Deloitte Access Economics

The economics of fuel taxation in the mining sector

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Executive Summary

The Minerals Council of Australia commissioned Deloitte Access Economics to examine the economics of fuel taxation in the mining sector.

In brief, this report explains why the principles of good tax design show that key justifications for taxing fuel do not apply in some circumstances. For example, if you aren't using diesel on roads, then there's no case to hit you with an implicit road user charge via fuel taxes.

Most importantly of all, taxing diesel used as a business input would be inefficient, and would make Australians less well off. That is because it would mean that something is being taxed twice – once in the hands of the business, and again in the hands of domestic consumers.

Such 'taxes on taxes' are inefficient, and hence typically bad policy. That is why Treasury has consistently supported the policy rationale behind fuel tax credits. In testimony to the Senate on 5 June 2014, Mr Rob Heferen of Treasury has noted that tax credits are: "... there to ensure that the double taxation does not occur. So the tax that is on the business input is relieved from the business activity. It is particularly important from a tax policy point of view. Certainly, with export competing industries, that double taxation obviously would be problematic."

This report also shows why **fuel tax credits aren't a subsidy:** The only reason why money flows from the government back to businesses is because it is administratively easier for businesses to pay excess tax upfront, and then to have that refunded later. This is a common feature of the tax system. The same is true of GST refunds for GST paid by business, and annual income tax returns for excess income tax paid by individuals through the PAYG system.

And there is a wider perspective here. Some policy changes would be dumber than others:

- That would be true, for example, **if Australia were to make tax policy mistakes affecting industries which compete globally**. Global markets don't play nice. If our policies are bad, then we'll lose out, and do so at a considerable cost to national well-being. In this case, the effective incidence of an increase in the diesel tax paid by miners would fall on mining exports. But these are sold into world markets, and any increase in domestic costs cannot be passed on to foreign consumers. So any increase in diesel tax for Australian miners would simply see a loss of global market share, profits and employment. Such concerns appear to have prompted some of the comments made by Mr Heferen noted above.
- And that would be even more true, for example, if Australia were to make tax policy
 mistakes affecting those industries in which our nation has the largest comparative
 advantage. Interestingly, there is a close correlation between those sectors whose excess
 fuel tax payments are refunded, and those sectors with the greatest comparative
 advantage including mining, as well as agribusiness and tourism.

Today's bad economics is all too often next year's bad politics. A fiscal repair task most certainly remains, and the risk is that hard political choices could lead to poor policies.

However, an increase in the diesel tax on miners would mean that many existing mines could find their lives considerably foreshortened. And the potential development of new mines may remain in limbo, some of it to be permanently mothballed.

1 Background

Fuel has always been taxed by Australian Governments, with an excise on diesel first introduced in 1957.

The current fuel tax credit scheme provides a full or partial rebate of excise on fuel to some firms.

In 2012-13, the mining industry received around \$2.1 billion in fuel tax credits. That represented slightly less than 40% of the total fuel tax credit claims paid by the Federal Government, with a number of other industries also claiming fuel tax credits.¹

1.1 A brief history of fuel taxation

Australian Governments have always taxed the consumption of fuels. From Federation until the late 1920s, this taxation was in the form of a customs duty (as all petrol consumed in Australia was imported). When refineries began to produce petrol domestically, a petrol excise was introduced.²

Over time, the increased use of diesel-powered vehicles in Australia saw the introduction of an excise on diesel in 1957.

What is the fuel tax credit?

Fuel excise was originally only levied on those consumers who were purchasing fuel for the purpose of using 'on road' vehicles. Indeed, with the introduction of diesel excise in 1957, it was announced that consumers of diesel for other purposes would have the full extent of the duty reimbursed. This was later changed to a system of exemption certificates, which allowed large users of diesel to purchase the fuel without incurring any excise.³

This system continued until August 1982, when the Diesel Fuel Rebate Scheme was introduced, partly in response to concerns regarding alleged abuse of the exemption certificate system. The Diesel Fuel Rebate Scheme applied the exemption from the excise only to primary producers, miners, and users of diesel for heating, lighting, hot water, airconditioning and cooking for domestic purposes, or in hospitals, nursing and aged care homes, rather than all 'off road' users.⁴

¹ Australian Taxation Office, *Taxation Statistics 2011-12*, Fuel tax credits scheme – claims paid, by fine industry, 2006-07 to 2012-13 financial years. Available: www.ato.gov.au.

² James, D. (1995) *Revenue before rhetoric: A critique of fuel taxation in Australia*, Parliamentary Research Service Current Issues Brief No. 50 1994-95, 28 June, p. 1.

³ James, D. (1995) *Revenue before rhetoric: A critique of fuel taxation in Australia*, Parliamentary Research Service Current Issues Brief No. 50 1994-95, 28 June, p. 2.

