## Dear Productivity Commission,

I am semi-retired academic, age 70, own my home, married. Karl Reed, MSc (Monash), Assoc. RMIT (1965), Fellow, Hon. Life Member, Australian Computer Society, Fellow Institute of Engineers Australia, Member IEEE, ACM.

• Adjunct Assoc. Prof. (Latrobe University)

• Chair ACS National Software Industry Committee May 1974 to 1988

• Lead first IT industry trade mission from Australia in 1982

• 1985, established Australian Computer Society/Software Industry Association

• Director, ACS Technical Boards 1990-2006

• Governor IEEE-Computer Society (1997-2000,2000-2002),

• Chair IEEE-CS' TCSE (2000-2002, 2002-2004)

• Director Amdahl Australian Intelligent Tools Program 1989 to 1996.

• Consultant Editor Australasian Computer World from 1978 to 1995 and Columnist

• Guest Scientist Fraunhofer IESE 2002

• CORE Distinguished Service Award for 2007

• Visiting Scientist, University de Milano at Crema, 2006,2007,2008,2009

Karl Reed is a pioneer of software engineering education in Australia, and was recognised as national spokesperson on industry policy, advising State and Federal Governments both formally and informally for nearly 30 years. He is a Fellow and an Honorary Life Member of the Australian Computer Society, past chairman of the Victorian branch and Director of its Computer Systems and Software Engineering Board, and recipient of the Victorian Branch's Murton Award for service. He was Chair of the ACS National Software Industry Committee from May 1974 to 1988 lead the first IT industry trade mission from Australia in 1982. In 1985, established the Australian Computer Society/Software Industry Association, Australia's first National IT industry association with branches in each state. He has been a Distinguished Business Associate at Swinburne University of Technology. He was consultant editor to Australasian Computer World from 1978 to 1995 authoring the Column " An Essential Reed". He has been a Guest Scientist at the Fraunhofer Insiittute for experimental Software Engineering. He was a Governor of the IEEE-Computer Society for the statutory limit of two terms (1997-2000,2000-2002), and was the Chair of the IEEE-CS' Technical Council on Software Engineering (2000-2002,2002-2004). Reed is currently in the Computer Science and Computer Engineering Department at La Trobe University, and was the Director of the Amdahl Australian Intelligent Tools Program from 1989 to 1996. In 2008, he was awarded the CORE Australian Distinguished Service Award for 2007 for his long-standing services to the IT Academic Community. In the second half of 2006, he was a Visiting Scientist at the University de Milano at Crema, and returned there in 2007,2008 and 2009. His research interests include software testing, the nature of software engineering, Compilable restricted natural languages, Web-page design, high-level software re-use, design isomorphisms,

process comparison software architecture, email usage, organisational resilience and industry policy.

I do not work in the industry, nor do I have close friends or family who do.

Submission to The Productivity Commission Inquiry on Australia's Automotive Manufacturing Industry 2013 V.02

By Karl Reed, FACS, FIE Aust. HLM ACS, MSc(Monash) ARMIT

## 3. Impact on Australia's Future

Failure to support the Australian Automotive Manufacturing Industry (AAMI) would lead to the loss of some 200,000 jobs, many well paid and highly skilled. It would be a massive blow to large-scale manufacturing in Australia at a time when we need to boost that sector.

- 3.1 What needs to be done.
- 3.2 Tariffs and Protection
- 3.2.1 Tariffs

Interpreting data presented by Australian Automotive Intelligence, on a normalised basis, tariff reductions on motor vehicles have lead to imported vehicle prices rising to 160% of the base figure in in real terms since 1984, while local vehicle prices rose to 260%. As Automotive Intelligence point out, this is due to two factors, firstly, the elimination of tariffs, and, secondly, the drop in the value of the A\$.

To put this in a real perspective, a family member bought a Mazda 323 manual in 1984 for (from memory) \$14,500 on the road. Recently, at the time of writing (26/11/2013) Mazda are advertising the Mazda 3 Neo manual \$19,990 drive away.

