Submission to the Parliamentary Joint Committee on Corporations and Financial Services Inquiry into Agribusiness Managed Investment Schemes

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Key points and recommendations

1. Plantation managed investment schemes have quadrupled the cost of growing wood in Australia and are an unnecessary drain on the public purse.

2. Plantation managed investment schemes are boom bust by nature because investment in wood is driven by the demand for tax minimisation, not wood market realities.

3. The combination of investment driven by the demand for tax minimisation and highly profitable plantation MIS companies receiving their income up-front has generated a hardwood chip glut.

4. An investigation of late 1990s hardwood plantation prospectus documents reveals a wide chasm between chip and paper market expectations and actual market realities. With prospectus company profits not pinned primarily to revenue from wood sales, there is little commercial motivation for them to invest in rigorous market research or to respond to wood market realities.

5. If the Commonwealth Government decides to engage in tackling the woodchip glut (acknowledging its substantial hand in creating the arrangements that generated the glut), it will need to attend to the entrenched alliance between the bureaucracy and the forestry lobby groups. In particular, it must rise above a handful of lobbyists who pedal perceptions of wood shortages (including on the domestic front through misrepresenting the wood and wood products trade deficit) despite the hardwood chip glut.

It is recommended that:

1. The Commonwealth Government terminate immediately the arrangements enabling plantation managed investment schemes.

2. The Commonwealth Government terminates the policy goal of tripling Australia's plantation estate by 2020, as was the first recommendation of the 2004 Senate Committee report *Australia's Forest Plantations – A Review of Plantations for Australia: The 2020 Vision*.

3. The Commonwealth Government engages in tackling the woodchip glut by facilitating the clearing of competing native forest supplies from the market.

4. Plantation managed investment schemes be investigated more deeply than is possible for the parliamentary committee given its time and resource constraints.

5. The carbon forest sink legislation (Subdivision 40-J of the *Income Tax Assessment Act 1997*) be revisited in the light of the plantation MIS corporate and system failure.

1. Introduction

While the global financial crisis and economic recession may have triggered the downfall of Timbercorp and Great Southern Plantations, all hardwood plantation MIS investments face a very difficult next few years. The schemes have driven a hardwood chip glut in a no growth market: securing sales means displacing heavily subsidised native forest supplies from Tasmania, Victoria and New South Wales. The complexity underpinning the likely on-going failings of the schemes may be unprecedented in Australia's corporate and government history. There are many questions. How did a free-market-believing government get to sign an industry dream target of tripling the output of an agricultural commodity? Where did all the money go? Why didn't the ratings agencies sound the alarm? What was the role of forestry lobbyists, including the one created specifically for the plantation MIS companies, in the debacle? Why didn't either major party in government terminate the schemes?

In this submission I focus on two elements. First, an investigation of the late 1990s hardwood plantation prospectus documents aligning their portrayal of the future market for woodchips and paper with what actually happened. Secondly, a mapping of the job movements of five key forestry/plantation lobbyists as key background information for understanding why, despite their instrumental role in creating a woodchip glut, they appear never to have called for competing low cost native forest supplies to be withdrawn from the market.

This submission addresses the Committee's Terms of Reference numbers 1, 5, 6, 7, 8, 9, 10 and 12.

2. Eucalypt plantation managed investment scheme - fundamentals

By focussing on four key variables (presented in Table 1) we can rise above the tax, financial and corporate complexities of plantation managed investment schemes (MIS) and understand their fundamental flaws, inevitable bust and how wood growing in Australia has become a very high cost business draining the public purse.

MIS eucalypt pulpwood growers invest 4.5 times more than non-MIS growers to do the same job of planting and managing trees over the rotation (Table 1). Yet MIS growers–informed by the projections presented in prospectus documents–expect rates

of return ranging between 6.5% to 11.0% (Lonsec Agribusiness Research 2001). On paper, the cost chasm between MIS operations and actual industry standards has been reconciled using highly optimistic assumptions on wood yields and stumpage prices. In the case of wood yields: in the vicinity of 60% higher than industry actuals. In the case of stumpage prices: in the vicinity of between 93% to 820% higher than industry actuals (Table 1).

Most plantation MIS are structured to focus virtually all the market and wood yield risk onto the grower (not the MIS company) when the trees mature ten to twelve years after the initial investment. As time passes, it is clear MIS growers in doing the job of growing hardwood for woodchips have not soared above current industry actuals and the projected returns for many investors are unlikely. Great Southern Plantations' 2005 annual report sounded the alarm. The company reported buying all the wood for its 1994 project for $6.4 million and claimed an after tax expense of $3 million. Financial advisors estimate that Great Southern Plantations then sold the wood for around $2.1 million, less than a third it paid for it (Intelligent Investor 2006). Great Southern Plantations argued the failure was in the past and rectified. Ratings agency Australian Agribusiness Group, whilst noting the failure, gave Great Southern Plantations 4 ½ stars (out of 5) for Corporate Governance and 3 ¾ stars for Track Record in their rating of the company's 2007 project. Alan Cummine, executive director Treefarm Investment Managers Australia (established in 2000 as the lobbyist for plantation MIS companies) worked to contain the damage spreading sector-wide by arguing that past performance did not accurately reflect future wood yields from better managed plantations and planting stock. Funds continued flowing into plantation MIS companies.

<u>Summary</u>

- Irrespective of grower-investor knowledge of wood growing and market realities, they have used their pumped-up investment cost for immediate tax relief.

- Through tax and financial engineering, the demand for tax minimisation has displaced wood market signals as the driver for investment in plantations. (Wood market realities are discussed later in this submission and Appendix A.)

- The public purse pays for this concocted high-cost wood growing system destined, inevitably, for economic bust.

Table 1 Eucalypt plantation MIS–costs and key assumptions for plantations established mid-term in the life of Australia's MIS plantation program.

	MIS	Industry actual	Source/comments
Cost per hectare (including management over rotation)	$9 300	$2 000	Source for MIS costs – Lonsec Agribusiness Research 2001 using eight prospectus documents. Source for industry actual as reported by Auspine, then a major private plantation grower, reproduced in Ajani 2007 p. 255.
Land cost	Lease costs included above	$2 500	For most schemes, growers do not own the land.
Wood yield (m^3/hectare/year)	27.3	17.00	Source for MIS costs – Lonsec Agribusiness Research 2001. Industry actual is the average of the yields used by the Bureau of Rural Sciences for their wood supply projections for eucalypt pulpwood plantations in Western Australia, Green Triangle, Murray Valley and Central Victoria (Parsons *et al*. 2007 p. 46.)
Stumpage price ($ per m^3)	$36.72	$17 - $19 softwood plantation $4 - $15 native forest	Source for MIS stumpage prices – Lonsec Agribusiness Research 2001. Nominal stumpage prices reported at end of rotation (average 11 years) converted to nominal prices at start of rotation using average assumed annual real price increase of 0.2%. Source for industry actual – softwood plantation is ForestrySA list price; native forest is actual stumpage prices for Tasmania and Victoria (Ajani 2007 p. 265) plus a 12% quality adjustment factor. Actual stumpage prices for hardwood plantations have transparency problems– see discussion about Great Southern Plantation payments on page 3.