⁴ Ibid, p. 2.

The current fuel tax credit scheme was introduced on 1 July 2006 in order to simplify the previous schemes, reduce compliance costs for businesses and to extend fuel tax credits to new businesses and industries.⁵

Since then, the commencement of Australia's carbon price mechanism has reduced the level of the fuel tax credit by a carbon charge (as discussed in more detail below).

1.2 'Off road' diesel use in mining and other sectors

Miners, farmers and businesses in a number of other sectors use fuel for a variety of 'off road' purposes.

For example, the mining industry uses diesel primarily for three reasons. It is used for:

- power generation (typically where no other sources are available), usually to run heavy grinding machinery, but also for housing and the like;
- running in-pit vehicles (the huge tractors and trucks which are part and parcel of modern mining); and
- transport on both private rail and private road systems.

Under the fuel tax credit scheme, businesses which use fuel for 'off road' purposes are eligible for a full rebate of the fuel tax which applies to the fuel they use. The scheme also provides a partial rebate for businesses using vehicles for 'on road' purposes. The partial rebate is equal to the difference between the amount of the fuel tax and the applicable road user charge.⁶

Fuel tax credits in effect remove road user charges from the overall fuel tax being paid.

The fuel tax is levied at the point of importation or production, with a fuel tax credit being paid to businesses based on fuel use when they submit their business activity statement.⁷ The fuel tax is currently levied at a rate of 38.143 cents per litre, although it is proposed to be biannually indexed to the CPI from 1 August 2014. The level of the fuel tax credits currently applicable to mining and other activities is shown in the table below.

Mining companies typically claim the fuel tax credit for off road activities, and are eligible for a rebate of 31.662 cents per litre in 2013-14. That rebate is less than the full excise of 38.143 cents per litre, because the amount of the rebate for 'off road' use for miners was reduced when the carbon tax was introduced on 1 July 2012.

⁵ The Parliament of the Commonwealth of Australia 2006, Fuel Tax (Consequential and Transitional Provisions) Bill 2006, explanatory memorandum p. 7.

⁶ Ibid, p. 14.

^{1010,} p. 14 7 Ibid, p. 3.

Table 1.1: Fuel tax credit categories applicable to mining

Business use	Fuel type	Tax credit rate for fuel acquired from 1 July 2013 (c/L)
In a heavy vehicle* (including emergency vehicles) for travelling on a public road.	Liquid fuels (eg. diesel or petrol)	12.003**
 'off road' activities where the fuel is combusted, for example: mining marine or rail transport nursing and medical burner applications electricity generation by a commercial generation plant, stationary generator or a portable generator construction manufacturing wholesale/retail property management 	Petrol Diesel and other liquid fuels	32.347*** 31.622***
 landscaping. To power auxiliary equipment of a heavy vehicle* travelling on a public road, such as fuel used to power a refrigeration unit or a 	Liquid fuels (eg. diesel or petrol)	38.143^

Source: ATO 2013, 'Fuel tax credits for business', available from:

http://www.ato.gov.au/uploadedFiles/Content/ITX/downloads/BUS18875n14584.pdf

Notes: Other fuel tax rebate categories exist, including for non-liquid fuels and for purposes not applicable to mining. These have been omitted from the table. * A heavy vehicle is greater than 4.5 tonne gross vehicle mass (GVM). Diesel vehicles acquired before 1 July 2006 can equal 4.5 tonne GVM. ** This rate accounts for the road user charge which is subject to change and currently exceeds the rate for gaseous fuels. It applies to fuel used in a heavy vehicle for travelling on a public road. ***The rates for these activities account for the carbon charge, which changes annually until 1 July 2015, then six-monthly thereafter due to changes in the carbon price. ^ This fuel use is not reduced by the road user charge or the carbon charge.

Table 1.2 shows the impact of the carbon tax on fuel tax credits. This impact is the effect of applying the carbon tax on the combustion of certain taxable fuels. It is an amount equal to the price of carbon emissions from the use of liquid or gaseous fuels. The carbon charge amount varies for different fuels, depending on their rate of carbon emissions.

Table 1.2: Impact of carbon tax on fuel tax credits (reduction in cents per litre)

Fuel type	2012-13	2013-14	2014-15
Petrol	5.52	5.796	6.096
Diesel and other liquid fuels	6.21	6.521	6.858
LPG	3.68	3.864	4.064
LNG and CNG	6.67	7.004	7.366

Source: Australian Government (2012).

The size of the fuel tax credit scheme over the last five years is shown in Table 1.3 below, with this data relating to all fuels, not just diesel. The table shows that the scheme has averaged around \$5.2 billion per year since 2008-09, and was \$5.4 billion in 2012-13.

