Introduction

I welcome the Senate Economic Legislation Committee for the opportunity to comment on the Automotive Transformation Scheme Amendment Bill 2014, following the closure of Holden, Toyota, Ford, Aftermarket and Original Component Manufacturing in the Australia.

In analysing the role of domestic policy in offsetting negative employment implications through the Australian Automotive Manufacturing Industry, I recognise that there are policy challenges that can only be dealt with at the global level.

For enterprises in developing countries joining GSCs (Global Supply Chain) are substantial. Integration into GSCs has become an important pillar of their policies for export-led development. GSCs enable manufacturers within the chain to obtain modern management know-how and hands-on information on quality standards and technology, and thus to become more competitive. Such manufacturers also quickly learn about demand patterns in high-income markets and consumer preferences in such markets. Participation in GSCs could also create economy-wide externalities[1]for developing countries, such as employment, improvement in technology and skills, productive capacity upgrading and export diversification into more value added. In turn, those externalities increase their attractiveness for more foreign direct investment and subsequently increase demand for counterfeit manufacturing and parallel importation from developing countries into developed countries.

Excessive tariffs on intermediate products make countries less attractive to global investment and are detrimental to the localisation of production process, creating opportunities for lead manufacturing organisations to join GSCs. This reinforces the importance of governance issues in relation to freer trade and factor mobility[2], particularly for the case of lead manufacturing organisations their strategic partners and specialised suppliers.

It's therefore imperative that Australian lead manufacturing organisations unleash new business strategies, partners and suppliers that can capitalise on local companies with favourable access to domestic markets and manufacturing networks. These potential gains explain the acute interest of policymakers in many ways to link their private sectors to GSCs. Moreover, policies aimed at ecommerce are essential in facilitating the integration of domestic organisations into markets that are increasingly dominated by GSCs.

[1] Factors whose benefits (called external economies) and costs (called external diseconomies) are not reflected in the market price of goods and services. http://www.businessdictionary.com/definition/externalities.html#ixzz3YZhUDHCA

[2] The degree to which a factor of production, such as labour or capital, is able to move, either among industries or among countries, in response to differences in its factor price, thus tending to eliminate such differences.
http://www-personal.umich.edu/~alandear/glossary/f.html

About Me

I'm a Business Analyst with strong skills in conducting research and feasibility studies using qualitative and quantitative methods and statistical analysis to identify initiatives and facilitate action-driven plans to support organisations growth and objectives. I have the experience, capabilities and judgement for taking a business to its next level of success and resolving the deficiencies that impede its ability to grow and prosper, including a complete portfolio of business consulting and my professional career in the Aviation, Forklift Manufacturing, Automotive and Appliance industries. The depth and breadth of my experience spans markets worldwide and is successful in combining creative talents with more structure general business skills to deliver strategic outcomes which are cost-effective, market-appropriate and profitable.

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Abstract

A comprehensive market analysis has been undertaken to identify new opportunities for manufacturing and supply trends for the automotive vehicle manufacturers in Australia, including OEMs (Original Equipment Manufacturers) and OCM (Original Component Manufacturers).

The purpose of this paper is to contribute new strategies to the discussion of trends in the terms of trade between lead financial and insurance organisations, OEM, OCM and aftermarket manufacturers.

Manufactured goods exported from developing and developed countries and long term trends in the world export prices index of manufactured goods in developing and developed countries which are sensitive to the choice of country weights the treatment of quality change that increased the manufacture of counterfeit products and export of parallel products from developing to developed countries. These imports and export trends from developing to developed countries has created externalities which has subsequently contributed to the closure of Holden, Ford and Toyota and OCM manufacturing in Australia, subsequently led to the estimated loss of 200,000 jobs in Australia by 2018. The empirical evidence of job loss is inconclusive.

It's therefore imperative that Australian lead manufacturing organisations unleash new business strategies, partners and suppliers that can capitalise on local companies with favourable access to domestic markets and manufacturing networks. These potential gains explain the acute interest of policymakers in many ways to link their private sectors to GSCs.

This Submission demonstrates compelling evident of imports and exports trends of counterfeit and parallel products contributed to crease manufacturing of automotive vehicles and spare in Australia. Moreover, policies aimed at ecommerce are essential to facilitating the integration of domestic organisations into markets that are increasing dominated by GSCs, such as Brazil, China, India and Thailand.