3. Hardwood chip supply

Contemporary plantation MIS were created in the first half of the 1990s. Most offered investments in hardwood plantations geared for woodchip production because these require relatively short rotations that generate earlier returns.

In addition, the hardwood chip market held a special attraction for MIS companies. Exporting native forest woodchips was highly profitable[1] due largely to state government willingness to sell public native forest chiplogs at low prices (meaning

[1] The Eden based South East Fibre Exports, drawing on native forest wood in New South Wales and Victoria, has recorded an average 34% after-tax profit on equity over the past 30 years (Ajani 2007, p. 245). I see no fundamental reason for other native forest chip exporters not enjoying similar results.

the three main native forest woodchip states–Tasmania, Victoria and New South Wales–have been willing to operate their forest agencies as loss making or barely break even operations). Embedded in the hardwood plantation prospectus financials is an assumption that the extraordinary profits enjoyed by the native forest woodchip exporters (principally Gunns, Midway and South East Fibre Exports) would be transferred in full to the plantation growers. Such an assumption defies the long historical reality of profit margin differentials along the agricultural commodity production and marketing chain.

Largely through MIS investments, Australia's hardwood plantation estate increased from 146 000 hectares in 1993 to 950 000 hectares in 2008 (ABARE 1993 p. 57; ABARE 2009 p. 10). The resources from the mid 1990s plantings are now on stream, supplying 40% of Australia's hardwood chips in 2007/08 (Table 2).

The Bureau of Rural Sciences projects plantation chip supply will soar by around 2010 (five months away!): tripling plantation supplies in the immediate future and doubling native forest production (Table 2).

Table 2 Hardwood chip production and projected supply – Australia (million m^3 roundwood per annum)

	Plantation	**Native forest**	**Source/comments**
Production 2007/08	4.4	6.1	Calculated using ABARE 2009; Ajani 2009. Includes relatively small volumes (around 10%) processed domestically into pulp.
Projected supply 2010 to 2014	13.8		Bureau of Rural Sciences projections prepared by Parsons *et al*. 2006.
Projected supply 2015 to 19	12.8		Bureau of Rural Sciences projections prepared by Parsons *et al*. 2007.

Most (around 90%) of Australia's hardwood plantation and native forest chips are exported unprocessed. Japan buys 85% of Australian exports and China 12% (ABARE 2009, p. 79). Australia accounts for a third of Japan's hardwood chip imports.

Summary

The key features of Australia's hardwood chip supply reality today are:

- dominated by heavily subsidised public native forest resources with state governments entrenched in loss making native forest wood supply;
- on the brink of a massive surge in plantation supply; and
- markets heavily concentrated to Japan whose pulp and paper industry dominates the global hardwood chip trade.

4. Hardwood chip consumption

The future demand for hardwood chips is crucial information for potential investors. Appendix A, aligns statements on market expectations presented in various hardwood plantation MIS prospectus' on offer by the late 1990s against what actually happened in the market.

Overwhelmingly, the hardwood plantation prospectus market analyses have been feeble: often referring to the total global wood market outlook (not mentioning that hardwood chiplogs account for only 14% of global industrial wood production); failing outstandingly in projecting fundamental market trends, downplaying the growing significance of paper recycling; misrepresenting Australia's wood products trade deficit; and never moving past vague generalities.

The reality of the markets for which the MIS wood was destined is:

- global growth in wood consumption of just 0.4% per annum from 1980 to 2007;
- average annual growth in Japanese consumption of paper and paperboard of 0.1% from 1997 to 2007;
- Japanese hardwood chip imports stagnant from 1997 to 2007;
- Japanese use of recycled paper and paperboard growing by 1.9% per annum since 1999;
- China working to achieve resource security for its paper industry through an awesome increase in recycled paper input, investing in high-yielding pulp technologies (requiring less wood to make a unit of pulp) and substantial investment in short rotation plantations for pulp production; and
- a long-term trend decline in real prices for globally traded hardwood chips.

The much quoted trade deficit in wood products is in reality a manufacturing industry problem, caused largely by imports of printing and writing paper. Australia's monopoly paper producer also substantially controls merchanting of both domestic and imported paper and is in a position to block or enable new domestic paper manufacturing.

5. Government support

On 2 October 1997, John Anderson, Minister for Primary Industries and Energy launched *Plantations for Australia-the 2020 Vision*. Its overarching goal was to triple Australia's plantation estate by 2020: a goal developed jointly by government and industry including the National Association of Forest Industries, Australian Forest Growers and Plantations Australia. It was endorsed by the Commonwealth and State

Governments in July 1996. The market analysis backing the goal–conducted by the Centre for Economic Analysis and attached as a Reference Document to *The 2020 Vision*–was shoddy (Ajani 2007, pp. 249-52). Launching *The 2020 Vision*, the minister referred to the event as a '*ceremony*' and '*a good news story for rural and regional Australia – indeed for all Australians'*. Jobs, partnerships with farmers, large scale land care benefits, greenhouse gas sequestration and creating a wood and wood products trade surplus were *The 2020 Vision's* offerings. Managed investment schemes were never mentioned as the vehicle for implementation, although they were then effectively fully fledged. In concluding his speech the minister listed the rewards to flow from *The 2020 Vision*:

'***The result will be a vibrant, sustainable, internationally focussed and competitive plantation sector that will deliver substantial rewards to all those involved in the industry; to rural and regional Australia; and to the economy at large***.' Minister for Primary Industries and Energy launching *The 2020 Vision*, Canberra 2 October 1997.

The outcome has largely been the opposite: an unsustainable boom-bust high cost activity benefitting a few at great expense to the many (including in rural areas) via the public purse.

Government-endorsed production targets are rare. They are marketing gold. Wood plantations have this privilege through *The 2020 Vision*, despite there being no evidence of market failure in plantation wood growing. Plantation MIS prospectuses regularly highlight *The 2020 Vision*.

Australian Plantation Timber included it as a dot point 'highlight':

'***An initiative by State, Territory and Commonwealth Governments and the forestry industry called the "2020 Vision" seeks to treble the area of Australia's plantations between 1997 and 2020. This will have significant benefits for the future of Australia's forestry industries***.' Australian Plantation Timber 2000 Prospectus p. 5.

Integrated Tree Cropping included the target as one of '***a number of reasons tree farming in Australia is a sensible investment'*** and emphasised the Australian Government connection:

'***<u>The Australian Government</u> supports the development of an expanded plantation industry and has the aim of tripling the country's tree farms by 2020. It is working with state and local governments to ensure impediments are minimised and every incentive is given to tree farming.***' Integrated Tree Cropping Eucalypts 1999 Green Triangle Project p. 8.

