Get big or get out" has proved quite tragically true for many of those engaged in export agriculture. But we are now only too well aware that "get big" is not restoring the prosperity of our rural communities, although it is maintaining the viability of a particular commodity for the benefit of a few"

xlix

The economy of scale theory was never understood by its supporters. Underwriting Constant returns to scale was assumed that small farm mergers would produce larger more efficient farm enterprises. It was expected that this would deliver long term profitable growth through increased efficiency and rising productivity. The difficulty for the "experts" assumption is the fact that within economies of scale theory, three different production environments are recognised. Each production environment has its own economies of scale theory. Economies of scale can be constant, increasing or decreasing returns to scale. The "experts" assumed rural economies of scale to be constant returns to scale. In reality, empirical evidence confirms rural industries operate under decreasing economies of scale theoretically defined as the Law of Diminishing Proportions^l. The economy of scale solution was always doomed to failure. It was theoretically flawed.

Comment

Low farm income is not a new phenomenon in mature growing economies. In Australia, it has been known for nearly half a century. Since 1983, solutions have relied heavily upon an abstract theoretical framework comprising Say's Law of Markets and Ricardo's comparative advantage; and, constant returns to scale.

Say's Law was never universally accepted. Hansen has this to say on orthodox economics built around Say's Theory of Supply and Demand:

"distrust of orthodox economics----- had been the rule, except for rare intervals, since the days of Ricardo"^{li}

J. M. Keynes, in 1936, refuted the tenets and principles of both the classics and neoclassic. Say's Law, he finally "interred" with his consumption function. For the theories of Say and Ricardo to have resurfaced in supply side economics says more about the quality of economists at that time rather than the failure of economic knowledge. In fact the claims of Reaganomics success sit uncomfortably besides the collapse of the US financial system 1981-94. The dismal performance of supply side theorists in the Euro area attempting to

overcome the dislocation brought about by decades of applied supply side economics should be enough in itself to force a rethink of contemporary economics.

Appendix B

Treaty of Rome

The Treaty Establishing the European Community or Treaty of Rome was first promulgated in 1957. In the absence of an official constitution, this Treaty becomes the legal framework of the European Community. A quiet reading of this important document soon demonstrates that a world of free trade in agriculture is incompatible with the Treaty of Rome. The silence by farm leaders and politicians driving the free trade agenda over the content of the Treaty does not reflect well upon their competence and credibility.

It is not difficult to access the original 1957 Treaty; or, an alternative *Consolidated Version of the Treaty Establishing the European Community*, 1997. In the original 1957 edition, Title II Agriculture comprises Articles 38 to 47. Specifically, Articles 38 & 39 are the basis of the Common Agricultural Policy (CAP). The consolidated version simply deleted transitional arrangements contained in the 1957 version. In the 1997 edition, Title II Agriculture comprises Articles 32 to 38. Articles 32 and 33 form the legal framework for the CAP. The following discussion refers to the 1997 *Consolidated Version of the Treaty Establishing the European Community*.

Article 32 simply outlines the extension to agriculture of a European Community common market. Agriculture is defined as comprising products of the soil, stockfarming, fisheries and first stage processing of these products. It further states that the common market for agriculture must be accompanied by the establishment of a common agricultural policy.

Herein lies the legal rationale for a common agricultural policy across the EU. No ideological free trade group or nation can alter this legal obligation of the EU to install a common agricultural policy.

Article 33 defines the objectives of the common agricultural policy as:

(1)

- I. *To increase agricultural productivity through technical progress and rational development of agricultural production through the optimum utilization of the factors of production particularly labour*
- II. *Thus to ensure a fair standard of living for the agricultural community particularly by increasing individual earnings of persons engaged in agriculture*
- III. *To stabilize markets*
- IV. *To assure availability of supplies*
- V. *To ensure supplies reach consumers at reasonable prices*

(2)

In applying the common agricultural policy, instruments of policy will recognize the need for adjustment by degrees. Furthermore, in the Member States (EU), agriculture constitutes a sector closely linked with the economy as a whole.

