



Response to the Productivity Commission Review of TCF Assistance

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Part A Response

In the review document there was criticism of the submission from the City of Wangaratta, particularly in terms of the economic model used (Review, Page 55). The modelling part of the submission was developed using REMPLAN modelling software and an input-output model of the local government area supplied by the Centre for Sustainable Regional Communities, La Trobe University, Bendigo. Three issues were raised:

- (i) the effects on consumption were overstated,*
- (ii) beneficial regional effects were ignored, and*
- (iii) some gains would come from new employment.*

1. The effects on consumption are overstated

The assumption underlying the impact assessment was that if output falls, consumption will fall proportionately and that economic behaviour is symmetrical whether output rises or falls. The Productivity Commission is correct in stating that such an effect may be diminished if displaced employees draw on employee entitlements and past savings to at least allow a modest level of consumption to continue. It is also possible that displaced workers may draw on welfare support in the short, medium or long term, a point for concern rather than celebration. If however some displaced workers leave the district in the longer term then the full consumption effect will be felt for this group of people. On this basis it could be argued that the consumption effect outlined in the initial modelling was overstated. The next issue is to determine the extent to which the consumption effect has been overstated and how this influences the previous findings.

The issue of employee entitlements has been discussed (Review pp115-121) with a number of examples of unrecovered worker entitlements. It appears that the more generous the agreed entitlement, the less is the chance that these will be paid if the company stops trading. As such it would be optimistic to imagine that workers will be able to survive for long by drawing down entitlements. The outlook for those displaced workers forced to live off the Newstart allowance is bleak. Average weekly wages for all TCF workers (Review p 169) was \$670 per week (\$27,485 pa after tax). The Newstart allowance ranges from \$380 per fortnight for a single adult

(\$9,880 pa) to \$411 for a single adult with children (\$10,686 pa) or 38% of the average after-tax wage.

To counter criticisms that the consumption effects were overstated, it was decided allow for a 50% reduction in negative consumption behavior which is well above the effect of those going on welfare and/or facing an unknown employment future and makes no allowance for workers forced to leave the region. To achieve this, the consumption coefficients in the model were halved and the effects were remodelled. The changes in output resulting from these changes are set out in Table 1 below.

Regional Output, Wangaratta.					
		Initial Effect \$m	Industrial Effect \$m	Consumption Effect \$m	TOTAL EFFECT \$m
Scenario 1.	Original modelling of initial loss of 100 TCF jobs with full consumption coefficients	-12.480	-5.721	-5.372	-23.573
Scenario 2.	As with Scenario 1 but with halved consumption coefficients	-12.480	-5.721	-2.242	-20.443

Table 1. Modelling results from initial loss of 100 jobs incorporating full and halved consumption coefficients

Following the adjusted consumption effects it can be seen that loss of total output has been reduced by \$3.143m or by 13% down to \$20.443m. The differences to employment following the adjusted consumption effect are set out in Table 2.

Regional Employment, Wangaratta					
		Initial Effect Jobs	Industrial Effect Jobs	Consumption Effect Jobs	TOTAL EFFECT Jobs
Scenario 1.	Original modelling of initial loss of 100 TCF jobs with full consumption coefficients	-100	-50	-50	-200
Scenario 2.	As with Scenario 1 but with halved consumption coefficients	-100	-50	-21	-170

Table 2. Modelling results from initial loss of 100 jobs incorporating full and halved consumption coefficients.

Following output, the number of jobs lost to the region has fallen by 29 or 15% to a total loss of 170 jobs as a result of a loss of 100 jobs in the TCF sector as opposed to the original claim of a loss of 200 jobs. Detailed modelling results are set out in Appendix 1.

The inclusion of lower consumption coefficients into the model has certainly diminished the total result. The extent of this change on regional output and employment has been estimated to be between 13% and 15%. As already noted, this should not be a cause for celebration as the region is still left with a severe set of consequences. Apart from imposing costs on the welfare system any changes to TCF output will also impose serious costs and hardships on the individuals caught up in this process.

The reduction of the negative consumption effect still fails to counter the original claim that the effects of tariff reductions and consequent loss of jobs in the TCF sector will result in the imposition of severe effects on the regional economy as any reductions in output and employment flow through to other industry sectors.

2. Beneficial regional effects of tariff cuts ignored

The example given (Review p 55)

..., for example – regional furniture manufacturing and associated investment would receive a boost from lower tariffs.