(http://m.mazda.com.au/special-offers/mazda3/neo-sedan-or-hatch). I have converted the 1984 price to its 2013 equivalent using the RBA Inflation calculator. If the exchange rate and tariff regime had remained equal, the same car would now cost \$39,860. (This only uses the standard inflation factor http://www.rba.gov.au/calculator/annualDecimal.html. Wage inflation may be a better indicator. The minimum average wage rose from roughly \$350 per week in 1984 to about \$1,100 in 2012., giving a similar inflator.

http://www.tradingeconomics.com/australia/wages).

The point here is that the removal of tariffs, the change to GST and, the high value of the dollar have combined to devastating effect.

This leads me to my first request.

R1. THE AUSTRALIAN GOVERNMENT SHOULD INTRODUCE EQUALISING TARIFFS FOR COMPLETELY BUILT AUTOMOBILES. THE FUNDS RAISED SHOULD BE USED TO FUND AUTOMOTIVE INDUSTRY DEVELOPMENT.

FURTHER, THE TARIFF SETTINGS SHOULD ADDRESS EXCHANGE RATE DISPARITIES AND SHOULD BE DETERMINED BY ANTI-COMPETITIVE CONSIDERATIONS.

Applying the tariff to Australian Manufactured Vehicles, would leave components tariff free. See comments later herein. It would also discriminate, in the case of a local producer, between those vehicles imported by it and those manufactured in Australia.

The tariff settings could be determined by taking a constant dollar expenditure view, over say a 10 year period. The idea is to model the demand shift against the requirement that the same % of GDP is spent on motor vehicles over a 10 year period. The result may be that people may replace their cars less frequently, however, the demand for Australian manufactured vehicles would increase.

3.2.2 Non-Tariff Barriers-National Automotive Vehicle Registration Fee Refundable on Australian Manufactured Vehicles

The Commission will no-doubt be familiar with the use of Non-Tariff barriers in other countries.

One such mechanism that could be adopted here would be a registration fee applied to ALL vehicles, that was automatically refunded, on the spot, for Australian Manufactured vehicles. This may need to be applied at the State level

R2. THE COMISSION SHOULD INVESTIGATE THE FEASIBLITY OF USING A NATIONAL VEHICLE REGISTRATION FEE, INSTANTLY REFUNDED FOR AUSTRALIAN MANUFACTURED VEHICLES, ASA MECHANSIM FOR INCREASING THE COMPETITIVENESS OF AUSTRALIAN MANUFACTURED VEHICLES

## 3.3 Government Purchasing

All Australian Governments and Departments at All Levels should be required to purchase Australian Manufactured vehicles. There is always a " value for money" argument against preferential purchasing, however, this could be addressed by limiting tax exemptions to Australian manufactured vehicles only!

R3. GOVERNMENT AND OTHER AGENCIES FUNDED BY PUBLIC MONIES SHOULD BE REQUIRED TO PURCHASE AUSTRALIAN MANUFACTURED VEHICLES EXCEPT WHERE THERE IS SOME EXTREME REQUIREMENT THAT MAKES THIS INFEASIBLE.

TO ADDRESS THE &Idquo; VALUE FOR MONEY" ISSUE THAT IS FREQUENTLY RAISED TO NEGATE THIS PROPOSAL, ANY TAX OR TARIFF EXEMPTIONS SHOULD APPLY ONLY TO AUSTRALIAN MANUFACTURED VEHICLES.

## 3.3 Promoting New Vehicle and Engine Technology

Government should fund applied research and development of new vehicle and engine technology. This should be done outside the traditional ARC granting system, which seems to mitigate against industrially applicable R&D.