In October 1998 Wilson Tuckey, as newly appointed Minister for Forests and Conservation with jurisdiction over plantations, became the plantation MIS companies' champion. Minister Tuckey forcefully defended public attacks on the schemes (see for example the minister's response to Alan Kohler's article 'Tax bill to ringbark tree schemes' in letters to the *Australian Financial Review* 23 June 2000 p. 87) and worked to ensure investments remained 100 per cent tax deductible in the year of expenditure.

In spite of the government's unwavering support, by 2002, mounting disquiet about plantations and government plantation policy saw *The 2020 Vision* and the taxation treatment of plantations engulfed in inquiries:

- A Senate Committee inquiry into Australia's Forest Plantations - A Review of *Plantations for Australia: The 2020 Vision* which reported in 2004.

- A Senate Committee inquiry into Australian Plantation Forestry which reported in 2004.

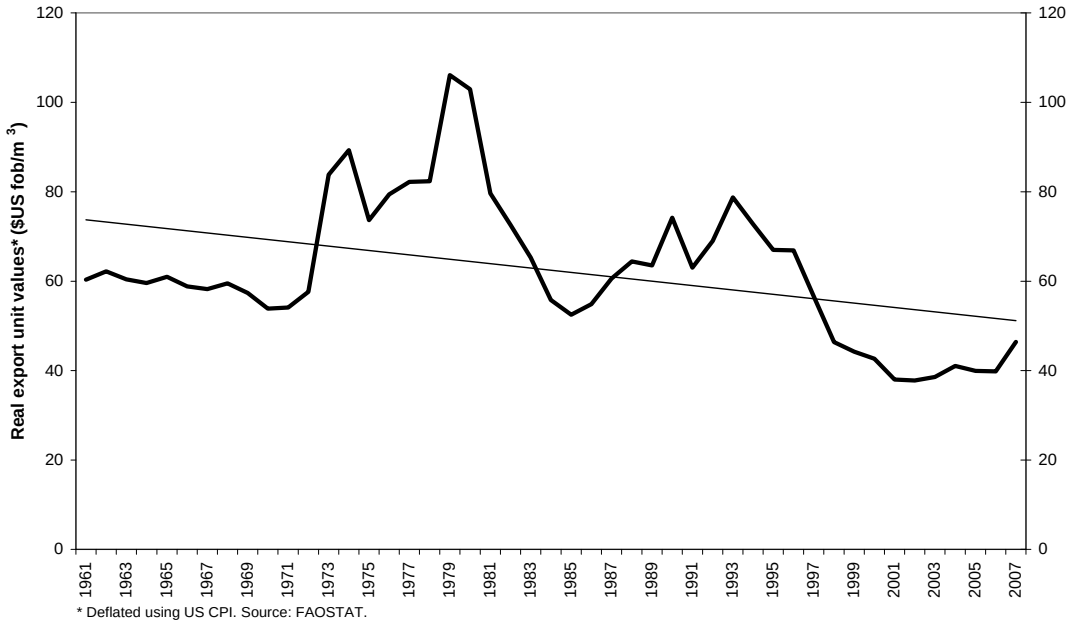
- A Treasury review of The Taxation Treatment of Plantation Forestry.

But Australia's plantation policy remained intact with Senate Committee recommendations (for example, to scrap the target to triple Australia's plantation estate) effectively ignored.

6. Native forest competition and blockages to economically coherent forest policy

Investing in plantations through MIS companies required the perception of wood shortages and therefore expectations of steadily rising real prices for wood. Australia's misrepresented wood and wood products trade deficit has been commandeered to this end. In the global market, wood price trends continue to contradict predictions of a global shortage (Figure 1, Clark 2001). Price trends also continue to contradict predictions of a shortage of hardwood chips. This misrepresentation of market reality works to promote investment and at the same time mask opportunities to substitute native forest wood with plantation wood. The arrangement has operated without government correction for 15 years and has generated a hardwood chip glut (Figure A7 combined with market trends in Japan and China as presented in this submission). Clearing the market of the low-priced native forest woodchip competition is economically coherent, but never has the hardwood plantation sector, or its lobbyists, called publicly for this. Intensifying competition between native forests and plantations in the hardwood chip market was inevitable. But the MIS companies do not bear the risk because their corporate and financial arrangements passed this onto the grower-investors.

Figure 1 Real price for exports of globally trade industrial wood



As increasing volumes of plantation wood came onto the market–first softwood and now hardwood–new plantation industry groups were created. NAFI, the historically dominant 'forestry' industry voice, primarily representing native forest logging, scrambled to maintain control. Five people effectively managed the new hardwood dynamic within the forestry industry (Table 3). All started their careers in the government sector and moved into forestry lobbying, most rotating around the lobby groups, including those they created (Figure 2). Their careers were firmly tied to plantation expansion but they appear to have an ideological fix against retiring native forests from wood production.

Summary

Australia's forest policy remains economically and ecologically incoherent: it has produced a hardwood chip glut with loss-making state forest agencies competing against failing private plantation investments promoted by government at public expense. And in this mess, on-going, unnecessary native forest logging is drawing down carbon stocks and biodiversity.

Table 3 From government to forestry lobbying

	Government	Forestry lobbies	Academia
Alan Cummine	• DPIE • Adviser to environment minister Ros Kelly	• Australian Forest Growers (AFG) • Treefarm Investment Managers Australia (TIMA) • Australian Plantation Products and Paper Industry Council (A3P)	
Allan Hansard	• ABARE • DAFF (Plantation Tax Review)	• National Association of Forest Industries (NAFI) • Tree Plantations Australia	
Miles Prosser	• State Forests NSW	• FORTECH* • NAFI • Plantations Australia • Boral • A3P • Aluminium Council	
Richard Stanton	• DAFF • State Forests NSW (National Co-ordinator 2020 Plantation Vision)	• NAFI • Australian Paper Industry Council • A3P	
Phil Townsend	• DAFF	• NAFI • Tree Plantations Australia	• ANU

A brief history of the forestry lobby groups listed in Table 3:

Industry organisations

* FORTECH (Forestry Technical Services Pty Ltd)–a forestry consultancy (not lobbyist)–part of the Dames and Moore Group now URS. Prosser's work included provision of independent forester's reports to plantation MIS companies.

Plantation organisations

Australian Plantation Products and Paper Industry Council (A3P) – formed to represent the interests of the plantation sector. Includes the merged Plantations Australia and Australian Paper Industry Council.

Treefarm Investment Managers Australia (TIMA) – formed in July 2000 as a special branch of Australian Forest Growers to represent the interests of the plantation MIS companies. Recently absorbed into Australian Plantation Products and Paper Industry Council (A3P).