Table 1.3: Fuel tax credit claims paid by industry (\$ millions)

	2008-09	2009-10	2010-11	2011-12	2012-13
Agriculture, forestry & fishing	631.5	623.5	645.6	652.9	679.3
Mining	1,850.7	1,891.1	2,035.2	2,349.4	2,136.0
Manufacturing	211.3	202.9	195.0	182.1	183.6
Electricity, gas, water & waste services	106.5	104.6	101.9	95.1	106.7
Construction	279.1	273.3	283.4	308.8	407.1
Wholesale trade	119.7	119.9	120.1	127.0	146.8
Retail trade	24.4	23.9	24.2	24.0	26.5
Accommodation & food services	10.9	9.5	9.9	10.2	9.3
Transport, postal & warehousing	1,147.3	1,090.4	983.6	953.2	1,000.6
Information media & telecommunications	3.4	5.8	11.7	11.8	1.5
Financial & insurance services	105.6	92.3	86.4	109.0	117.5
Rental, hiring & real estate services	38.5	36.4	38.2	43.6	44.2
Professional, scientific & technical services	309.2	337.9	344.5	380.0	370.9
Administrative & support services	17.3	16.4	22.0	23.3	23.5
Public administration and safety	158.5	111.0	85.4	93.0	75.9
Education & training	3.8	4.3	4.5	4.9	4.7
Health care & social assistance	2.2	1.8	2.0	1.9	2.3
Arts & recreation services	18.7	24.5	29.2	29.8	21.8
Other services	18.5	18.3	16.5	16.2	15.8
Other	8.4	5.7	71.4	110.8	34.0
Total all industries	5,065.4	4,993.7	5,109.5	5,527.1	5,408.0
Memo: Share paid to mining industry	36.5%	37.9%	39.8%	42.5%	39.5%

Source: Australian Taxation Office, *Taxation Statistics 2011-12*Note: The data in this table relates to all fuels, not just diesel.

The mining industry is the largest recipient of fuel tax credits, receiving around \$2.1 billion in 2012-13, while the transport, agriculture, construction and professional services industries were also large recipients. In total, these five industries have accounted for more than 80% of fuel tax credits each year since 2008-09.

Chart 1.1 shows that the mining industry's share of both GDP and total fuel tax credits had increased from 2008-09 to 2011-12. However, there was a fall in the level of fuel tax credits for the mining industry in 2012-13, even as mining output continued to grow (in part as the carbon charge reduction to fuel tax credits affected miners rather than other sectors from the latter year).

% of total fuel tax credits % of GDP

39%

39%

2008-09 2009-10 2010-11 2011-12 2012-13 8%

Mining fuel tax credits (LHS) Mining output (RHS)

Chart 1.1: Mining industry's share of GDP and total fuel tax credits (%)

Source: ATO, ABS, Deloitte Access Economics

2 Relevant tax principles

A tax on diesel via a fuel excise has been justified on the grounds that it:

- (1) represents an implicit user charge for roads, and
- (2) raises general revenue.

The first factor is why, virtually since the inception of taxes on diesel, policy has tried to quarantine 'off road' use of diesel through the use of exemptions or a rebate scheme – if you aren't using the diesel on roads, then there's no case to hit you with an implicit road user charge. In recognition of that, some industries (mining, farming, forestry and fishing) have historically not been charged the full tax on diesel.

Yet there is an even more fundamental point of tax policy in play here. Economists have long recognised the general tax principle that it is undesirable to tax an intermediate business input such as fuel. The general rule is that such a tax tends to lead to inefficient production methods being adopted, and hence lowers community well-being as a whole.

It means that something is being taxed twice – once in the hands of the business, and then again in the hands of domestic consumers.

Such 'taxes on taxes' are inefficient, and hence typically bad policy. At a 5 June 2014 Senate estimates hearing, Mr Rob Heferen of the Federal Treasury noted that fuel tax credits are: "... there to ensure that the double taxation does not occur. So the tax that is on the business input is relieved from the business activity. It is particularly important from a tax policy point of view. Certainly, with export competing industries, that double taxation obviously would be problematic."

Or, in other words, taxing business inputs would be a policy mistake. And that means raising general revenue – the second factor noted above – is also not a reason to tax diesel when it is a business input.

There is a related issue here. Some commentators argue fuel tax credits result in environmental externalities associated with fuel use being left unpriced, which has the same effect as a subsidy. Yet this claim also does not hold up to scrutiny:

- Since the implementation of Australia's carbon pricing mechanism, a carbon charge has already reduced the fuel tax credit to miners based on the emissions intensity of each fuel.
- Equally, if the carbon price is removed, it should be removed consistently, including its impact on fuel tax credits.