The remarks were directed particularly at the Wangaratta case so a specific response is warranted. In August 2001, the furniture industry in Wangaratta employed 20 workers with an estimated output of \$1.998m. In comparison the TCF sector employed 785 workers with an estimated output of \$98.486m. Local purchases of textile products by furniture makers were estimated to be 2.17% of output or \$43,000 annually (estimates extracted from REMPLAN). Savings on the cost of purchases under a lower tariff regime and consequent additions to output would not be expected to be profound in the Wangaratta region with an estimated additional output of just \$2,134.

Beneficial regional effects for all other industry sectors arising out of tariff cuts certainly can be modelled using input-output models such as REMPLAN but these effects need to be fed into the model. The advantage of this approach is that such effects are not determined by nationally formulated assumptions which may or may not be relevant to the region under scrutiny at the time of the investigation. Once such effects are defined and quantified they can then be fed into the model and the flow-on effects calculated.

The present proposal is to reduce tariffs in the TCF sector from an average of 15% to 5%. For the purpose of the exercise it has been assumed that as a result of the relative “stickiness” of prices in oligopolistic industry structures, a 10% fall in TCF prices could be expected to lead to no more than a 5% fall in prices to other industry sectors. For convenience a price elasticity of 1 was assumed so that a 5% fall in prices would lead to a 5% increase in the quantity demanded. The effect of lower input costs on final prices would then depend on the proportion of TCF inputs used by each of the particular industry sectors.

Results of the modelling on output under Scenario 2 (with lowered consumption coefficients) are set out in Table 3. Because the effects of Scenario 3 (including the beneficial effects) were positive, full consumption effects were used to calculate any benefits of lower input prices. It can be seen that the overall result was a reduction of the loss to the region of \$668,000 (3.3%) with a modified net loss for the region of \$19.775m as opposed to the previous loss of \$20.443m. The reality is that Wangaratta does not have a particularly diverse economy and the use of TCF inputs is at best very modest, a feature likely to be shared in many regional economies but not necessarily evident in national modelling.

Regional Output, Wangaratta					
		Initial Effect \$m	Industrial Effect \$m	Consumption Effect \$m	TOTAL EFFECT \$m
Scenario 2.	As with Scenario 1 but with halved consumption coefficients	-12.480	-5.721	-2.242	-20.443
Scenario 3.	Results of a 5% fall in price of TCF inputs to all other sectors using full consumption coefficients*	0.373	0.143	0.159	0.668
	Net effect	-12.107	-5.578	-2.083	-19.775

Table 3. The net effect on regional output of an initial loss of 100 TCF jobs

Table 4 sets out how lowered TCF input prices affected the employment across other industry sectors. Gains from lower TCF prices amounted to 5.3 extra jobs and the number of jobs lost due to tariffs was reduced from 170 to 165 (3.1%).

Regional Employment, Wangaratta					
		Initial Effect Jobs	Industrial Effect Jobs	Consumption Effect Jobs	TOTAL EFFECT Jobs
Scenario 2.	As with Scenario 1 but with halved consumption coefficients	-100	-50	-21	-170
Scenario 3.	Results of a 5% fall in price of TCF inputs to all other sectors*	2.7	1.1	1.5	5.3
	Net Effect	-97.3	-48.9	-19.5	-164.7

Table 4. The net effect on regional employment of an initial loss of 100 TCF jobs.

Hospitality, health and retail trade are sectors that have been identified by the Commission as users of textile inputs. Details of the direct effect on industry sectors are set out in Appendix 2. The size of inputs from the TCF has been calculated using local output figures and national input coefficients. Such a calculation will cover purchases of TCF inputs from within Australia but will not capture any imported TCF inputs. Such imports would be expected to be very small for the Wangaratta region.

The benefits of falling prices of TCF inputs in Wangaratta have proven to be slight. The overall position that there would be serious flow-on effects from any loss of employment in the TCF sector in Wangaratta still holds after allowing for reduced consumption effects and for benefits of lower prices for TCF inputs into other sectors. These latter effects have certainly modified the position but even under the modified assumptions it can be stated that for the loss of 100 TCF jobs, there will be a loss of a further 61 jobs in the region. As such, any significant changes imposed on this sector will have a substantial effect on the region in terms of output and employment over and above any beneficial effects which appear to be insubstantial.

3. Some gain in local employment

The purpose of the modelling exercise was to measure the economic impact of changes to TCF tariffs over a number of possible scenarios. Any exogenous increase in regional employment is not relevant to that aim. It is interesting to note that the Commission argues this point (Review p46) when it is responding to the case put by Geelong:

This is not to deny, however that even better (employment) results might have been achieved if that sector (the TCF sector) had not declined.

This is of course the point; any improvement in an unrelated industry sector will not appear in any type of economic modelling if it is exogenous and unrelated to the conditions being modelled. Such an improvement would otherwise be expected to lower unemployment rates rather than soak up any losses due to tariff reductions in the TCF sector.

