

UPSTREAM PETROLEUM TAXATION IN AUSTRALIA IN COMPARATIVE PERSPECTIVE, WITH SPECIAL FOCUS ON THE UNITED KINGDOM

1. This document is submitted to the Senate Economics References Committee (“SERC”) pursuant to its inquiry into corporate tax avoidance and minimisation in the Australian upstream petroleum sector. The document addresses SERC’s broadened request for information related to the payment of royalties the Petroleum Resource Rent Tax (PRRT) and other imposts by corporations involved in Australia’s offshore oil and gas industry. The purpose of the document is to make clear that the alarming downward trend in petroleum fiscal revenues that has featured so prominently in Australian public debate of late (and which has prompted SERC’s inquiry) is not a necessarily a consequence of tax avoidance and optimisation practices on the part of corporations engaged in producing oil and gas in Australia, widespread and outrageous as these appear to be. Rather, the paltriness of the fiscal receipts that the Australian government is currently getting (and is likely to get in future) in connection with the exploitation of the country’s hydrocarbon resources should be seen as a *design feature* of the Australian fiscal regime currently in force. In other words, the Australian petroleum fiscal regime is producing exactly the sort of fiscal outcomes that it was designed and intended to produce, and will continue to do so in the future unless the Australian government changes tack by radically overhauling this fiscal regime.
2. In a briefing paper dated November 2016, the International Transport Workers’ Federation (“ITF”) reached the conclusion that, since Australia has no royalty payable on offshore oil and gas production in Commonwealth waters and PRRT is not forecast to collect any revenues on the hydrocarbons used for LNG production for the space of decades, in effect “Australia’s offshore oil and gas is being given away for free”.¹ In that same briefing paper, ITF reported that “[i]n response to public concerns being raised about the effectiveness of the PRRT, [the Australian

¹ *An International Comparison of Australian Government Revenues from Oil and Gas Production. ITF Briefing Paper* (November 2016; available at <https://stopfreegas.org/reports/>): 2.

Petroleum Production & Exploration Association] APPEA - the oil and gas lobby group - has said that the PRRT is working as designed".² While it might appear that these statements are mutually contradictory, in my opinion, they both happen to be true. Furthermore, the fact that both are true highlights an anomalous situation that ill-serves the people of Australia, who are the ultimate owners of the country's petroleum resources and should therefore be the main beneficiaries from their exploitation.

3. For the avoidance of any doubt, as far as the aggressive tax "optimisation" by corporations exploiting Australia's petroleum resources is concerned, I would like to make it clear that, on the strength of my own experience in the international petroleum industry, I have no hesitation whatsoever in endorsing the conclusion that "oil and gas multinationals have used aggressive tax avoidance practices ... which severely limit the benefits to Australians from the exploitation of their natural resources".³ However, although the sums of money involved in these tax optimisation and avoidance – as well as outright tax evasion – activities are unquestionably very large, the collapse in Australian petroleum fiscal revenues is primarily due to structural factors inherent to the design of the Australian fiscal regime itself, a point that can be appreciated more clearly by looking at it together with what is likely its closest analogue in both conception and operation; namely, the fiscal regime in force in the British sector of the North Sea.
4. The centrepieces of both the Australian and British petroleum fiscal regimes are so-called 'resource rent' taxes – also referred to on occasion as windfall or excess profit taxes – called, respectively, Petroleum Resource Rent Tax (PRRT) and Petroleum Revenue Tax (PRT). These resource rent taxes were designed to allow companies a quick recovery of their costs and investments, essentially by treating the latter as current expenses, multiplied by a significant uplift (uplift is an interest factor meant to approximate the producer's opportunity cost of capital, and its

² ITF note 1 *supra*: 4; emphasis added.

³ ITF note 1 *supra*: 5.

rationale is to compensate the producer for the delay in cost recovery). While the applicable rate for such resource rent taxes may be set very high – it was as much as seventy-five per cent in the United Kingdom (“UK”) during the 1980s – no taxable income for the purposes of these taxes is generated until such time as all investment and cost outlays have been recouped, with interest (so the taxable base may conceivably be quite small).