2.1 Taxing business inputs

Using fuel taxes to raise 'general revenue' raises wider issues of tax policy.

The fuel excise represents a tax on a commodity which is used as an intermediate input by business.

That is, fuel is purchased by a business just like any other commodity and transformed through the production process along with other inputs such as labour and capital into output.

Yet economists have long recognised that taxing business inputs is bad policy.

Taxing business inputs is bad policy

This point was established in a seminal article on economic theory by Diamond and Mirrlees in 1971.⁸ Their essential insight was that, in any sensible and efficient system of taxation, taxes should not fall on business inputs because taxes that do this distort decision making by firms and cause businesses to adopt less efficient production methods.

The general principle explaining how this occurs has been succinctly summarised by David James:⁹

Economic theory indicates that the imposition of a pure tax on intermediate inputs to the production process is likely to lead to a misallocation of resources, reducing the nation's economic performance and ultimately the standard of living. A fuel tax, for example, is likely to increase the costs of those industries using fuel more intensively, causing resources to move away from such industries and into other avenues of production. The impact of the tax on relative prices charged by such industries will also distort consumer decisions. These distortions fail to meet one of the desirable attributes of any taxation system, that of 'neutrality', which requires a well-designed tax system to have the least possible impact on consumption and production decisions and resource allocation in general.

This has long been recognised in Australian policymaking.

For example, the undesirability of taxing business inputs informed Australia's GST reforms, which imposed the burden of the GST on final consumers rather than businesses and provided a refund to businesses for GST paid on business inputs in the form of input tax credits. Such an approach helps to avoid the classic 'taxes on taxes' problem: taxes imposed on business inputs would otherwise 'cascade' along the production chain, increasing the effective rate of tax at each stage.

While households also find it burdensome to pay taxes on purchases, it is now well accepted that it is a less economically damaging way to raise revenue than taxing the intermediate inputs of business.

⁸ Diamond, Peter A. and James A. Mirrlees (1971), "Optimal Taxation and Public Production I: Production Efficiency," American Economic Review 61(1), March.

⁹ Denis James, *Revenue before rhetoric: a critique of fuel taxation in Australia,* June 1995.

The efficiency cost of raising revenue through a tax on inputs will be higher than if the same revenue was raised through a tax on consumption or incomes because the tax on inputs distorts both production and consumption decisions, whereas broad-based taxes on consumption or incomes only distort the decision to supply labour to the production process.

A further consideration for taxing fuel as a business input: The Ramsay principle

A second key principle, related to the first point above, is that taxes should not fall on products whose demand is very price elastic. Taxes that do so have a rather more marked distortionary impact – a point implicit in the work of Ramsey. ¹⁰

In this case, the effective incidence of an increase in the diesel tax paid by miners would fall on mining exports. But these are sold into world markets, and any increase in domestic costs cannot be passed on to foreign consumers.

That means any increase in diesel tax for Australian miners would simply see a loss of global market share, profits and employment.

It is the latter concern which presumably underlies the comment of Mr Rob Heferen of the Federal Treasury, quoted earlier, that: "Certainly, with export competing industries, that double taxation [in the absence of fuel tax credits] obviously would be problematic."

2.2 Addressing externalities

While Diamond and Mirrlees (1971) established the general principle that optimal taxes are zero on all intermediate goods, exceptions can exist in certain circumstances.

The most notable exception is for goods that generate externalities and that therefore may require corrective Pigovian taxes (or subsidies) to be imposed. This refers to a situation where the price of a good, such as fuel, is lower than its social cost, and its consumption is therefore greater than is socially desirable. This can be corrected by taxing the good in order to raise the market price so that the final, after-tax price also reflects the social costs.

The extent to which these externalities apply to increase the social cost of fuel use above its market price will depend on the circumstances of that fuel use. For example, 'off road' fuel use will not lead to externalities such as raising road maintenance costs. Similarly, fuel used by miners and farmers is often far away from urban centres where pollution costs — another potential externality — tend to be the most problematic.

As a principle, policy measures that seek to address any such externalities need to take into account these different circumstances if they are to improve economic efficiency. It is therefore likely that, to the extent that fuel excise is used to correct for such externalities, fuel excise rates need to differ by fuel use and/or by user.

Similarly, it is important that the costs and benefits of any policy measures seeking to address environmental externalities are properly assessed if economic efficiency is to be improved

¹⁰ Ramsey, FP 1927, 'A Contribution to the Theory of Taxation', *The Economic Journal*, 37, no. 145, (Mar 1927), 47-61

rather than hindered. As the Industry Commission's report on Petroleum Products in 1994 noted in a statement that still remains relevant today:11

"Given the uncertainty relating to the cost of emissions and the costs associated with reducing emissions, it is important that governments are suitably cautious in designing and implementing policy measures. Unless comprehensive assessments are made of all the relevant costs and benefits of new policy measures, there is a risk that the measures implemented may impose costs greater than the expected benefits stemming from any reduction in pollution."