CONCLUSION

1. Productivity Commission arguments regarding exaggerated consumption effects have been incorporated into the model. When consumption coefficients were halved (a very cautious position under a scenario of widespread unemployment) modelling results for output and employment were 13% to 15% lower. Even so, the modifications failed to undermine the initial position that the loss of TCF jobs in Wangaratta would have serious flow-on effects in the region. A modified set of results is set out in the revised submission following.
2. The beneficial effect of lower TCF on input prices for all other sectors in the region proved to be very modest (\$670,000 and 5 jobs) and again failed to negate the initial position.
3. Benefits and jobs gained from exogenous or external effects should not be factored into a study of the impacts of tariff changes in the TCF sector. These benefits would have otherwise lowered the level of unemployment in the region or brought more workers into the region.

Part B. The Modified Submission

1. The significance of the TCF sector in Wangaratta

Estimated output for the TCF sector is \$98.406m. Details are set out in Figure 1.

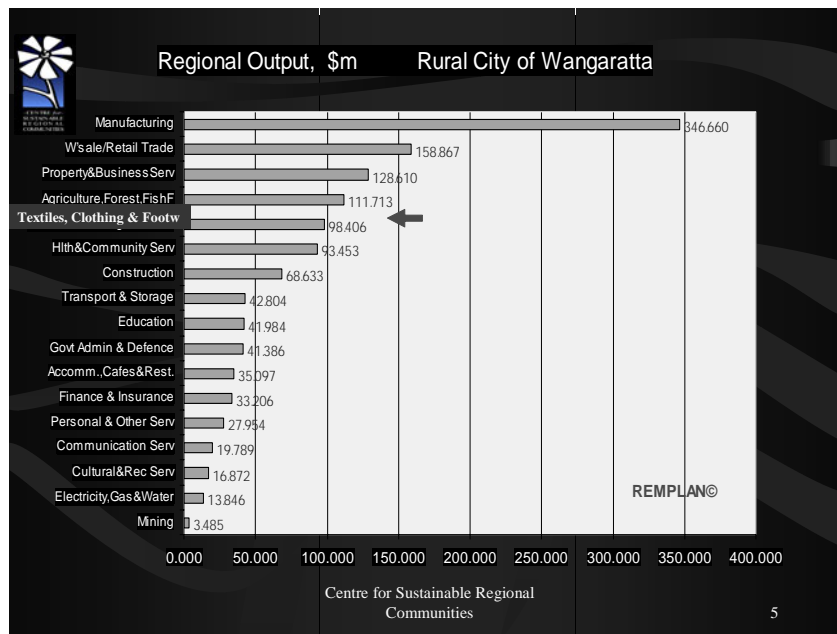


Figure 1. Output by industry sector in Wangaratta.

As set out in Table 5, the TCF sector is responsible for 7.67% of all output, 6.32% of all wages and salaries and 7.3% of all employment. The fact that it generates 17.39% of regional exports marks it as a key economic driver for the region.

THE TCF INDUSTRY IN THE RURAL CITY OF WANGARATTA	
TOTAL OUTPUT	\$98.406m (7.67%)
TOTAL INCOME (wages & salaries)	\$20.268m (6.32%)
EMPLOYMENT	785 (7.30%)
EXPORTS OUT OF REGION	\$83.791m (17.39%)
IMPORTS INTO REGION	\$33.932m (10.67%)
VALUE ADDED TO GRP REMPPLAN©	\$31.238m (5.26%)

Source: Modelled data (REMPPLAN) based on 2001 C-data, ABS

Centre for Sustainable Regional Communities

Table 5. Details of the TCF sector in Wangaratta

Details of manufacturing output are provided in Figure 2. It can be seen that the TCF sector is responsible for 28% of all manufacturing in the region. As such any change in this sector will have a significant impact on the region.