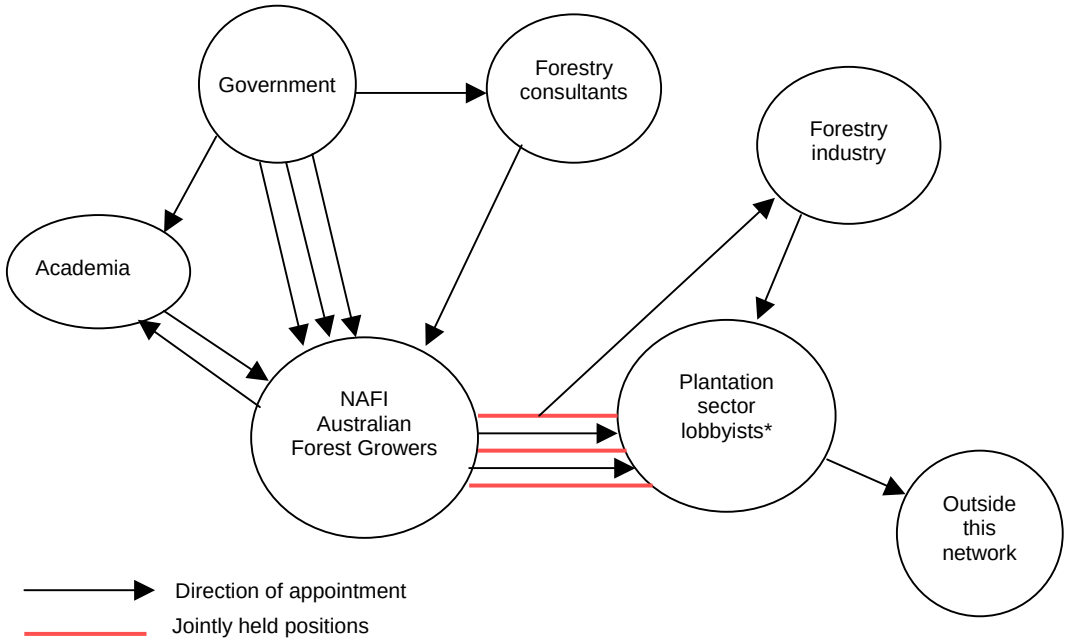
Tree Plantations Australia – within the NAFI group.

Organisations representing 'forest' industries (both native forests and plantations)

Australian Forest Growers (AFG).

National Association of Forest Industries (NAFI)

Figure 2 The jobs network for Australia's five key plantation forestry lobbyists



* Comprises TIMA - Treefarm Investment Managers Australia (a special branch of Australian Forest Growers recently merged into A3P); A3P - Australian Plantation Products and Paper Industry Council; Tree plantations Australia (within the NAFI Group); Plantations Australia (merged into A3P); Australian Paper Industry Council (merged into A3P).

7. Conclusions

Plantation managed investment schemes are boom and bust by nature because the investment is driven by the more intense demand for tax minimisation, not wood market realities. Combined with highly profitable corporate arrangements where plantation MIS companies earn most of their income up-front from selling high priced products to grower-investors, and relatively little if any from wood sales, Australia's plantation MISs have generated a hardwood chip glut. While the global financial crisis and economic recession may have triggered the downfall of Timbercorp and Great Southern Plantations, all hardwood plantation MIS investments face a very difficult next few years. Surviving MIS companies may use Timbercorp's and Great Southern Plantation's demise to help realign downwards grower expectations of returns on investment but will not escape the consequence of the wood glut without action to reduce native forest wood supplies.

An investigation of late 1990s hardwood plantation prospectus documents reveals a wide chasm between market outlook and actual market realities (Appendix A). Uncertainty is always present in projecting markets ten years out, but the failure to pick-up on fundamental structural changes in the hardwood chip and paper market should be of concern to grower-investors. Maybe the prospectus documents are protected in legal polish. But the reality is that with prospectus company profits not pinned primarily to revenue from wood sales, there is little commercial motivation for

them to invest in rigorous market research or to respond to wood market realities a decade into the future.

Before the MIS approach to growing wood, it cost around $2 000 to plant and manage a hectare of trees over a ten year rotation. Managed investment schemes more than quadrupled that cost. Neither wood prices nor plantation yields have increased anywhere near sufficient to offset this cost increase. The public purse is the biggest loser in this arrangement.

To contain the problem, plantation managed investment schemes should be wound up immediately. To prevent it recurring, schemes with similar characteristics such as the carbon sink plantation tax deductions (Subdivision 40-J of the *Income Tax Assessment Act 1997*) should be withdrawn pending full analysis.

On the woodchip glut, the Commonwealth Government faces two choices. It can ignore its substantial hand in creating the arrangements that generated the glut and leave it to the market to sort out. The market includes supplies from heavily subsidised State Government business enterprises using public native forests in Tasmania, Victoria and New South Wales. In this situation, we can expect a drawn-out battle between private plantation growers and native forest based chip exporters. [Australia experienced such a play when large areas of government funded softwood plantations came on stream over the 1980s and 1990s. The battle for the sawn timber market–won ultimately and inevitably by the plantation sector that now produces 80% of Australia's sawn timber–was unnecessarily protracted and hugely damaging to plantation sawmilling profitability.]

The alternative is for the Commonwealth Government to engage and find the wherewithal to clear the woodchip market of native forest supplies. [As an added plus: substantial carbon storage and biodiversity benefits would be realised.] If this is the chosen path, the Commonwealth Government will need to attend to the seriously entrenched alliance between the bureaucracy and the forestry lobby groups. An engaged government–at the ministerial level–would find it unacceptable that a handful of lobbyists continue to pedal perceptions of wood shortages (including on the domestic front through misrepresenting the wood and wood products trade deficit) with a hardwood chip glut building momentum.

Appendix A.

Aligning market expectations presented in various hardwood plantation MIS prospectus' on offer by the late 1990s with what actually happened in the market.

[Note: in the analysis below, all growth rates for non MIS prospectus statements were calculated using ordinary least squares logarithmic regression incorporating all annual data over the period specified.]