2.2.1 Taxing diesel as an implicit user charge for the cost of building and maintaining roads

Originally, the revenue raised from fuel excise was explicitly earmarked to fund the construction and maintenance of public roads. Indeed, until 1982 the excise was only levied on the consumption of fuel used in 'on road' vehicles.

The explicit link between fuel excise and road funding ceased in 1959. At least in part, the cessation of this explicit link reflected the need for greater flexibility in the budgeting process, with annual fluctuations in the revenue from fuel excise otherwise leading to irregular road funding year by year. 12

Even so, governments have on occasion continued to hypothecate a portion of the revenue from increases in the fuel excise to additional road funding. For example, a surcharge of 1 cent per litre was added to fuel excise in 1982 (rising to 2 cents per litre from 1983) to establish a roads program under Australian Bicentennial Road Development Trust Fund, with formal hypothecation of the revenue to road funding under legislation.

In more recent experience, the Federal Government has stated an intention to formally hypothecate the increased revenue from the reintroduction of fuel excise indexation in the 2014-15 Budget to increased road funding:¹³

'The Government will amend the Excise Act 1901 to ensure that the amount spent on road infrastructure funding is greater than the net revenue from the reintroduction of indexation on fuel excise and excise-equivalent customs duty."

Across all levels of government in Australia, the statistics also suggest a rough correlation between road-related revenue from fuel excise, motor vehicle registration charges, and stamp duties on the transfer of vehicles which amounted to a total of \$18.0 billion in 2011-12, and government funded road-related expenditure of \$18.5 billion in that year. 14

¹¹ Industry Commission 1994, *Petroleum Products*, Report No. 40, AGPS, Melbourne.

¹² Ibid, p. 2.

¹³ Australian Government, Budget Measures, 2014-15 Budget Paper No. 2, 2014, http://www.budget.gov.au/2014-15/content/bp2/download/BP2_consolidated.pdf, accessed 11 June 2014.

¹⁴ Bureau of Infrastructure, Transport and Regional Economics (BITRE), 2013, Australian infrastructure statistics Yearbook 2013, Canberra ACT.

As the Henry Tax Review stated:15

"This combination of annual motor vehicle registration and fuel excise could be viewed as a crude 'two-part tariff' for road usage. While road taxes are not hypothecated (that is, earmarked) to road spending, revenue from these taxes does cover the direct cost of infrastructure spending on roads and bridges ..."

That said, the bulk of the revenue raised from fuel excise is now part of general revenue. Even so, it remains clear from the above that one of the underlying justifications for fuel excise – including excise on diesel – is to contribute to the cost of constructing and maintaining public roads.

It therefore follows that, for users whose usage of diesel is mostly or notably 'off road', this justification is rather less applicable.

2.2.2 Taxing diesel so as to raise general revenue

With the cessation of formal hypothecation of fuel excise to road funding, the fuel excise now mostly raises general revenue. Like other taxes which raise revenue, this allows for the provision of services, welfare payments and other expenditures by governments. Data from the Australian Taxation Office shows that the excise on diesel and petrol raised more than \$14.6 billion in 2012-13, up from almost \$13.2 billion in 2008-09 (see Table 2.1 below).

Table 2.1: Revenue raised from fuel excise (\$ millions)

	2008-09	2009-10	2010-11	2011-12	2012-13
Petrol	6,481.0	6,285.0	5,939.0	6,147.0	6,044.3
Diesel	6,703.0	6,862.0	7,465.0	8,387.0	8,562.1
Total fuel excise	13,184.0	13,147.0	13,404.0	14,534.0	14,606.4

Source: Australian Taxation Office, *Taxation Statistics 2011-12*

As noted above, taxing business inputs – the key use of diesel for mining – is bad policy, and hence an inefficient way of raising general revenue.

The next section of this report examines how these principles of tax policy have been applied in Australia's system of fuel taxation, with a focus on the operation of fuel tax credits.

2.2.3 Taxing diesel so as to address environmental externalities

Some argue that fuel excise may also be imposed to help to address environmental externalities. For example, the Henry Tax Review noted that "the excess burden of fuel excise may be overstated to the extent that there are social and environmental costs of fuel consumption. These externalities may be reduced as excise curbs fuel consumption, which would improve welfare."

¹⁵ Commonwealth of Australia 2010, 'Australia's Future Tax System', p. 375.

However, since the implementation of Australia's carbon pricing mechanism, a carbon charge has already reduced the available fuel tax credit based on the emissions intensity of each fuel. For example, at a carbon price of \$24.15 per tonne, the fuel tax credit was reduced by 6.521 cents per litre in 2013-14.