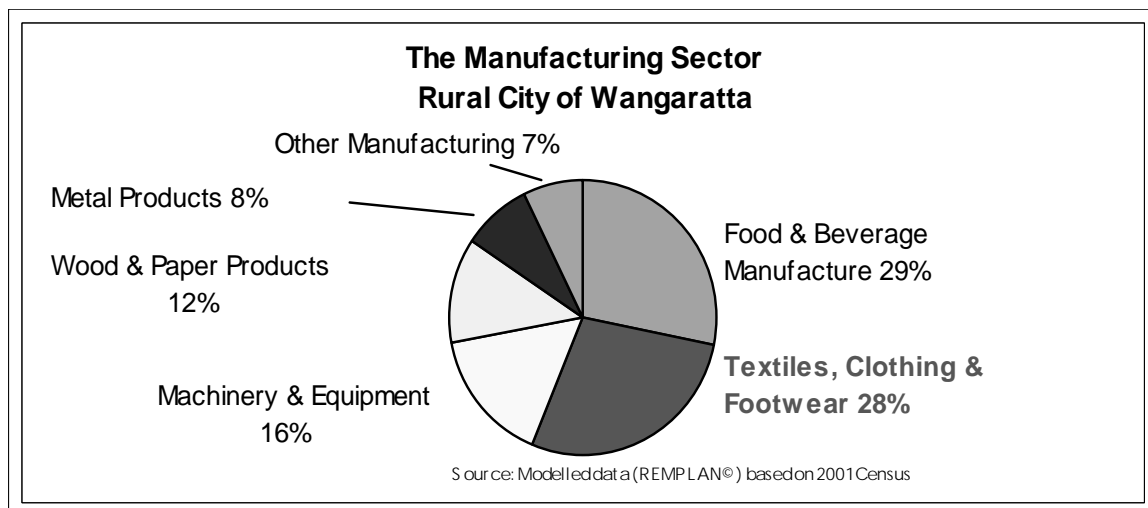


Figure 2. Composition of the manufacturing sector in Wangaratta

2. The economic impact of changes to the TCF sector

A number of scenarios were modelled to assess the likely impacts of changes to the TCF sector on the Wangaratta regional economy. This round of modelling included a halving of the consumption effect through the halving of the consumption coefficients and the factoring in of

benefits arising out of lower TCF input prices for other sectors as discussed above. Details of the revised modelling are set out in Table 6.

This latter change assumed a drop in tariffs from 15% to 5%, unitary price elasticity (=1.00) and a 5% drop in the price of TCF inputs for other industry sectors as outlined in Part 1 of this submission.

The results of modelling the modified scenarios continue to show a serious impact of any reductions in the TCF sector in Wangaratta. In scenario 1, a drop in output of \$12.480m leads to a total loss of \$20.443m in the region. Job losses amount to an initial loss of 100 jobs but this increases to 170 jobs in the region (1.58% of the workforce) once the flow-on effects are taken into account.

To better understand the impact of the sector on the Wangaratta regional economy the technique of “hypothetical extraction” was adopted under Scenario 3 in Table 6. This indicates that the sector generates an initial \$98.400m in output and 785 jobs. This increases to \$161.188m in regional output and 1,344 jobs making up 12.49% of the workforce once the flow-on effects are taken into account.

REEMPLAN© SCENARIO	OUTPUT \$m			EMPLOYMENT			
	Initial Change	Flow-on effects	Total Effect	Initial Change	Flow-on effects	Total Effect	% Workforce
1: Loss of 100 TCF jobs	-\$12.480	-\$7.963	-\$20.443	-100	-70	-170	-1.58%
2: Loss of 500 TCF jobs	-\$62.700	-\$55.734	-\$102.708	-500	-356	-856	-7.96%
3: Loss of 785 TCF jobs	-\$98.400	-\$62.788	-\$161.188	-785	-559	-1344	-12.49%
4: Gain of 50 TCF jobs	\$6.240	\$3.982	\$10.222	50	35	85	0.79%
5: Gain of 100 TCF jobs	\$12.480	\$7.963	\$20.443	100	70	170	1.58%

Table 6. Details of revised modelling, Scenarios 1 to 5.

CONCLUSION

The TCF sector is a key economic driver in the Wangaratta economy, even after the recent loss of Yakka Pty Ltd. The sector still generates 7.3% of employment directly and 12.49% indirectly. Any cutbacks resulting from changes to tariffs will have serious regional consequences. Other attempts have been made to model broader regions but these tend to average out the effects and gloss over the severe impacts on areas such as Wangaratta, Geelong, Wodonga and Bendigo. Regional impact analysis of possible cutbacks in TCF output in Wangaratta suggests that once the analysis drills down to a particular local area, more serious consequences emerge. It should be noted that previous criticisms of the regional modelling process have been met and while the claimed impacts are smaller, the same overall conclusions can still be maintained. Claims and hopes that industry sectors which benefit from lower inputs associated with TCF inputs (e.g. furniture & hospitality) have been dashed for regions such as the one under scrutiny where it is expected that only five additional jobs will be generated across all other industry sectors. A serious problem associated with the modelling of change in the TCF sector is the difficulty of predicting just where the burden of tariff cuts will fall given the “lumpiness” inherent in adjustments of this kind. For this reason, a number of scenarios have been explored.