5. In Australia, any undeducted expenditures for the purposes of PRRT are compounded forward at a variety of set rates.⁴ The UK fiscal regime is even more generous: in the event that at any point over the lifetime of a petroleum license – including, crucially, the period of decommissioning of petroleum production installations – the sum of cumulative investment (with uplift) plus costs exceeds cumulative profits (with applicable deductions), then PRT in the amount necessary to bring the two sides of the equation into balance is reimbursed to payors.
6. Starting in 1993, in pursuit of the aim of levying progressively less taxes on oil and gas exploration and production activities, the UK government began whittling away at PRT, not only by lowering the rate of the tax but also by restricting its applicability to projects developed before that year and granting all kinds of reliefs. From that point on, only a small minority of the fields potentially liable to pay PRT in fact did so, and PRT receipts shrank to a fraction of ring-fenced Corporation Tax receipts from upstream oil activities.⁵ In March 2016, the UK government decided to zero rate PRT on a permanent basis, effective January 2016. By being zero rated on a permanent basis, PRT was rendered useless as a levy but, crucially, the other constituent elements of the tax itself remained in the statute books. Therefore, qualifying expenditures (notably those associated with the decommissioning of

⁴ In general, undeducted exploration costs are generally compounded at the long-term bond rate (“LTBR”) plus 15 percentage points, while other costs are augmented at the LTBR plus five percentage points. These compounding factors are very generous: the uplift rate of the long-term bond rate plus 5 percentage points (currently 11 per cent in total) is much higher than the corporate bond rate, a useful proxy to compensate investors in the absence of a full loss offset (*Australia's Future Tax System: Final Report*: C1–2; available at <http://www.taxreview.treasury.gov.au>).

⁵ During the second half of 2015, for example, there were 57 fields potentially liable to pay PRT, but only 19 did so.

PRT-liable fields, such as Brent) can still be carried back against past PRT payments.⁶ As a result, the UK government will end up footing the bill for around 45 per cent of the future decommissioning costs in the North Sea, and its future oil income is likely to be a negative figure.⁷

7. There are other jurisdictions (like Norway and Denmark) which also have in place fiscal regimes that treat investment as a current expense, always subject to uplift, for the purpose of assessing windfall profit taxes, albeit calculated on an annual basis (as is the case in Australia). The UK fiscal regime is unique in carrying out these calculations on the basis of the whole of the elapsed term of a licence, with the possibility of payors being reimbursed for past payments. This effectively turns PRT receipts into a reserve that funds any incremental investments/costs associated with Acts of God, exogenous market developments, the costs of decommissioning of petroleum production installations, and even negligence on the part of some operators (as the bulk of such investments/costs end up being paid out of the government's share of revenues, with the excess profit rate determining the magnitude of its contribution in percentage terms).⁸
8. At the core of Australia's and the UK's approach to petroleum taxation is the idea that the optimal development of a country's petroleum resources is realised by making sure that charges for resource production never compromise or come into conflict with any upstream investment that an oil company (ideally one subject to the ultimate discipline of the capital market) believes could be profitable, and might therefore be willing to undertake. Should this free and frictionless flow of investment encounter an obstacle that *might* drive up costs, then it is incumbent

⁶ See "Shell Begins Huge Task of Decommissioning Brent Oil Rigs", *The Guardian*, 6 February 2017. The Brent decommissioning is likely to take between 8 and 10 years, at an expected cost of "several billion pounds" (<http://www.shell.co.uk/sustainability/decommissioning/brent-field-decommissioning/brent-field-faqs.html>).

⁷ For the FY2016-2022 period, the Office for Budget Responsibility ("OBR") expects negative PRT annual receipts of around £500 million, as oil and gas output further declines and the decommissioning of production installations gathers pace (HM Treasury, *Spring Budget 2017* (HMSO, London 2017): 60).

⁸ For instance, the basin-wide precautionary shutdowns and mandatory investments that followed the Piper Alpha disaster of 6 July 1988 (plus the cash flow effects of the disaster itself) shrank the PRT obligations of the British oil industry to such an extent that, in Fiscal Year 1990-91, the UK government recorded negative PRT receipts for the not inconsiderable sum of £216 million.

upon government to address this potential cost problem, preemptively, by reducing – if necessary all the way down to zero – the charges that such companies pay the government for resource production, so as to make the investment in question profitable. Thus, even though the Australian and the British fiscal regimes claim to be market-driven, the cornerstone of both is the highly dubious premise that at the margin, it is ultimately taxation (rather than costs and/or prices) that sways the investment decisions of corporations.