The Automotive Manufacturing in Australia

Let's start by discussing the terms that characterise the functions of Automotive Manufacturers and Suppliers in Australia

- *OEM (Original Equipment Manufacturers)* are manufacturers and suppliers of equipment that stand alone or function by its self, such as a motor vehicles manufactured by Holden, Toyota, Ford, Mitsubishi etc.
- *OCM (Original Component Manufacturer)* are manufacturers of components for OEM's (Original Equipment Manufacturers) such as; Hella, GUD Filters, Gates, Bosch, Exide Batteries etc. also referred to as Aftermarket Manufacturers. The OCM generally work closely with the company that sells the finished product
- *Aftermarket*
  › the selling of new parts for cars that have already been manufactured:
  http://dictionary.cambridge.org/dictionary/business-english/aftermarket
- *Parallel Imports* are imported spare parts sourced from the OEM (Original Equipment Manufacturer) predominately in South East Asian countries. These parts are prohibited to be resold as Genuine OEM parts hence the term Parallel. It's another name for non-genuine, unbranded and/or aftermarket parts that are imported.
- *Counterfeit spare parts* are referred as Non-OEM parts that are predominately manufactured and sourced from Taiwan and most recently from China.

Lead OEM organisations have contractual agreements with OCMs to manufacture components solely for Equipment Production and Replacements Components for schedule-maintenance. Once these contracts terminate the OCMs have an preference to (1) continue to manufacture and distribute the components under their own OCM brand as aforementioned which is marketed as an Aftermarket Product, or (2) continue manufacturing for OEMs for Equipment Production and Replacements Components for schedule-maintenance.

The Australian automotive spare parts and accessories market is awash with three kinds of products (OEM, Parallel Parts and non-OEM) of various degrees of quality and cost. Given the perplexed characterisation of **Parallel Imports** and **Counterfeit** spare parts, they encompass the classification as Aftermarket and OCM in the Australian Automotive Industry; these products are marketed successfully to both leads insurance organisations and wholesale and retail customers alike.

The Term Parallel
Abstract *"Australasian Paint and Panel 01 May 2001"*
"A spokesperson for NRMA Insurance made this statement in response to the question; 'how does NRMA define a parallel part?': "NRMA Insurance defines 'parallel parts' as parts made by the same manufacturer or source as the OEM component and identical in specification and quality. They are sold through a different distribution channel to that of the original manufacturer network. We are aware that there is some confusion, different and/or loose terminology used in the parts supply and smash repair industries. We have therefore explained to our staff that by the term 'parallel parts' we mean 'parallel genuine parts'."
This statement means NRMA is using the term in its correct sense; parallel parts = OEM parts."
Refer to link for full story
http://www.paintandpanel.com.au/archive/confusion-reigns-over-parallel-parts

So why parallel products instead of local OEM products? World export prices of manufactured goods and in the terms of trade are sensitive to the choice of bloc countries. These export price indexes affect international competitiveness, of real exchange rates, of income, price, and substitution elasticity, of export supply, and of the terms of trade.

The Term Counterfeit

The following evidence enumerates the difficulties faced by domestic and international OEMs and OCMs.

> *The Australian Automotive Aftermarket Association, 01 April 2014. Total Australian automotive parts manufacturing (original equipment and aftermarket)is estimated at $5.4 billion, and the motor vehicle service and repair sector is estimated at $19.5 billion. The collision repair contributes $5.6 billion or 29 per cent of this total.*
> http://www.paintandpanel.com.au/archive/the-aftermarket-and-the-economy
>
> *Rob Spiegel, Senior Editor, Automation & Motion Control 3 February 2015. Counterfeit Components Continue to Slam Electronics Industry*
> http://www.designnews.com/author.asp?section_id=1386&doc_id=276743
>
> *Shegasen Govender interview with Australasian Paint & Panel 01 March 2005 "Every insurance company uses after-market parts"*
> http://www.paintandpanel.com.au/archive/after-market-so-what

> *Automotive Aftermarket Suppliers Association. North America. Numerous government agencies and industry sources estimate the global counterfeit problem at $600 billion per year. As a result, the FBI has labeled counterfeiting as the "Crime of the 21st Century." Counterfeiting is not a victimless crime. Consider that: Counterfeiting steals good manufacturing jobs. Counterfeiting destroys brand reputation of legitimate companies and poses product liability claims. The sale of counterfeit goods has been linked to organized crime and terrorist organizations.* http://www.aftermarketsuppliers.org/Advocacy/Brand-Protection

Given that parallel and counterfeit spare parts encompass the classification as aftermarket & OCM, the empirical evidence focusing on the relation between the alleged movement of counterfeit and parallel parts and trade liberalisation and manufacturing in developing and developed countries is inconclusive. These parts have its own standards of Quality this makes product identification and acquisition a less complex proposition for the insurance and smash repair industry to utilise. Both products do not carry warranty liability which makes end-users and Australian Insurance Companies susceptible not to comply with safety and engineering reliability principles.