When the costs to regional and local economies are lined up against the proposed national benefits of tariff cuts, it is difficult to remain complacent. National modelling results (Review, Appendix E) suggest that the economic benefits will come in the form of very modest or no growth in GDP and no change or even a loss in real consumption and investment in Australia. Gains will be expected through falling exchange rates and 7% increases in export and import volumes. The outcome will be the creation of regional imbalance where areas linked to exports such as minerals will gain in trade and those associated with TCF activity will bear the costs of change. This raises another concept of “equity” which is the one of *regional equity*. If change can be genuinely justified, and if some regions or areas are expected to bear the burden of this change, then there is a clear responsibility for assistance at the regional level.

Assistance to negatively affected areas in the form of aiding the implementation of new technologies appears more palatable than the baling out of affected communities after the event but both forms of assistance may be required. Just as former employees will need assistance with issues of support and mobility, many communities will require assistance to help the process of defining their strategic position, planning their future directions and attracting investors able and willing to participate in these changes.

Appendix 1. Modelling Results

Original modelling- initial loss of 100 jobs

Wangaratta Rural City ECONOMIC IMPACT				
OUTPUT \$m				
FILL IN EXPECTED ANNUAL CHANGES IN OUTPUT TABLE				
(Final Demand Column)	\$m			
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	-12.480	-1.071	-0.086	-13.637
Agriculture,Forest,FishF	0.000	-1.547	-0.197	-1.744
Mining	0.000	-0.002	-0.003	-0.005
Manufacturing	0.000	-0.654	-0.760	-1.414
Electricity,Gas&Water	0.000	-0.109	-0.116	-0.225
Construction	0.000	-0.016	-0.014	-0.030
W'sale/Retail Trade	0.000	-0.934	-1.404	-2.339
Accomm.,Cafes&Rest.	0.000	-0.168	-0.342	-0.510
Transport & Storage	0.000	-0.417	-0.167	-0.585
Communication Serv	0.000	-0.100	-0.120	-0.220
Finance & Insurance	0.000	-0.109	-0.251	-0.360
Property&BusinessServ	0.000	-0.480	-1.087	-1.567
Govt Admin & Defence	0.000	-0.035	-0.029	-0.064
Education	0.000	-0.022	-0.150	-0.172
Hlth&Community Serv	0.000	-0.010	-0.294	-0.304
Cultural&Rec Serv	0.000	-0.016	-0.156	-0.172
Personal & Other Serv	0.000	-0.030	-0.196	-0.225
Households	0.000			
TOTAL	-12.480	-5.721	-5.372	-23.573

ECONOMIC IMPACT				
INCOME(Household) \$m				
\$m				
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	-2.570	-0.221	-0.018	-2.809
Agriculture,Forest,FishF	0.000	-0.159	-0.020	-0.179
Mining	0.000	0.000	0.000	0.000
Manufacturing	0.000	-0.105	-0.122	-0.227
Electricity,Gas&Water	0.000	-0.014	-0.015	-0.028
Construction	0.000	-0.003	-0.003	-0.006
W'sale/Retail Trade	0.000	-0.307	-0.461	-0.767
Accomm.,Cafes&Rest.	0.000	-0.040	-0.081	-0.120
Transport & Storage	0.000	-0.097	-0.039	-0.136
Communication Serv	0.000	-0.025	-0.030	-0.054
Finance & Insurance	0.000	-0.036	-0.083	-0.119
Property&BusinessServ	0.000	-0.068	-0.153	-0.221
Govt Admin & Defence	0.000	-0.017	-0.014	-0.031
Education	0.000	-0.016	-0.109	-0.125
Hlth&Community Serv	0.000	-0.007	-0.183	-0.189
Cultural&Rec Serv	0.000	-0.004	-0.037	-0.040
Personal & Other Serv	0.000	-0.015	-0.100	-0.115
Households				
TOTAL	-2.570	-1.132	-1.466	-5.168

Initial loss of 100 jobs
Reduced consumption effects
(halve consumption
coefficients)