9. While neither the Australian nor the British fiscal regime shift risk away from oil and gas firms at the exploration stage, the risk profile that companies face once a commercial discovery has been made in either jurisdiction is highly favourable, on two grounds. The first one is that resource rent levies are the sole means whereby these governments have sought to obtain fiscal revenues from upstream activities, other than general taxation (i.e. there are no royalties or signature bonuses). The second one is that payment of such levies is made contingent, and subordinated, to the recoupment of all investments and costs – assessed on an annual basis in Australia, while the more generous UK fiscal regime assesses them over the lifetime of licenses – plus an assured rate of return (high enough to surmount with ease the hurdle rate requirements that an oil company would have for a project in provinces with a very low level of political risk, such as Australia and the UK).⁹ Because of this, the Australian and British governments (in their capacity as recipients of resource rent tax payments) are shifted to the very last place in the

⁹ PRT incorporated a series of special reliefs and mechanisms meant to ensure that projects which generated no windfall profits would be protected from the tax. Among these mechanisms was one known as “Safeguard”, designed “to give companies a degree of assurance about the minimum level of profits they can expect to enjoy after PRT (but before CT [corporation tax]), with a view to ensuring that marginal fields remain profitable”. Safeguard restricted “the amount of PRT payable by a participator in a chargeable period if the effect of the PRT would be to reduce after-tax profit below a minimum return on investment in the field”. That minimum return was defined as “15 per cent of the participator's 'accumulated capital expenditure' in the field up to the end of the chargeable period in question”, with 'accumulated capital expenditure' in turn defined as “the cumulative amount of field expenditure allowed as qualifying for supplement”. If the adjusted profit were less than 15 per cent, then the PRT for that chargeable period would be reduced to nil. If the adjusted profit were more than 15 per cent of accumulated capital expenditure, then the PRT charge would be the lesser of 80 per cent of the excess or else the amount of the PRT charge calculated in the normal way. See HM Revenue and Customs, *A Guide to UK and UK Continental Shelf Oil and Gas Taxation - January 2008*: ¶¶4.16-4.18 (available at <http://www.hmrc.gov.uk/international/ns-fiscal3.htm>).

line of residual claimants for project funds, behind not only the most unsecured creditors but even of equity holders. In addition, the structure of these resource rent taxes has meant that the Australian and British governments have in effect funded investments in infrastructure that has subsequently been used by its corporate owners to extract very significant revenues from third parties which were not connected in any way to the project that such infrastructure was meant to serve (the prime instance of this being the Forties pipeline in the UK North Sea).

10. In comparison to other petroleum fiscal regimes around the world, even those in economically developed jurisdictions, both the Australian and British upstream fiscal regimes have always been very attractive for investors. However, with the increase in petroleum prices from 2000 onwards, the differences in the amounts that Australia and the UK obtain from the exploitation of their petroleum resources, compared to what other jurisdictions get, has reached staggering proportions.
11. A straightforward way of appreciating this point consists in calculating and comparing the effective tax ratios (“ETR”) for petroleum exploration and production activities in different jurisdictions producing oil and natural gas. The ETR is defined as the sum of tax revenues divided into the value of gross production. Unlike the marginal rate of tax (which is a forward looking measure that relies on assumptions about prices, revenues and production profiles), ETR is a retrospective indicator calculated on the basis of observed data for all of these parameters (this is a useful feature, as the taxes that companies liquidate may be a very small fraction of what they would have theoretically had to pay had the marginal rate of taxation applied, as the recent cases of Google, Facebook, Amazon, Apple and other multinational companies have demonstrated). Thus, ETR is a device that allows the comparison of the real incidence of taxation across jurisdictions, not least because it makes it unnecessary to track and itemise the myriad exemptions, incentives, special features (and tax bases) granted against the various taxes faced by the oil and gas industry in different countries, at different times. ETRs, in other words, permit the

translation of dynamic tax policies across jurisdictions into a tractable analytical form.