Overseas perspectives of agriculture and the wider economy are in stark contrast to Australia's simplistic microeconomic view of an industry judged in terms of its efficiency alone. Indeed, Article 33 will come as a shock to most Australian farmers. The requirement for farm incomes to increase hopefully through productivity is not all that different to our own approach. However, the stability of markets to ensure supply reaches consumers at reasonable prices sets out the rationale for programs that permit a range of intervention measures from supply constraint to subsidization of production and consumption when necessary. This is incompatible with Australia's policy approach

Article 34 sets out the mechanisms to be employed in achieving Article 33 objectives. Policy instruments comprise: regulation of prices; production and marketing aids for various products; storage and carryover arrangements; and machinery to stabilize imports and exports.

To meet the objectives of the CAP, one or more guidance and guarantee funds may be structured. A Guarantee fund provides export subsidies for surplus production and purchases production on domestic markets. A Guidance Fund is concerned with the structure of agriculture and provides assistance to farmers, loans for improvements, extension services, and infrastructure improvements.

Articles 35 & 36 provide support for Article 33 objectives. They specifically seek to coordinate efforts in vocational training; research and delivery of knowledge; and, can include financing of projects or institutions. Aid can be provided for protection of enterprises disadvantaged by structural or natural conditions; and within economic development programs.

ⁱ Samuleson, Hancock, Wallace, *Economics, Australian Edition*, McGraw-Hill Company, 1970 ,p.451

ⁱⁱ Keynes ,John Maynard; *The General Theory of Employment, Interest and Money*; Volume vii; Royal Economic Society; Macmillan press,1976,p. 378

ⁱⁱⁱ Edwards G.W. & Watson A.S., *Surveys of Australian Economics, Agricultural Policy*, Ch. 4; Ed. F.H. Gruen; George Allen & Unwin, 1978,Ch. 4, p.192

^{iv} Edwards G.W. & Watson A.S , *Agricultural Policy*, from, *Surveys of Australian Economics*, Gruen F.H. ed., Allen & Unwin 1978, Ch. 4, p. 195

^v Penguin Macquarie Dictionary of Australian Politics, Penguin Books, 1988, p.181

^{vi} Lloyd P.J, *Surveys of Australian Economics.*, ed. F.H. Gruen, George Allen Unwin,1978, Ch. 5 ,p.271-72

^{vii} Watson, A.S. op. cit. p. 274

^{viii} Rural Adjustment, Rural Debt and rural Reconstruction; Report of the Senate Rural and Regional Affairs and Transport Committee, Dec. 1994,p.1

^{ix} Opp.cit p.1

^x Keynes, John Maynard; *The General Theory of Employment, Interest and Money*, Volume VII, Royal Economic Society, 1973, p.20

^{xi} Senate Rural and Regional Affairs and Transport References Committee, *Rural Adjustment, Rural Debt and Rural Reconstruction Report*, Dec. 1994,p.34

^{xii} Lopez Isidro &Rodriguez Emmanuel; *The Spanish Model*; New left Review 69, May June 2011, p 10

^{xiii} Ibid, Dec. 2012 and April 2013

^{xiv} Australian Commodity Statistics 1997 p 219,.206

^{xv} Koutsoyiannis A. *Modern Microeconomics*, Macmillan Press, 1977, p.p. 150-155

^{xvi} Davidson F.G & Stewardson B. R.; *Economics and Australian Industry*, Second Edition; Longman Cheshire,1979,p.229