Wangaratta Rural City ECONOMIC IMPACT				
OUTPUT \$m				
FILL IN EXPECTED ANNUAL CHANGES IN OUTPUT TABLE				
(Final Demand Column)	\$m			
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	-12.480	-1.071	-0.036	-13.587
Agriculture,Forest,FishF	0.000	-1.547	-0.082	-1.629
Mining	0.000	-0.002	-0.001	-0.004
Manufacturing	0.000	-0.654	-0.317	-0.971
Electricity,Gas&Water	0.000	-0.109	-0.049	-0.158
Construction	0.000	-0.016	-0.006	-0.022
W'sale/Retail Trade	0.000	-0.934	-0.586	-1.521
Accomm.,Cafes&Rest.	0.000	-0.168	-0.143	-0.311
Transport & Storage	0.000	-0.417	-0.070	-0.487
Communication Serv	0.000	-0.100	-0.050	-0.150
Finance & Insurance	0.000	-0.109	-0.105	-0.214
Property&BusinessServ	0.000	-0.480	-0.454	-0.934
Govt Admin & Defence	0.000	-0.035	-0.012	-0.047
Education	0.000	-0.022	-0.063	-0.085
Hlth&Community Serv	0.000	-0.010	-0.123	-0.133
Cultural&Rec Serv	0.000	-0.016	-0.065	-0.081
Personal & Other Serv	0.000	-0.030	-0.082	-0.111
Households	0.000			
TOTAL	-12.480	-5.721	-2.242	-20.443

ECONOMIC IMPACT				
INCOME(Household) \$m				
\$m				
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	-2.570	-0.221	-0.007	-2.798
Agriculture,Forest,FishF	0.000	-0.159	-0.008	-0.168
Mining	0.000	0.000	0.000	0.000
Manufacturing	0.000	-0.105	-0.051	-0.156
Electricity,Gas&Water	0.000	-0.014	-0.006	-0.020
Construction	0.000	-0.003	-0.001	-0.005
W'sale/Retail Trade	0.000	-0.307	-0.192	-0.499
Accomm.,Cafes&Rest.	0.000	-0.040	-0.034	-0.073
Transport & Storage	0.000	-0.097	-0.016	-0.113
Communication Serv	0.000	-0.025	-0.012	-0.037
Finance & Insurance	0.000	-0.036	-0.035	-0.071
Property&BusinessServ	0.000	-0.068	-0.064	-0.132
Govt Admin & Defence	0.000	-0.017	-0.006	-0.022
Education	0.000	-0.016	-0.046	-0.062
Hlth&Community Serv	0.000	-0.007	-0.076	-0.083
Cultural&Rec Serv	0.000	-0.004	-0.015	-0.019
Personal & Other Serv	0.000	-0.015	-0.042	-0.057
Households				
TOTAL	-2.570	-1.132	-0.612	-4.314

Response to the Productivity Commission Review of TCF Assistance

Appendix 1 cont'd

Original modelling initial loss of 100 jobs

Wangaratta Rural City ECONOMIC IMPACT EMPLOYMENT Units				
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	-100	-8.544	-0.684	-108.784
Agriculture,Forest,FishF	0	-15.899	-2.026	-17.926
Mining	0	-0.004	-0.005	-0.009
Manufacturing	0	-3.095	-3.594	-6.689
Electricity,Gas&Water	0	-0.291	-0.311	-0.602
Construction	0	-0.116	-0.102	-0.218
W'sale/Retail Trade	0	-12.804	-19.245	-32.048
Accomm.,Cafes&Rest.	0	-1.950	-3.976	-5.926
Transport & Storage	0	-2.748	-1.101	-3.848
Communication Serv	0	-0.519	-0.622	-1.141
Finance & Insurance	0	-0.639	-1.474	-2.113
Property&BusinessServ	0	-1.868	-4.232	-6.100
Govt Admin & Defence	0	-0.307	-0.253	-0.560
Education	0	-0.417	-2.798	-3.216
Hlth&Community Serv	0	-0.188	-5.290	-5.478
Cultural&Rec Serv	0	-0.146	-1.432	-1.578
Personal & Other Serv	0	-0.435	-2.863	-3.298
Households				
TOTAL	-100	-50	-50	-200

ECONOMIC IMPACT VALUE ADDED \$m				
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	3.962	0.340	0.027	4.329
Agriculture,Forest,FishF	0.000	0.751	0.096	0.847
Mining	0.000	0.001	0.001	0.002
Manufacturing	0.000	0.209	0.242	0.451
Electricity,Gas&Water	0.000	0.062	0.066	0.127
Construction	0.000	0.007	0.006	0.013
W'sale/Retail Trade	0.000	0.460	0.691	1.151
Accomm.,Cafes&Rest.	0.000	0.071	0.144	0.215
Transport & Storage	0.000	0.205	0.082	0.288
Communication Serv	0.000	0.060	0.072	0.132
Finance & Insurance	0.000	0.071	0.163	0.234
Property&BusinessServ	0.000	0.310	0.702	1.012
Govt Admin & Defence	0.000	0.020	0.016	0.036
Education	0.000	0.019	0.124	0.143
Hlth&Community Serv	0.000	0.008	0.224	0.232
Cultural&Rec Serv	0.000	0.007	0.071	0.078
Personal & Other Serv	0.000	0.020	0.134	0.154
Households				
TOTAL	3.962	2.620	2.862	9.443