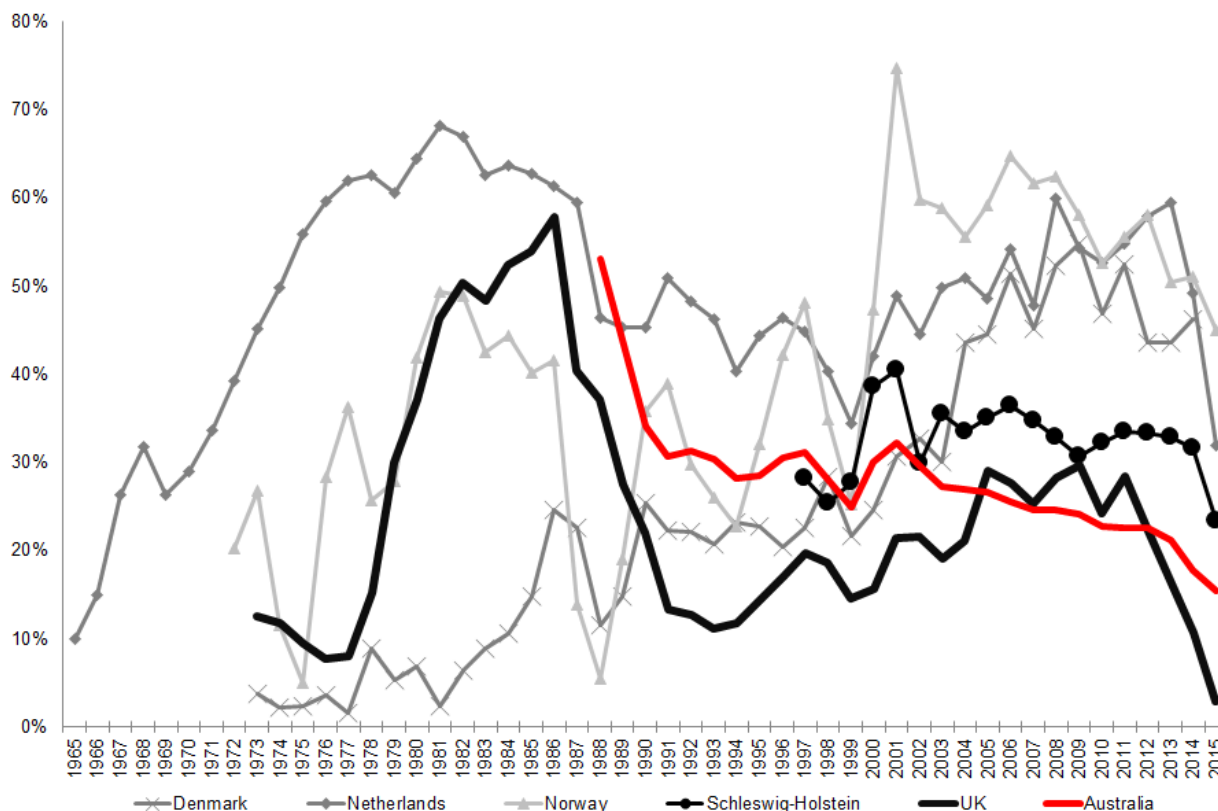
12. ETRs incorporate no information on industry costs, so a disparity in ETRs cannot necessarily be taken as diagnostic that the tax burden in one jurisdiction might be too light in comparison to that of some other jurisdiction, because it is costs that ultimately determine the share of gross revenues available to be divided between taxes and industry profits. But ETRs can certainly give a good idea of just how large differences in cost structures (exploration, production and so on) would have to be in order to account for a given tax gap between jurisdictions. Moreover, the calculation of ETRs is straightforward, requiring no adjustments either to capture the fluctuating values of currencies or to express natural gas volumes in oil equivalent terms. Thus, for the layperson, ETR is an intuitively easy concept to grasp.

13. The Figure below plots the respective ETRs for Australia and the UK, and compares them with those of other hydrocarbons producers around the North Sea Basin. As can be appreciated, both the Australian and the UK ETRs are currently (and have been for a long time now) way below those observed for any of the other major North Sea hydrocarbons producers (Denmark, the Netherlands and Norway). Indeed, they are lower even than the ETR of the fifth North Sea hydrocarbons producer, the German Federal *Land* of Schleswig-Holstein.¹⁰ This last datum is highly counterintuitive, for a number of reasons. Firstly, German North Sea petroleum production only started in 1987, whereas hydrocarbons production in Australia and the UK began much earlier. Secondly, German North Sea hydrocarbons output has always been minuscule in comparison to Australian

¹⁰ The tax regime in Schleswig-Holstein is very simple. First, there is a royalty payable to the *Land* government (as mineral taxation is a *Land* matter under the German federal constitution), whose statutory rate has increased sharply in recent years – from 8 per cent in 2000 to 21 per cent in 2013. In 2014, the Schleswig-Holstein government adopted a sliding scale arrangement whereby the base royalty rate for offshore oil production would still be 21 per cent but, depending on oil prices, the rate could be as high as 40 per cent. In addition to the royalty, normal corporate income tax (not ring-fenced) is payable to the German federal government.

and UK output.¹¹ Thirdly, Schleswig-Holstein unit costs are high because oil production takes place in an estuarine setting of exceptional environmental fragility through a quite complex production system, and the quality parameters of the oil produced are poor (i.e. it is a heavy oil with a relatively high sulphur content, unlike most crude oils produced in Australia and the UK).¹²