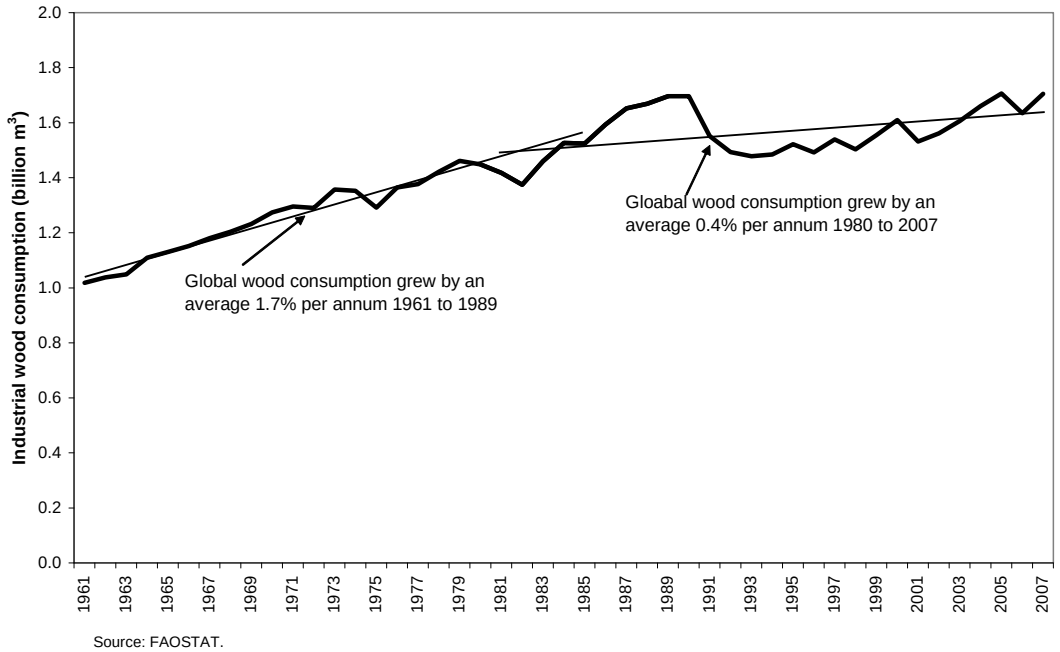
'Worldwide wood production has increased at a rate of 1.3% per year since the early 1960s…. demand for wood is increasing worldwide …Current projections indicate that demand will increase within the range 1.5% to 4.9% per year.'
Forestry Tasmania 1999 Trees Trust Offer Document p. 16.

Reality

- Structural changes in the global wood and wood products industry (notably stagnant developed country consumption of solid wood products and wood saving strategies, most significantly through increased paper recycling) have slowed wood consumption. Developing countries have not offset these wood demand dampeners such that global wood consumption since the 1980s replicates the high growth in the 1960s and 1970s (Figure A1).

- 1999 Forestry Tasmania Tree Trust investors in hardwood chip plantations will not experience a global wood market growing at an average 1.5% per annum over the life of their investment–even before factoring in the current global economic recession. The 4.9% per annum growth projection is bizarre.

Figure A1 Global industrial wood consumption



Source: FAOSTAT.

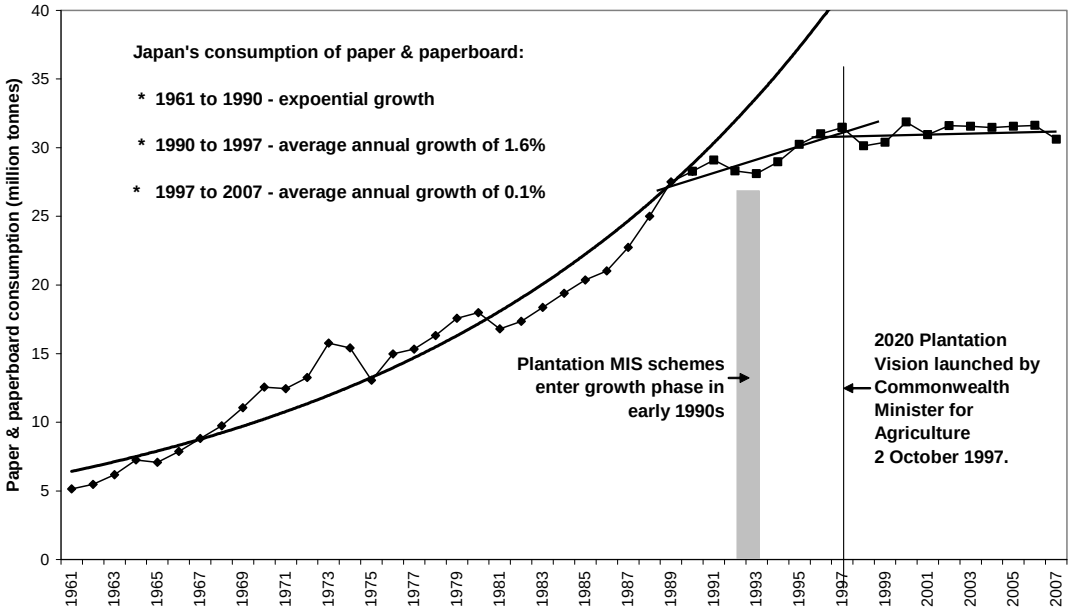
'***Japan, the second largest producer and consumer of paper and paperboard in the world, is estimated to show an annual increase in demand of 2.2% per annum by the year 2010.'*** Timbercorp Eucalypts Project 1998 p. 8.

Reality

- Since 1998, Japan's consumption of paper and paperboard has stagnated (Figure A2).

- It is quite possible that Japan's consumption of paper and paperboard over the period 1998 to 2010 contracts.

Figure A2 Japan's consumption of paper and paperboard



Source: FAOSTAT amended using Japan Paper Association statistics for 2004 to 2007 that report higher production of printing & communication paper in those years.

'Japan currently dominates the Asian market for internationally traded woodchips, and in 1996 imported approximately 26.3 million tonnes. The Japanese Ministry for International Trade and Industry predicts an increase of 2.2% per annum in paper use in Japan between 1996 and 2010. The use of recycled waste paper in the manufacture of new paper is approaching the maximum technical level and Japan's domestic supply of hardwood chips is declining. As a result Japanese woodchip imports are predicted to increase by 50% to around 40 million tonnes by 2015 to satisfy demand.' Integrated Tree Cropping 1999 prospectus p. 10.

Reality

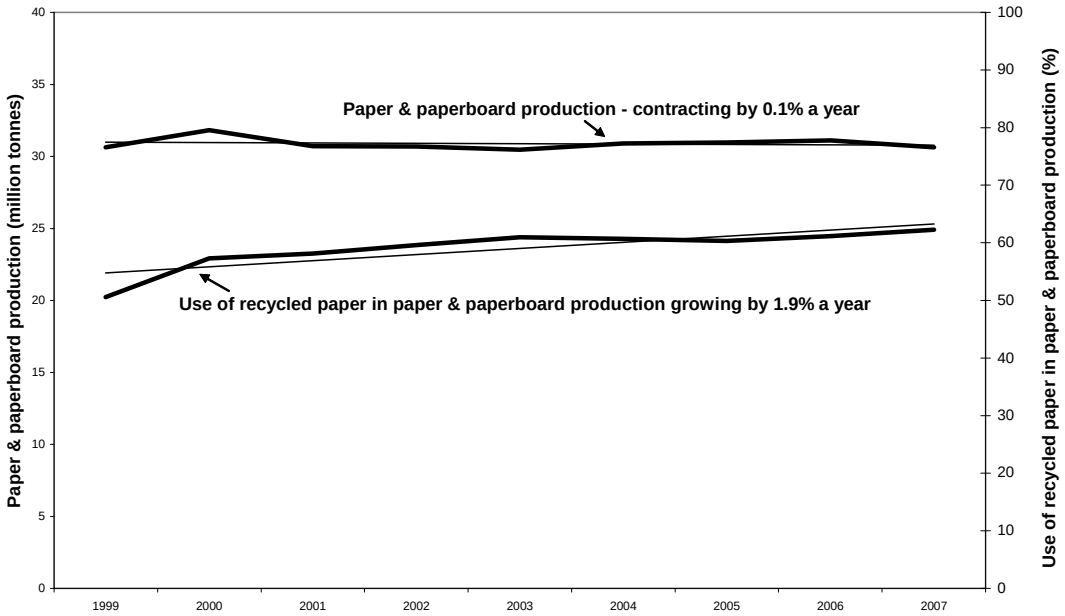
- Yes, Japan dominates the Asian market for internationally traded woodchips. This exposes Australian hardwood chip exporters to greater market risk.