Initial loss of 100 jobs
Reduced consumption effects
(halve consumption coefficients)

Wangaratta Rural City ECONOMIC IMPACT EMPLOYMENT Units				
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	-100	-8.544	-0.286	-108.385
Agriculture,Forest,FishF	0	-15.899	-0.846	-16.745
Mining	0	-0.004	-0.002	-0.006
Manufacturing	0	-3.095	-1.500	-4.595
Electricity,Gas&Water	0	-0.291	-0.130	-0.421
Construction	0	-0.116	-0.043	-0.158
W'sale/Retail Trade	0	-12.804	-8.032	-20.836
Accomm.,Cafes&Rest.	0	-1.950	-1.660	-3.609
Transport & Storage	0	-2.748	-0.459	-3.207
Communication Serv	0	-0.519	-0.260	-0.779
Finance & Insurance	0	-0.639	-0.615	-1.254
Property&BusinessServ	0	-1.868	-1.766	-3.634
Govt Admin & Defence	0	-0.307	-0.106	-0.412
Education	0	-0.417	-1.168	-1.585
Hlth&Community Serv	0	-0.188	-2.208	-2.396
Cultural&Rec Serv	0	-0.146	-0.598	-0.743
Personal & Other Serv	0	-0.435	-1.195	-1.630
Households				
TOTAL	-100	-50	-21	-170

ECONOMIC IMPACT VALUE ADDED \$m				
SECTOR	Final Demand	Industrial Effect	Consumpn Effect	Total
Textiles, Clothing, & Footw	-3.962	-0.340	-0.011	-4.313
Agriculture,Forest,FishF	0.000	-0.751	-0.040	-0.791
Mining	0.000	-0.001	-0.001	-0.002
Manufacturing	0.000	-0.209	-0.101	-0.310
Electricity,Gas&Water	0.000	-0.062	-0.027	-0.089
Construction	0.000	-0.007	-0.003	-0.010
W'sale/Retail Trade	0.000	-0.460	-0.288	-0.748
Accomm.,Cafes&Rest.	0.000	-0.071	-0.060	-0.131
Transport & Storage	0.000	-0.205	-0.034	-0.240
Communication Serv	0.000	-0.060	-0.030	-0.090
Finance & Insurance	0.000	-0.071	-0.068	-0.139
Property&BusinessServ	0.000	-0.310	-0.293	-0.603
Govt Admin & Defence	0.000	-0.020	-0.007	-0.026
Education	0.000	-0.019	-0.052	-0.070
Hlth&Community Serv	0.000	-0.008	-0.093	-0.101
Cultural&Rec Serv	0.000	-0.007	-0.030	-0.037
Personal & Other Serv	0.000	-0.020	-0.056	-0.076
Households				
TOTAL	-3.962	-2.620	-1.194	-7.776

Appendix 1 Cont'd

Factor in 5% cheaper TCF inputs to
all other sectors

Full consumption effects

Wangaratta Rural City		ECONOMIC IMPACT		
OUTPUT		\$m		
(Final Demand Column)	\$m			
	Final	Industrial	Consumpn	Total
SECTOR	Demand	Effect	Effect	
Textiles, Clothing, & Footw	0.000	0.001	0.003	0.004
Agriculture,Forest,FishF	0.007	0.036	0.006	0.049
Mining	0.000	0.001	0.000	0.001
Manufacturing	0.243	0.047	0.023	0.313
Electricity,Gas&Water	0.000	0.003	0.004	0.006
Construction	0.006	0.001	0.000	0.007
W'sale/Retail Trade	0.016	0.014	0.042	0.073
Accomm.,Cafes&Rest.	0.016	0.004	0.010	0.030
Transport & Storage	0.002	0.014	0.005	0.021
Communication Serv	0.001	0.003	0.004	0.008
Finance & Insurance	0.001	0.003	0.008	0.012
Property&BusinessServ	0.005	0.014	0.033	0.052
Govt Admin & Defence	0.002	0.001	0.001	0.004
Education	0.002	0.001	0.005	0.007
Hlth&Community Serv	0.027	0.001	0.009	0.037
Cultural&Rec Serv	0.030	0.002	0.005	0.037
Personal & Other Serv	0.013	0.001	0.006	0.020
Households	0.000			
TOTAL	0.371	0.145	0.162	0.678
INCOME(Household)		ECONOMIC IMPACT		
\$m		\$m		
	Final	Industrial	Consumpn	Total
SECTOR	Demand	Effect	Effect	
Textiles, Clothing, & Footw	0.000	0.000	0.001	0.001
Agriculture,Forest,FishF	0.001	0.004	0.001	0.005
Mining	0.000	0.000	0.000	0.000
Manufacturing	0.039	0.008	0.004	0.050
Electricity,Gas&Water	0.000	0.000	0.000	0.001
Construction	0.001	0.000	0.000	0.001
W'sale/Retail Trade	0.005	0.005	0.014	0.024
Accomm.,Cafes&Rest.	0.004	0.001	0.002	0.007
Transport & Storage	0.000	0.003	0.001	0.005
Communication Serv	0.000	0.001	0.001	0.002
Finance & Insurance	0.000	0.001	0.003	0.004
Property&BusinessServ	0.001	0.002	0.005	0.007
Govt Admin & Defence	0.001	0.001	0.000	0.002
Education	0.001	0.000	0.003	0.005
Hlth&Community Serv	0.017	0.000	0.006	0.023
Cultural&Rec Serv	0.007	0.000	0.001	0.009
Personal & Other Serv	0.007	0.001	0.003	0.010
Households				
TOTAL	0.085	0.027	0.044	0.156