In a coherent system of taxation, that should address any perceived environmental externality associated with their fuel use:

- If fuel tax credits were removed in their entirety on environmental grounds as some who claim the fuel tax credit is a subsidy have argued should happen then the fuel excise paid by miners would increase to 38.1 cents per litre of diesel. That would represent an effective carbon price of \$141 per tonne of CO². 16
- That would compare to a carbon price of \$24 per tonne imposed on other emission generating activities such as coal-fired electricity generation.
- It would also represent an economically inefficient and destructive way to lower carbon emissions.
- To argue that fuel tax credits represent a subsidy to fuel use on environmental grounds is to argue for an equivalent \$141 per tonne carbon price across the whole economy.
- To charge some parts of the economy the equivalent of a \$141 per tonne carbon price
 while not charging others similarly would be spectacularly inefficient policy all the more
 so if the parts of the economy being hit with a carbon price of that magnitude were
 business inputs, and more so again if those business inputs were used in the creation of
 products sold onto world markets.
- Moreover, while households do face a higher fuel excise rate of 38.1 cents per litre, the
 weight of current and historical evidence suggests that only a portion of the total excise
 rate reflects environmental externalities, with the current elevated excise rate also a
 reflection of the policy objectives to impose an implicit road user charge and to raise
 general revenue.
- As discussed above, neither of the latter two policy objectives justify the removal of fuel tax credits.

In summary, the claim that fuel tax credits are a subsidy does not hold up to scrutiny.

Equally, if the carbon price is removed, it should be removed consistently, including its impact on fuel tax credits.

¹⁶ If the fuel excise for miners increases by 5.9 times from 6.5 to 38.1 cents per litre of diesel, that implies that the effective carbon price will also increase by 5.9 times, from \$24 to \$141 per tonne.

3 Why fuel tax credits are not a subsidy

Australia's fuel tax credit system has been intentionally designed so that fuel used by business as a business input is not taxed. That reflects the application of the general principle of tax policy that taxing intermediate business inputs will harm economic efficiency and lower living standards.

Ideally, business would not pay tax on a business input such as fuel. Unfortunately, administrative realities have meant that, as in other situations where tax is first taken and then later returned (such as tax refunds through the PAYG system), it is administratively easier for business to pay the tax on diesel upfront, and be refunded later.

This administrative feature of the rebate system makes the fuel tax credit look like a subsidy, because it involves money going from the government back to businesses. Yet it is not a subsidy. Indeed, by removing a distortion from firms' choice of inputs, the fuel tax credit does the opposite by ensuring a more level playing field for all business inputs.

As Mr Heferen of Treasury noted on 5 June 2014, "The fuel tax credits—it is an outlay; it is not a tax expenditure...... The net amount paid for the fuel—so the amount of tax itself, to the extent that someone is entitled to either be exempt from that or have that refunded—to the extent that it is an off-road use, as in manufacturing, mining, agriculture and those sorts of things, would ordinarily be included as part of the base and therefore the departure from the base is not a tax expenditure. It is not a subsidy. It is just what the base ought to be."

3.1 Administration of the fuel tax credits scheme

The way in which the fuel tax credits scheme is administered by the ATO can inadvertently make it look like fuel tax credits are a subsidy – because it means some money flows from the government back to businesses.

Yet that is merely the return of money that the principles of good tax design indicate shouldn't have been taxed in the first place. The only reason it is taxed upfront is because it is administratively easier to charge all users – both consumers and businesses – the same price for fuel, and then use tax credits to get the right tax policy outcome.

The administration of the scheme has evolved over time.

Historically, farmers and miners simply did not pay the tax on diesel. But that was complex to administer and open to abuse. In 1982 the then Government switched to a rebate system.

Since then all users have paid the full tax on diesel upfront, with farmers and miners as well as other businesses receiving a rebate returning the excess tax paid.

This transaction shows up on both sides of the Budget accounts – as diesel tax paid at full rates by all users on the revenue side, and as a rebate of the excess tax charged to miners, farmers and other businesses on the expenditure side.

The presence of an entry for the fuel tax credit on the expenditure side of the Budget has led to some to refer to it as a subsidy, a tax concession, or a form of industry assistance.

Related to this, some commentators have also stated that the fuel tax credit scheme subsidises fuel use because the rate of fuel excise paid by business is less than that paid by households and lower than the socially optimal rate based on environmental grounds.

3.2 Why fuel tax credits are not a subsidy

There are a number of reasons why fuel tax credits cannot be considered a subsidy.

Most fundamentally, to the extent that fuel excise is seen as a way to raise general revenue, fuel tax credits simply represent the return of excess taxes paid by farmers, miners and other businesses.