- Japan's paper consumption has not grown by 2.2% per annum since 1996. It has remained stagnant (Figure A2). [How is it in the wood importing Japanese paper industry's interest to not present optimistic forecasts?]

- Rather than hitting a technological limit to paper recycling, the Japanese paper industry's use of recycled paper has increased by around 2% per annum since 1999 (Figure A3).

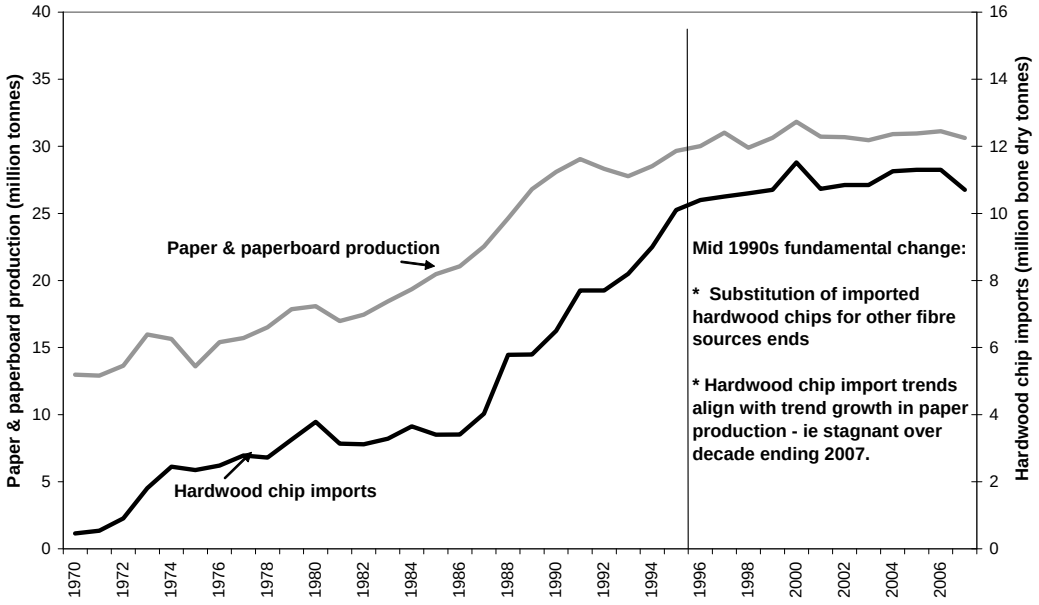
- Japan's substitution of domestic hardwood chips with imports ended in the mid 1990s. Since then hardwood chip imports have stagnated, in line with Japan's no growth paper and paperboard production (Figure A4). Predictions of a 50% increase in woodchip imports by 2015 are fantasy.

Figure A3 Japan's use of recycled paper in paper and paperboard production



Source: FAOSTAT amended using Japan Paper Association statistics for 2004 to 2007 that report higher production of printing & communication paper in those years.

Figure A4 Japan's hardwood chip imports



Source: FAOSTAT (amended using Japan Paper Association statistics for 2004 to 2007 that report higher production of printing & communication paper in those years); Japan Paper Association and Japan Tariff Association statistics (I thank Ian Penna for assistance in data collection).

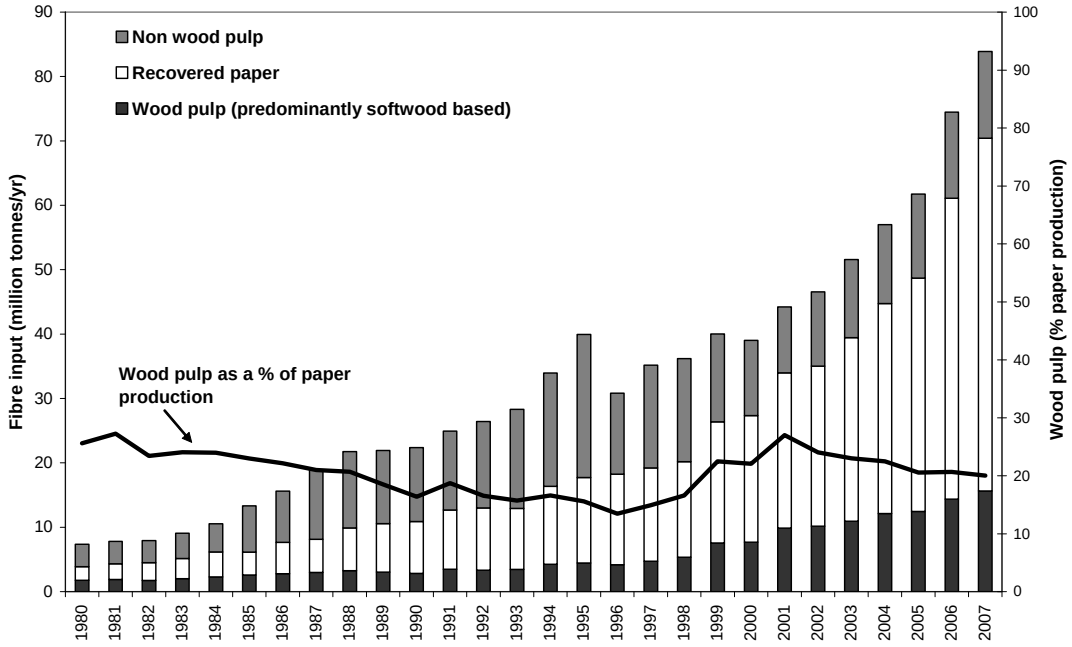
'***The market for woodchips in Asia is expected to grow to satisfy rising demand for paper products … As an example, in the period 1980 to 1996, the use of paper in China increased from 6 kg per head to 25 kg … If the existing rate of increase continues, by 2015 Chinese consumption with reach 279 million tonnes of paper, which is an amount equivalent to the current total world consumption***.' Integrated Tree Cropping Eucalypts 1999 Green Triangle Project p. 10.