Appendix 1 Cont'd

Factor in 5% cheaper TCF inputs
to all other sectors

Full consumption effects			ECONOMIC IMPACT		
EMPLOYMENT			Units		
Wangaratta Rural City					
	Final	Industrial	Consumpn	Total	
SECTOR	Demand	Effect	Effect		
Textiles, Clothing, & Footw	0	0.008	0.021	0.029	
Agriculture,Forest,FishF	0	0.370	0.061	0.503	
Mining	0	0.001	0.000	0.001	
Manufacturing	1	0.223	0.108	1.481	
Electricity,Gas&Water	0	0.007	0.009	0.016	
Construction	0	0.004	0.003	0.051	
W'sale/Retail Trade	0	0.196	0.580	0.995	
Accomm.,Cafes&Rest.	0	0.041	0.120	0.347	
Transport & Storage	0	0.089	0.033	0.135	
Communication Serv	0	0.017	0.019	0.041	
Finance & Insurance	0	0.019	0.044	0.069	
Property&BusinessServ	0	0.054	0.127	0.201	
Govt Admin & Defence	0	0.012	0.008	0.037	
Education	0	0.010	0.084	0.131	
Hlth&Community Serv	0	0.014	0.159	0.659	
Cultural&Rec Serv	0	0.018	0.043	0.336	
Personal & Other Serv	0	0.017	0.086	0.293	
Households					
TOTAL	2.7	1.1	1.5	5.3	
ECONOMIC IMPACT					
VALUE ADDED \$m					
\$m					
	Final	Industrial	Consumpn	Total	
SECTOR	Demand	Effect	Effect		
Textiles, Clothing, & Footw	0.000	0.000	0.001	0.001	
Agriculture,Forest,FishF	0.003	0.017	0.003	0.024	
Mining	0.000	0.000	0.000	0.000	
Manufacturing	0.078	0.015	0.007	0.100	
Electricity,Gas&Water	0.000	0.001	0.002	0.003	
Construction	0.003	0.000	0.000	0.003	
W'sale/Retail Trade	0.008	0.007	0.021	0.036	
Accomm.,Cafes&Rest.	0.007	0.001	0.004	0.013	
Transport & Storage	0.001	0.007	0.002	0.010	
Communication Serv	0.001	0.002	0.002	0.005	
Finance & Insurance	0.001	0.002	0.005	0.008	
Property&BusinessServ	0.003	0.009	0.021	0.033	
Govt Admin & Defence	0.001	0.001	0.000	0.002	
Education	0.002	0.000	0.004	0.006	
Hlth&Community Serv	0.021	0.001	0.007	0.028	
Cultural&Rec Serv	0.014	0.001	0.002	0.017	
Personal & Other Serv	0.009	0.001	0.004	0.014	
Households					
TOTAL	0.149	0.066	0.086	0.302	

Appendix 2. Estimated outputs following a 5% decrease in TCF input prices

Textiles, Clothing, & Footwear	\$'000
Agriculture, Forest, Fish & Farming	7
Mining	0
Manufacturing	243
Electricity, Gas & Water	0
Construction	6
Wholesale & Retail Trade	16
Accommodation, Cafes & Restaurants	16
Transport & Storage	2
Communication Services	1
Finance & Insurance	1
Property & Business Services	5
Government Administration & Defence	2
Education	2
Health & Community Services	27
Cultural & Recreation Services	30
Personal & Other Services	13
	371