These businesses pay the excess in the first place solely as a means of easing the administrative burden on the Government.

This is a common feature of the tax system. The same is true of GST refunds for GST paid by business, and annual income tax returns for excess income tax paid by individuals through the PAYG system.

These refunds of excess taxes paid are not subsidies – rather, as outlined in the previous chapter, the Australian tax system has been deliberately designed on the basis of sound tax principles so that **businesses as a general rule do not pay tax on business inputs**. As such, from an economic perspective, the correct interpretation of a cut to fuel tax credits is that it would represent an increase in taxation on business inputs, rather than a reduction in a subsidy.

If the objective of fuel excise is to impose a road user charge, then businesses that use diesel for 'off road' purposes should not pay the charge as they do not contribute to the costs associated with road use such as road maintenance, traffic congestion or urban pollution. In this case, since no road user charge is incurred, fuel tax credits for 'off road' use of fuel clearly do not represent a subsidy, but merely act as a refund of excess tax paid.

As Mr Heferen of Treasury has noted, "The fuel tax credits—it is an outlay; it is not a tax expenditure...... The net amount paid for the fuel—so the amount of tax itself, to the extent that someone is entitled to either be exempt from that or have that refunded—to the extent that it is an off-road use, as in manufacturing, mining, agriculture and those sorts of things,

would ordinarily be included as part of the base and therefore the departure from the base is not a tax expenditure. It is not a subsidy. It is just what the base ought to be."

3.3 Does Treasury agree that removing all or part of fuel tax credits would be bad economics?

In April 2012 fifty five freedom-of-information documents (FOI) were released and obtained from the Australian Treasury ('the Treasury') which indicated that the Treasury favours the retention of fuel tax credits (http://www.theaustralian.com.au/national-affairs/policy/greens-hit-roadblock-on-fuel-tax-as-treasury-argues-for-diesel-rebate/story-fn59nsif-1226321703552).

The Treasury noted that the credits were designed to "avoid distorting business investment decisions". Some quotes from the FOI documents which were reported in the media are extracted below:

"... fuel tax credits are not a subsidy for fuel use, but a mechanism to reduce or remove the incidence of excise or duty levied on the fuel used by businesses 'off road' or in heavy 'on road' vehicles."

"Australia's fuel tax credit system is a mechanism designed to ensure that, in general, the incidence of fuel tax is not burdened on businesses, but rather the final consumer. This is consistent with Australia's tax system more broadly, where consumption taxes are intended to apply to final consumption (rather than business inputs)."

Mr Rob Heferen of the Treasury also made the following comments at a 5 June 2014 Senate estimates hearing:

"The fuel tax credits—it is an outlay; it is not a tax expenditure..... The net amount paid for the fuel—so the amount of tax itself, to the extent that someone is entitled to either be exempt from that or have that refunded—to the extent that it is an 'off road' use, as in manufacturing, mining, agriculture and those sorts of things, would ordinarily be included as part of the base and therefore the departure from the base is not a tax expenditure. It is not a subsidy. It is just what the base ought to be."

Similarly, at the same Senate estimates hearing, Senator Mathias Cormann indicated that the Federal Government did not consider fuel tax credits to be a subsidy:

"Let us be very clear: the government does not consider the diesel fuel rebate as a subsidy at all. It is, as Mr Heferen has just said, a measure to avoid double taxation. It is recognition that you should not charge businesses an effective road user charge if they do not use public roads."

The appropriateness of using fuel taxes to collect revenue was also discussed in the recent Henry Review of Australia's taxation system, entitled 'Australia's Future Tax System', which provides a useful insight into Treasury's thinking.

The Review's recommendation in relation to fuel taxes (Recommendation 65) is extracted below:

"Revenue from fuel tax imposed for general government purposes should be replaced over time with revenue from more efficient broad-based taxes. If a decision were made to recover costs of roads from road users through fuel tax, it should be linked to the cost of efficiently financing the road network, less costs that can be charged directly to road users or collected through a network access charge. Fuel tax should apply to all fuels used in road transport on the basis of energy content, and be indexed to the CPI. Heavy vehicles should be exempt from fuel tax and the network access component of registration fees if full replacement charges are introduced."¹⁷

The extract highlights that the Review argued in favour of fuel taxes being removed. The Review argued that narrow based taxes on specific goods such as fuel tax should only be used to address particular social costs or market externalities.¹⁸

On this basis, the Review recommended that fuel taxes should be removed except when used to recover for the cost of road use (that is, address a market externality) and that a carbon pricing mechanism rather than a fuel tax should be used to recover any environmental costs associated with fuel use.¹⁹

Based on this policy logic, the Review concluded that fuel taxes should be applied to 'on road' uses only to the extent necessary to recover the efficient costs of maintaining road infrastructure, while a tax credit should be applied to 'off road' fuel uses.²⁰

While the Henry Tax Review advocated removing fuel tax as a source of general government revenue entirely, current policy achieves this indirectly by imposing a fuel tax but providing businesses with a rebate for eligible 'off road' uses and a rebate net of heavy vehicle road charges for on road use.