Proposal 1
Preferred Partnering Program

Currently all insurers go directly and indirectly via Preferred Partners to the market to access Aftermarket spare parts and take market price with Smash Repairers mark up for all aftermarket spare parts, these aftermarket spare parts are generally **Parallel** and **Non-Genuine/Counterfeit**. Over 90% of counterfeit and parallel spare parts used are sourced offshore predominately out of South East Asian Countries where there are several dominant domestic suppliers distributing both counterfeit and parallel parts, characterised as "Aftermarket Parts" with their own in-housing trading structures. Insurance assessors base their assessments on the basis of these prevailing market conditions.

Global economic transformation has put immense pressures on Australian lead Insurance organisations to optimise cost-capability ratios by engaging and collaborating with non OEM/OCM organisations. While economic lead organisations actively participate in creating this initial condition this transformation underpins an industrial pollutant i.e. parallel and counterfeit product enrolling other economic and non-economic lead organisations and their partners into the same network.

This Preferred Partnering Program with the Australian Insurance organisations and the smash repair industry, referring to both mechanical and motor vehicle body parts seeks to revive OCM, Aftermarket manufacturing and distribution in Australia. Lead insurance companies participating in a Local Supply Chain can play a catalytic role in developing Australia's economic growth through productive capacity upgrading

A lead insurance company is big enough and more likely and able to take an equity position in a company success of which derives from known, quantifiable and verifiable supplyside costs of its internal aggregate demand. Cost savings translate to lower premiums, increased profits and a better share price profile etc. This proposal could provide an insurance company with a cost saving competitive advantage over the short to medium term and the opportunity to extend the advantage nationally and internationally over time. And also permit an insurance company (with a large motor vehicle insurance portfolio) to take a commanding, strategic position on the supply side of the industry, which is currently highly fragmented, disorganised and beset by small to medium sized players which stretches the supply chain, adding significantly to use of counterfeit and parallel spare parts diminishing what little exists of Quality Standards.. Spare Parts Industry Standards of service, staff training, management and operating systems, are almost non-existent. In short this industry is in need of consolidation/rationalization.

This strategy seeks to place OEM, Aftermarket and OCM at the forefront of being able to do so by extending and utilising the economies of scale benefits derived from a Closed-loop **preferred partnering** process and linking it to a cost cutting scenario on the supply side wherein their expertise resides.

Why Insurance Companies? Insurance companies have always been at the forefront of structural change in the smash repairindustry and have been able to divest itself from the (non-core) smashrepair and mechanical repair industry, while maintaining a strategic influence that provides the appropriate platform to launch this supply-side strategy. Insurance companies provide repairers closer interlocking relationship in these production networks that approximate the relational interorganisation partnerships into a close loop process.

The integrity of this strategy (Closed-loop preferred partnering program) must withstand the most adverse economic conditions when the imperative to sustain manufacturing at the similar cost of imported counterfeit and parallel spare parts that will create employment in the automotive industry is all the more urgent.

Proposal 2
Remanufacturing (Component, Spare Parts & Vehicles)
The quality standards of remanufactured parts can be exceptionally high for a reason inherent in the remanufacturing process; every part is checked for quality defaults, whereas only sample checks are made in manufacturing process. Remanufacturing therefore increases a company's market share, even if it may diminish its new manufacturing volume and slightly reduces its economy of scale in manufacturing and it may also increase a company's reputation for quality products. Remanufacturing is therefore economic feasible with additional benefits with regards to the quality image of its products, which makes good business sense.

Remanufacturing creates efficient cost control and high proprietary capabilities because it may significantly lower the cost of manufacturing, but also may increase risk of capability reduction due to the potential leakage of proprietary knowledge or codifiable technology.

To capitalize on this new market imperative, lead manufacturers and insurance organisations with their networks partners and suppliers must recognised that the nature of this demand is substantially different, requires not just tweaking global product manufacturers or services to fulfil this demand at lower costs, but rather a fundamentally new understanding of the nature of demand and a corresponding system of networks, that forms an **"Closed Loop Remanufacturing Process",** illustrated in figure 1**.** This process will eradicate a significant proportion of parallel and counterfeit parts imperative entailing massive demand increase for reliable, quality and lower concern for products standards and quality levels.