^{xvii} Koutsoyiannis A. *Modern Microeconomics*, Macmillan Press, 1977, p. 163

-
- ^{xviii} Paish Matt, Almost half Australia's food industry is owned by foreign investors, report shows, AFN online, Jan. 2012.,p.2
- ^{xix} Hunter Murray, Who owns corporate Australia?, independentaustralia.net, February, 2013,p.7
- ^{xx} Robinson Joan, *Morality and Economics*, Economists View, online, 2007/07, p. 1
- ^{xxi} Robinson Joan, *Morality and Economics*, Economists View, online, 2007/07, p. 1
- ^{xxii} Edwards G.W and Watson As; *Surveys of Australian Economics*, Edited, Gruen F.H, George Allen Unwin, 1978, p. 198-99
- ^{xxiii}^{xxiii} Mansfield Edwin; *Micro-economics Theory & Applications*,W.W. Norton & Company Inc.; 1969,p.p.91-92
- ^{xxiv} Koutsoyiannis A.; *Modern Microeconomics*;Macmillan;1975,p.49
- ^{xxv} Kindleberger and Lindert, *International Economics*, Richard D Irwin, 1978,p.60
- ^{xxvi} Kindleberger and Lindert, *International Economics*, Richard D Irwin, 1978,p.60
- ^{xxvii} Anker Richard, *Engel's Law Around the World 150 Years Later*, Working paper Series ,No.. 247, PERI, University Massachusetts, January 2011,p.p35-36
- ^{xxviii} Kindleberger and Lindert; *International economics*; Richard D Irwin Inc.,1978,p.369
- ^{xxix} Omerod Paul, *The death of Economics*, faber and faber,1994,p.68
- ^{xxx} Cleaver H. ; *Supply Side Economics: The New Phase of Capitalist Strategy in the Crisis*; Babylon Metropoli, El Gallo Illustrado, 1981, p. 1;webpace.utexas.edu/hcleaver, 12/07/2012,
- ^{xxxi} Hauge Gabriel, *The International Capital Market and the International Monetary System*, The 1978 Per Jacobsson Lecture, IMF, Washington, Sept., 1978,p.5
- ^{xxxii} Bartley Robert L; *How Reaganomics Made the World Work: We're all supply siders now*, The Arsenal, April 1989,p.1
- ^{xxxiii} Bartley Robert L; *How Reaganomics Made the World Work: We're all supply siders now*, The Arsenal, April 1989,p.8
- ^{xxxiv} Reynolds Alan, *'Supply Side' Defined*, Cato Institute, April 2007,p 1
- ^{xxxv} Bartlett Bruce; *How Supply-Side Economics Trickled Down*, Economists View,economistsview.typepad.com/2007/04,p.1 25/09/2012
- ^{xxxvi} Bartlett Bruce; *How Supply-Side Economics Trickled Down*, Economists View,economistsview.typepad.com/2007/04,p.1 25/09/2012
- ^{xxxvii} Cleaver H. ; *Supply Side Economics: The New Phase of Capitalist Strategy in the Crisis*; Babylon Metropoli, El Gallo Illustrado, 1981, p. 1;webpace.utexas.edu/hcleaver, 12/07/2012,
- ^{xxxviii} Hansen Alvin H.; *Business Cycles and national Income*, George Allen & Unwin, 1951, foot note 48, p.272
- ^{xxxix} Brennan Paul, *Beating the commodity price cycle*, Sept. 1995, p.7
- ^{xl} Mansfield Edwin; *Micro-economics Theory & Applications*,W.W. Norton & Company Inc.; 1969,p.p.91-92
- ^{xli} Koutsoyiannis A.; *Modern Microeconomics*;Macmillan;1975,p.49
- ^{xlii} Kindleberger and Lindert, *International Economics*, Richard D Irwin, 1978,p.60
- ^{xliiii} Kindleberger and Lindert, *International Economics*, Richard D Irwin, 1978,p.60
- ^{xliiv} Anker Richard, *Engel's Law Around the World 150 Years Later*, Working paper Series ,No.. 247, PERI, University Massachusetts, January 2011,p.p35-36
- ^{xlv} Mansfield Edwin; *Micro-economics Theory & Applications*,W.W. Norton & Company Inc.; 1969,p.p.107
- ^{xlvix}^{lvi} Dept of Geography, University of Washington; web site : faculty.washington.,edu, Sept. 2012
- ^{xlvii} Krugman Paul R. ; Obstfeld Maurice; *International Economics Theory and Policy*; sixth edition; World Student Series, 2003, p. 12
- ^{xlviii} Edwards G.W. & Watson A.S.; *Surveys of Australian Economics*, Agricultural Policy, Ch. 4; Ed. F.H. Gruen; George Allen & Unwin, 1978,p.192
- ^{xlix} Arnold Lynne, Chatterton Brian; *Future Rural policies for Australia*, Politics XII, May, 1977, p.p.127-129
- ^l Koutsoyiannis A, *Modern Microeconomics*, Macmillan 1977,p. 82-84
- ^{li} Hansen Alvin, *A Guide to Keynes*, McGraw-Hill, 1953. P.p 4-5