This is less efficient than removing the tax entirely because it imposes additional administrative costs associated with both the initial tax collection and the subsequent administration of fuel tax credits, but attempts to achieve a similar policy outcome.

This perspective helps explain why Treasury has consistently voiced its opposition to the removal of fuel tax credits in the past, as illustrated by the release of these FOI documents relating to fuel tax credits.

¹⁷ Commonwealth of Australia 2010, 'Australia's Future Tax System', recommendation 65, p. 392.

¹⁸ Ibid, p. 25.

¹⁹ Ibid, p. 398.

²⁰ Ibid.

4 Why increase an inefficient tax on Australia's most efficient industries?

Some policy changes would be dumber than others. Not only do the principles of good tax design support most features of the current system, to unwind some or all of the fuel tax credit system would result in:

- Larger costs because these are mostly export industries, which can't pass on the costs of poor policies in Australia to world markets.
- Larger costs to future growth prospects, because there is a surprisingly close match between those sector receiving fuel tax credits and those sectors in which Australia has the strongest comparative advantage.

Today's bad economics is all too often next year's bad politics. A fiscal repair task most certainly remains for the Federal Budget, and the risk is that hard political choices could lead to poor economic choices.

An increase in the diesel tax on miners would mean that many existing mines could find their lives considerably foreshortened. And the potential development of new mines may remain in limbo, some of it to be permanently mothballed.

The preceding analysis has explained why:

- The principles of good tax design show that key justifications for taxing fuel do not apply in some circumstances: For example, if you aren't using diesel on roads, then there's no case to hit you with an implicit road user charge via fuel taxes.
- Most importantly of all, taxing diesel used as a business input would be inefficient, and would make Australians less well off. That is because it would mean that something is being taxed twice once in the hands of the business, and again in the hands of domestic consumers. Such 'taxes on taxes' are inefficient, and hence typically bad policy.
- This report also shows why fuel tax credits aren't a subsidy: The only reason why money flows from the government back to businesses is because it is administratively easier for businesses to pay excess tax upfront, and then to have that refunded later. This is a common feature of the tax system. The same is true of GST refunds for GST paid by business, and annual income tax returns for excess income tax paid by individuals through the PAYG system.

Yet there is a wider perspective here worth noting.

Sometimes bad policy can be even worse:

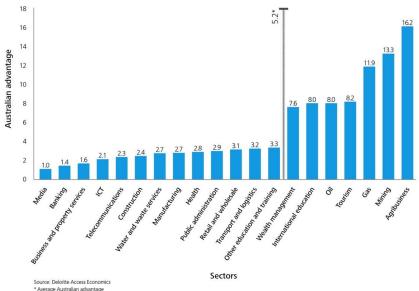
- That would be true, for example, if Australia were to make tax policy mistakes affecting
 those industries which compete globally. Global markets don't play nice. If our policies
 are bad, then we'll lose out and do so at a considerable cost to national well-being. Such
 concerns appear to have prompted some of the comments made by Mr Rob Heferen of
 Treasury on 5 June 2014 before the Senate.
- And that would be even more true, for example, if Australia were to make tax policy mistakes affecting those industries in which our nation has the largest comparative advantage.

Interestingly, there is a close correlation between those sectors whose excess fuel tax payments are refunded, and those sectors with the greatest comparative advantage.

Deloitte published *Positioning for Prosperity? Catching the next wave,* the third paper in Deloitte's *Building the Lucky Country series*, in early 2014. The paper discusses the expectations for sectoral growth prospects across Australia's economy.

Chart 4.1: Areas of comparative advantage for Australia (relative advantage score)

Australian advantage



Source: Deloitte (2014).

As shown in Chart 4.1 above, those sectors in which Australia has the greatest comparative advantage over the medium to long term relative to our competitors include:

- Mining
- Agribusiness
- Gas

- Tourism
- International education
- Wealth management.

These sectors represent future growth waves for Australia. It would be a particularly costly error to get the tax policy settings for such sectors wrong.

Today's bad economics is all too often next year's bad politics. A fiscal repair task most certainly remains for the Federal Budget, and the risk is that hard political choices could lead to poor economic choices.

An increase in the diesel tax on miners would mean that many existing mines could find their lives considerably foreshortened. And the potential development of new mines may remain in limbo, some of it to be permanently mothballed.

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