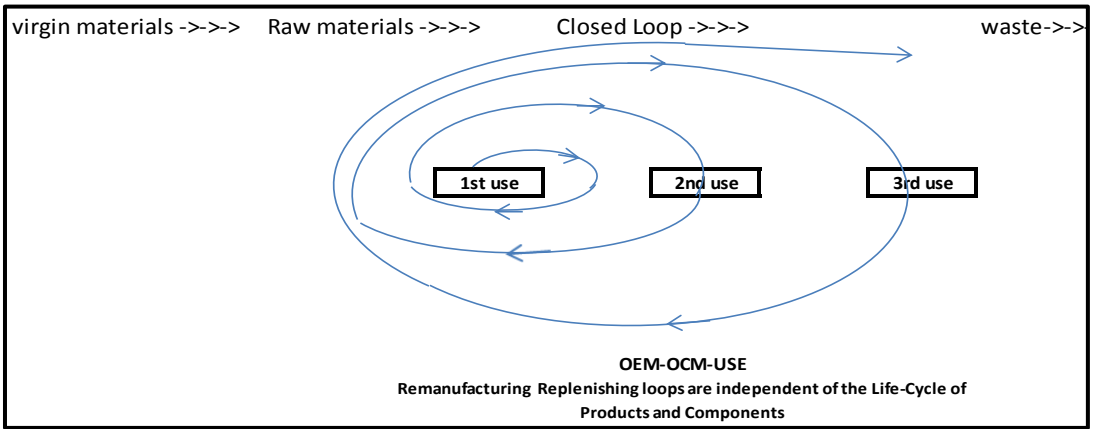

Figure 1, Self-Replenishing Process

This Closed Loop Remanufacturing Process characterised by oligopolistic competition could achieve similar trade effects through GSCs, because such competitiveness comes from a sophisticated management of the chain. The majority of modern GSCs appear to rely more on the ability to move goods continuously, safely and economically than on lower labour costs. In this regard, one of the key aspects of GSCs is synchronisation: goods flow in and out of chains in a "just-in-time" process, so as to keep costly inventories at a minimum. However, when inventories are low and a problem occurs in any of the manufacturing blocks, it quickly spreads along the entire chain with snowballing costs. GSCs are often as fragile and prone to failure as is their weakest supplier. Thus, it is crucial that all members in a chain are fully reliable.

To create sustainability, OEM and Aftermarket Manufacturers need to embrace long term belief systems philosophies[3]. The recognition of new business models and thought ideas will effectively match an industry with customer demands, core capabilities, and best practices. Each loop utilizes used products or components as a source for new ones and **recycling used scrap as locally available raw material**. A society relying on this self-replenishing economy is building on existing wealth and applying economics to optimise the total life span of spare parts and components. In practice, there is a trade-off between the reliability of suppliers and manufacturing costs.

Closed-loop strategies can be achieved by implementing the repair (schedule maintenance), or remanufacture/recondition (unscheduled maintenance) of spare parts and components, which facilitates job creation, decreases extraction raw material[4]and enhance the profitability of products by transforming them into a serviceable parts so the spare parts and components are in proprietorship of the OEM and Aftermarket Manufacturer, in order to reduce costs by eliminating the acquisition of base materials, but also ensuring product reliability is maintained.

[3] Origin of the 14 points – Out of The Crisis p23 by W. Edwards Deming, *"Adopting and action on the 14 points are a signal that the management intend to stay in business and aim to protect investors and jobs".*

[4] Dr Marlene Kanga https://www.engineersaustralia.org.au/news/president-social-licence-engineering
Now more than ever, engineers need to look beyond technology solutions and build genuine partnerships with communities for successful projects.

Independent repairers, OEM and Aftermarket manufacturers will find immense opportunities including new business development, product modification/innovation in the Closed-loop strategy, *Repair, Reconditioning and Remanufacturing* process.

While the Closed-loop process creates opportunities for skilled labour and reducing the acquisition of raw materials, such actions will also provide the private enterprise with new incentive to make Branded high quality goods economically available as part of a self-replenishing economy built on a circular method which allows a substitution of manpower for energy.

Conclusion

In addition to economic factors such as price and quality, consumers are now better informed and take into account other noneconomic considerations such as ethical and social responsibility and *environmental* impact in their consumption decision. These diverse consumer preferences would become a defining feature in shaping how manufacturers develop and organise their manufacturing networks.

An essential element in integrating the aforementioned **Preferred Partnering Program** and **Remanufacturing Program** is the availability of skilled labour. The production of goods for international markets, particularly by means of supplying a GSC, requires a skilled labour force, with technical, managerial and entrepreneurial expertise. Therefore, from a policy perspective, there is a need to invest in the development of human capital and capabilities, as well as in knowledge-based services. It is also important to allow for qualified foreign labour permits so as to import missing critical skills. Finally, in cases where the lead organisations own part of the GSC, tax policy is an important determinant for the localisation of production. By looking at the differences in taxation across countries, lead manufacturing companies and lead insurance organisations tend to optimise supply chains also based on tax efficiency.

List of References

1. Susan Teltscher, Tariffs, taxes and electronic commerce revenue implications for developing countries.
2. Irving B. Kravis and Robert E. Lipsey, Prices and terms of trade for developed—country exports of manufactured goods, September 1981.
3. Robert E. Lipsey, Quality change and other influences on measures of export prices of manufactured goods and the terms of trade be1ween primary products and manufactures, March 1994.
4. Henry Wai-Chung Yeung and Neil M.Coe, Towards a dynamic Theory of Global Production Networks, 2015.