THIS CAN BEST BE DONE BY APPLYING THE AUSTRALIAN GOVERNMENT RURAL R&D CORPORATION MODEL TO THE AUTO IDUSTRY

R3. THE AUSTRALIAN GOVERNMENT RURAL R&D CORPORATION MODEL SHOULD BE APPLIED TO THE AUTOMOTIVE MANUFACTURING INDUSTRY. 1% OF WHOLESALE PRICING INCOME SHOULD BE CONTRIBUTED BY INDUSTRY, WITH 1% ADDED TO THIS BY GOVERNMENT. (A LOWER PERCENTAGE MAY WORK ALSO)

THESE FUNDS TO BE USED FOR NEW PRODUCT TECHNOLOGY DEVELOPMENT, WITH EMPHASIS ON NEW ENGINE, SAFETY, SUSPENSION AND MANUFACTURING TECHNOLOGY. THE RESULTS TO BE FREELY LICENSED TO AUSTRALIAN MANUFACTURERS FOR USE IN AUSTRALIA. THESE FUNDS ALSO TO BE USED TO FUND POST SECONDARY EDUCATION TRAING IN THIS AREA.

The RR&D Corporation model is well understood, and, can be easily applied to any industry sector.

3.4 Decentralisation and The Automotive Industry

The Productivity Commission should examine and recommend mechanisms for encouraging the Automotive Industry to develop plants in decentralized areas. IN particular, any direct support should be conditional upon the maintenance of plants in Adelaide and other State capitals.

R4. ANY DIRECT SUPPORT SHOULD BE CONDITIONAL ON MAINTENACE OF EXISTING PLANTS IN ADELAIDE AND GEELONG AND THE EXPANSION OF COMPONENT MANUFACTURING TO OTHER REGIONAL CENTRES

3.5 Protection of Employee Entitlement and Component Manufacturers Investment

A major problem seems to be the protection of small and medium scale component

manufacture's investment, and employee entitlement. The latter could be addressed by an industry wide levee on sales, perhaps 0.5% would be ample. (A complete analysis is necessary to determine the level).

R5. A LEVEE ON ALL SALES OF AUTOMOBILES IN AUSTRALIA BE USED TO PROTECT EMPLOYEE ENTITLEMENTS. THE SCALE OF THIS LEVEEE TO BE DETERMINED BY A DETAILED STUDY.

R6. AN INVESTMENT INSURANCE SCHEME BE DEVELOPED TO PROVIDE PROTECTION FOR SME'S IN THE COMPONENT INDUSTRY. THE PRECISE NATURE TO BE DETERMINED BY A DETAILED STUDY, WITH THE GOAL OF BEING REVENUE NUETRAL OVER TIME.

3.6 Protection of Australian Employee's Working Conditions.

While contentious, it is appropriate for the Productivity Commission to recommend that any support for the industry should be conditional upon workers conditions being protected. The situation where Australian workers are expected to take wage cuts or other reductions in conditions to make enterprises operating in an unprotected sector viable. Exactly how this should be done without altering the balance of power between unions and management unreasonably needs to be discussed, however, the current situation is NOT in the interests of Australian as a whole.

R7. GOVERNMENT SUPPORT TO BE CONDITIONAL ON THE MAINTENANCE OF CURRENT, REASONABLE WORKING CONDITIONS.

3.7 Creation of Opportunities for Local Investors in Vehicle Manufacturing.

As we speak, none of the major vehicle manufacturers are listed on Australian stock exchanges. The Commission should make a study of statutory requirements covering Foreign Direct Investment (FDI) in relevant countries (Sweden, Germany, France, Spain, Italy, China, Japan, Korea, Brazil) to ascertain the extent which it is possible for a large Automobile manufacturer to establish a wholly foreign owned subsidiary. The study should also examine non-statutory impediments to such investment.

In this authors view, it would not be unreasonable for the local operations of Automobile manufacturers to be required to be listed in Australia, and subject to foreign investment restrictions similar to those that apply to Qantas.

R8. THE COMMISSION REPORT ON STATUTORY REQUIREMENTS AND OTHER LIMITATIONS COVERING FOREIGN DIRECT INVESTMENT (FDI) IN RELEVANT COUNTRIES (SWEDEN, GERMANY, FRANCE, SPAIN, ITALY, CHINA, JAPAN, KOREA, BRAZIL), WITH A VIEW TO RECOMMENDING THEIR USE IN THE AUTOMOTIVE INDUSTRY AUSTRALIA

To me and Australia, the survival of the Automotive Industry is critical. WE have lost so many important industries, lets not loose this one.

Kind Regards, Adj Assoc Prof Karl Reed