Reality

- Converting Integrated Tree Cropping's quoted projections of China's paper consumption into market opportunities relevant to Australian hardwood plantation growers requires netting out recycled paper use–currently feeding around 70% of China's paper production; non-wood fibres like bagasse–currently feeding 17% of China's paper production (Figure A5); softwood pulp (accounting for the majority of wood pulp production); and factoring in China's uptake of higher yielding pulp technologies and domestic tree planting program for pulp production.

- China well understands its capacity to shock the global wood market and drive wood prices up. For its own interests, China is working to avoid such an outcome through a combination of pre-emptive price negotiations driving real prices for its wood imports down, an awesome increase on recycled paper use, uptake of high-yielding pulping technologies (requiring less wood to make a unit of pulp) and a substantial short rotation plantation program geared for pulp production. Projecting China's wood imports over two decades assuming linear relationships is naive.

Figure A5 China's fibre sources for paper and paperboard production

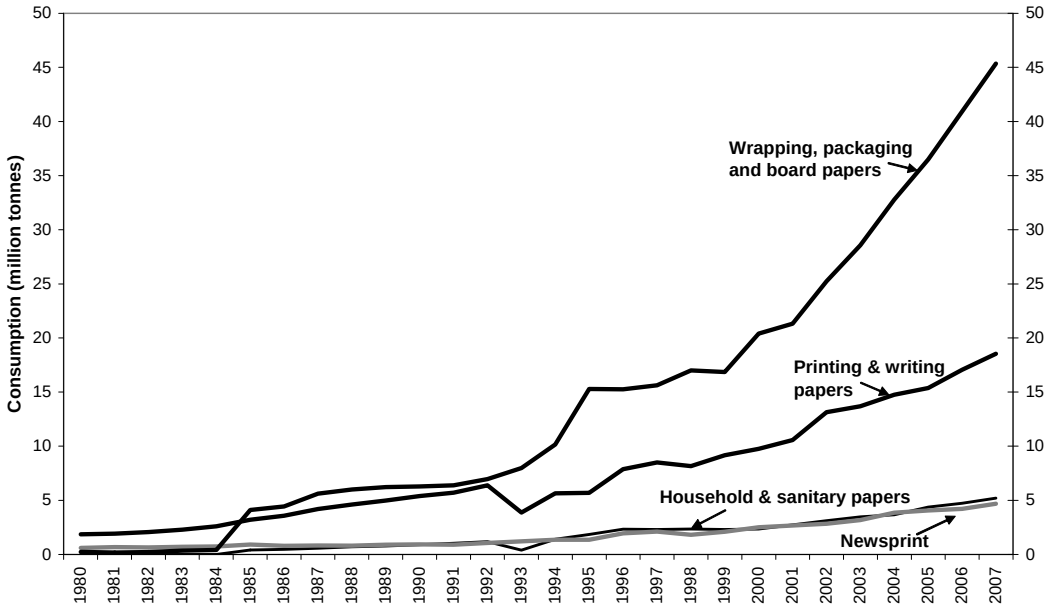


'***Your Woodlots will be planted with E. globulus, a fast growing species of native Australian eucalypt. E. globulus is considered one of the best species for high quality paper providing bulk and opacity to printing and writing papers while its short fibres fit closely together to provide the smooth writing surface needed for printing and writing papers***.' And the page earlier '***Strong demand*** [for paper and paperboard] ***from China and the ASEAN countries is also expected***…' Timbercorp Eucalypts Project 1998 pp. 8-9.

Reality

- Many prospectus documents advise on the suitability of eucalypts for printing and writing papers and the growing market opportunities for wood especially China. To my knowledge, none have presented information on the types of paper and paperboard China actually consumes and their relative trends. Since 1998, wrapping, packaging and board papers (made using mainly recycled paper and softwood pulp) have accounted for 63% of China's growth in paper and paperboard consumption; printing and writing papers for 23% and newsprint and household and sanitary papers for 14% (Figure A6).

Figure A6 China's paper consumption



Source. FAOSTAT.

'***Australia currently has an estimated $1.5 billion deficit in wood and wood products. As part of the process of addressing this imbalance the Federal Government has issued the 2020 Vision policy to encourage ongoing investment in the timber plantation industry. The primary target of this policy is to encourage private investment in plantations in order to treble the area under plantation in Australia by the year 2020***.' Great Southern Plantations 1999 share offer prospectus p. 6.

Reality

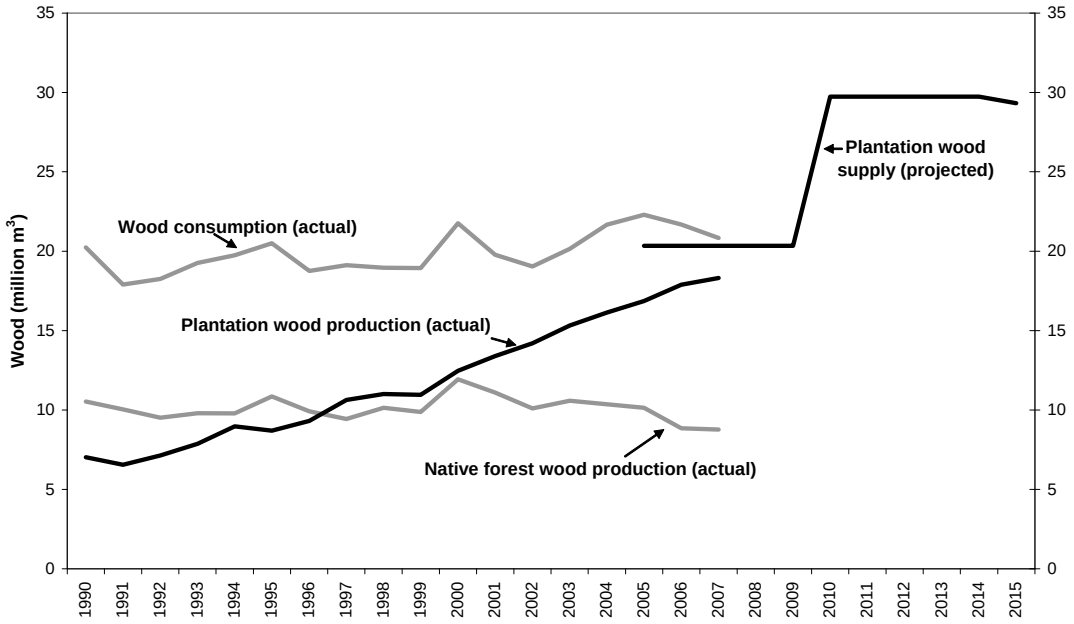
- For those apparently concerned about Australia's wood products trade deficit (but not our computer or coffee trade deficit), the problem is not a shortage of wood. Australia has enough wood in plantations alone to meet virtually all our wood needs (Figure A7): meaning that an insufficiency of wood cannot explain the deficit. The so called wood and wood products trade deficit problem is a manufacturing industry problem. It lies substantially in Australia's printing and writing paper sector with its monopoly producer which also has a substantial controlling interest in merchanting, including of imported papers. Imports of printing and writing papers account for 70% of Australia's wood and wood products trade deficit. (See Ajani 2007 pp. 299-303 for a full explanation of how the structure of Australia's printing and writing industry (one company) frustrates the building of a new plantation based hardwood pulpmill.)

- Leaving aside the above crucial issue of domestic market access for a new plantation-based pulp and paper operator, such potential investments face a wood pricing problem. It appears that plantation MIS companies have been unwilling to enter into supply contracts with more realistic stumpage prices,

possibly because of the negative signals to potential new MIS investors from whom the plantation MIS companies generate their profits.

- The plantation prospectus companies have exploited entrenched misunderstanding about Australia's wood and wood products trade deficit. The trade deficit helps market their investment products with their high stumpage price assumptions which make unviable any new hardwood plantation pulp and paper mill in Australia, the essence of the so called wood and wood products trade deficit problem.

Figure A7 Australia's wood consumption and projected plantation wood supply



Source: ABARE *Australian Forest and Wood Products Statistics* ; Parsons et al. 2007 (Bureau of Rural Sciences plantation wood supply projections)

'***The price for internationally traded pulpwood, and in particular hardwood woodchips, has been stable for the last 25 years***…' Integrated Tree Cropping Eucalypts 1999 Green Triangle Project p. 11.

'***The export price is negotiated annually by the Australian plantation industry with Japanese purchasers. In February 2008, this price increased to $207.40 per bone dry tonne, a 9.5% increase on the 2007 price….The 2008 price is relevant for investors in Great Southern's 1997 and 1998 projects, whose plantations are currently being harvested.'*** Great Southern Plantations Projects 'Plantation communication to all advisors' 8 May 2008.

[Since this communication, Great Southern Plantations, Integrated Tree Cropping and Timbercorp have negotiated no change to the nominal chip price ($207/BDT) for 2009 for sales to Japan.]

Reality

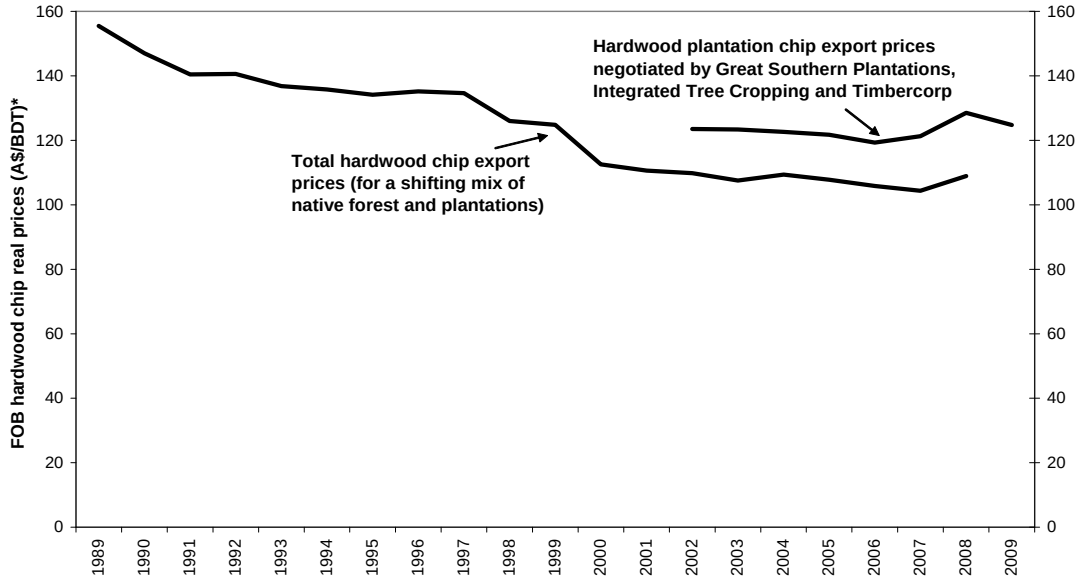
- ABARE's latest published data set for woodchip export prices (native forest and plantations combined) commences from 1989 – the source data from the ABS for earlier years apparently have inconsistencies in the unit of measurement. For the duration of reliable price data, real prices for hardwood chips have trended down by an average 2% per annum (Figure A8). This is a familiar trend for commodity production over the long term. The more recent easing in the price decline for hardwood chip exports partly reflects quality changes as plantation resources account for an increasing share of the trade.

- Higher prices for plantation chips reflect a tangible quality premium. What Great Southern Plantations does not communicate to advisers is how their negotiated woodchip prices for 2008 compare with the prices assumed in their 1997 prospectus financials–the relevant prospectus for growers selling into the 2008 market. Great Southern Plantations assumed that plantation woodchips would command a 10% to 20% price premium over native forests and that the woodchip nominal price would increase by 2% to 3% a year. Taking the average of these two sets of assumptions:

    - 1997 growers selling into the 2008 market would have expected hardwood plantation woodchip prices (nominal) to reach $244.40/BDT. This is 18% higher than the price Great Southern Plantations negotiated.

    - 1998 growers selling into the 2009 market would have expected hardwood plantation woodchip prices (nominal) to reach $250.50/BDT. This is 21% higher than the price Great Southern Plantations negotiated.

Figure A8 Real prices for Australian hardwood chip exports



* Prices adjusted for inflation using Australian CPI 1989/90 = 100. 2008/09 CPI calculated using data for three quarters and assuming no growth in June qtr 2009.
Source: ABARE Australian Commodity Statistics 2008; Great Southern Plantations 2008; Great Southern Plantations Stock Exchange announcement 27/3/2009.

References

ABARE 1993, *Quarterly Forest Products Statistics March Quarter 1995*.

ABARE 2009, *Australian Forest and Wood Products Statistics September and December Quarters 2008*.

Ajani J. 2009, 'Australian production of wood and wood products in 2007/08 disaggregated by wood source', unpublished paper Fenner School of Environment and Society, the Australian National University.

Ajani J. 2007, *The Forest Wars*, Melbourne University Press.

Clark J. (now Ajani) 2001, 'The global wood market, prices and plantation investment: an examination drawing on the Australian experience', *Environmental Conservation 28* (1) 53-64.

Great Southern Plantations 2008, '1774 Plantations communication to all advisors' 8 May 2008.

FAOSTAT, United Nations Food and Agricultural Organisation forestry data <http://faostat.fao.org/site/626/default.aspx#ancor>

Intelligent Investor 2006, 'Act of generosity', Issue 203, 5 July 2006, p. 2.

Lonsec Agribusiness Research 2001, 'Comparison of similar eucalyptus pulpwood projects', Lonsdale Securities Ltd.

Parsons M., Frankes I. & Gavran M. 2007, *Australia's Plantation Log Supply 2005-2049*, Bureau of Rural Sciences.