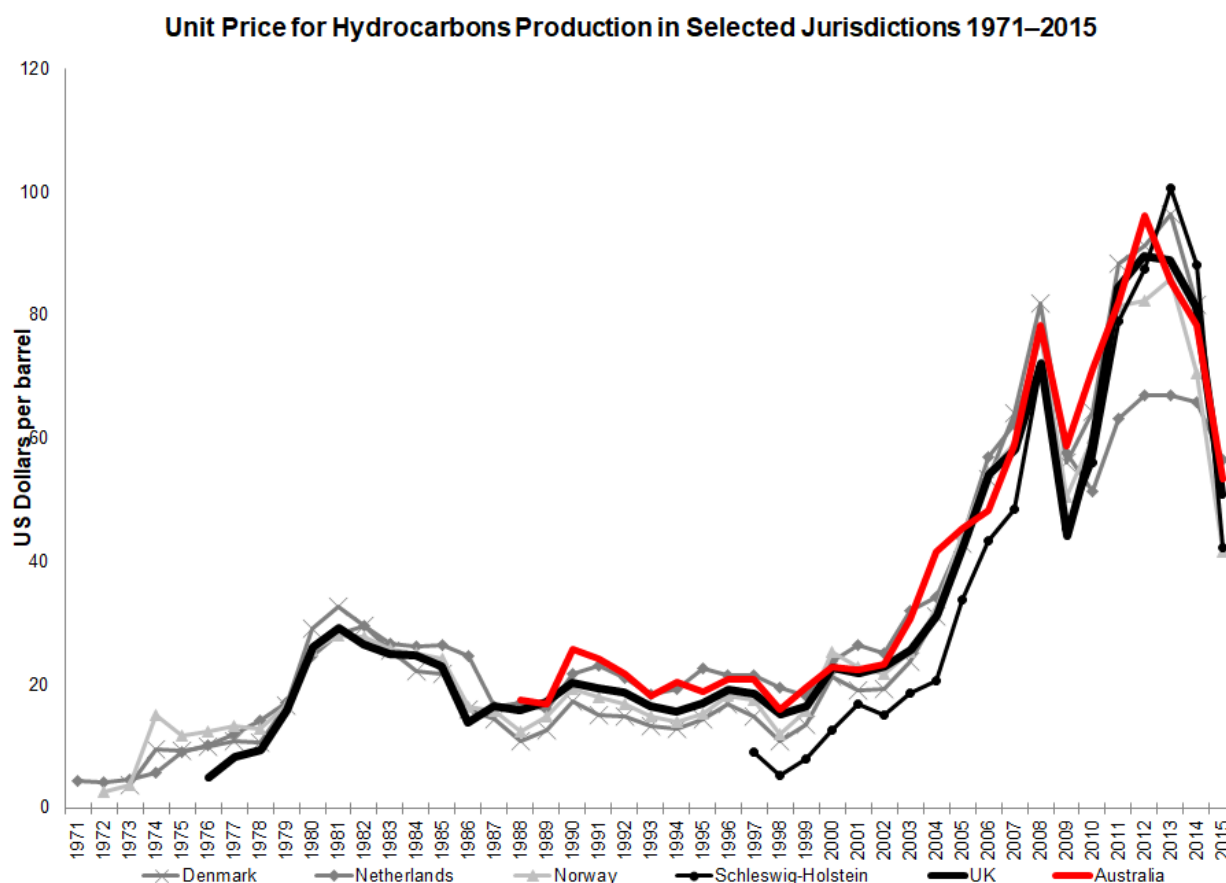
Effective Tax Ratios for Hydrocarbons Production in Selected Jurisdictions, 1965–2015



¹¹ Schleswig-Holstein hydrocarbons production peaked in 2003 at around 60 thousand barrels of oil equivalent per day (KBOED) and is currently running at around 25 KBOED. Australian hydrocarbons production appeared to have reached a peak in 2000 at a level of 1.1 million barrels of oil equivalent per day (MMBOED) but, after having fallen by around 20 KBOED between 2001 and 2006, it recovered subsequently and in 2015-16 reached its highest level yet: 1.3 MMBOED. UK hydrocarbons production peaked in 1999 at 4.7 MMBOED, and in 2015 was running at around 1.63 MMBOED (i.e. twenty-seven times more than Schleswig-Holstein production at its peak).

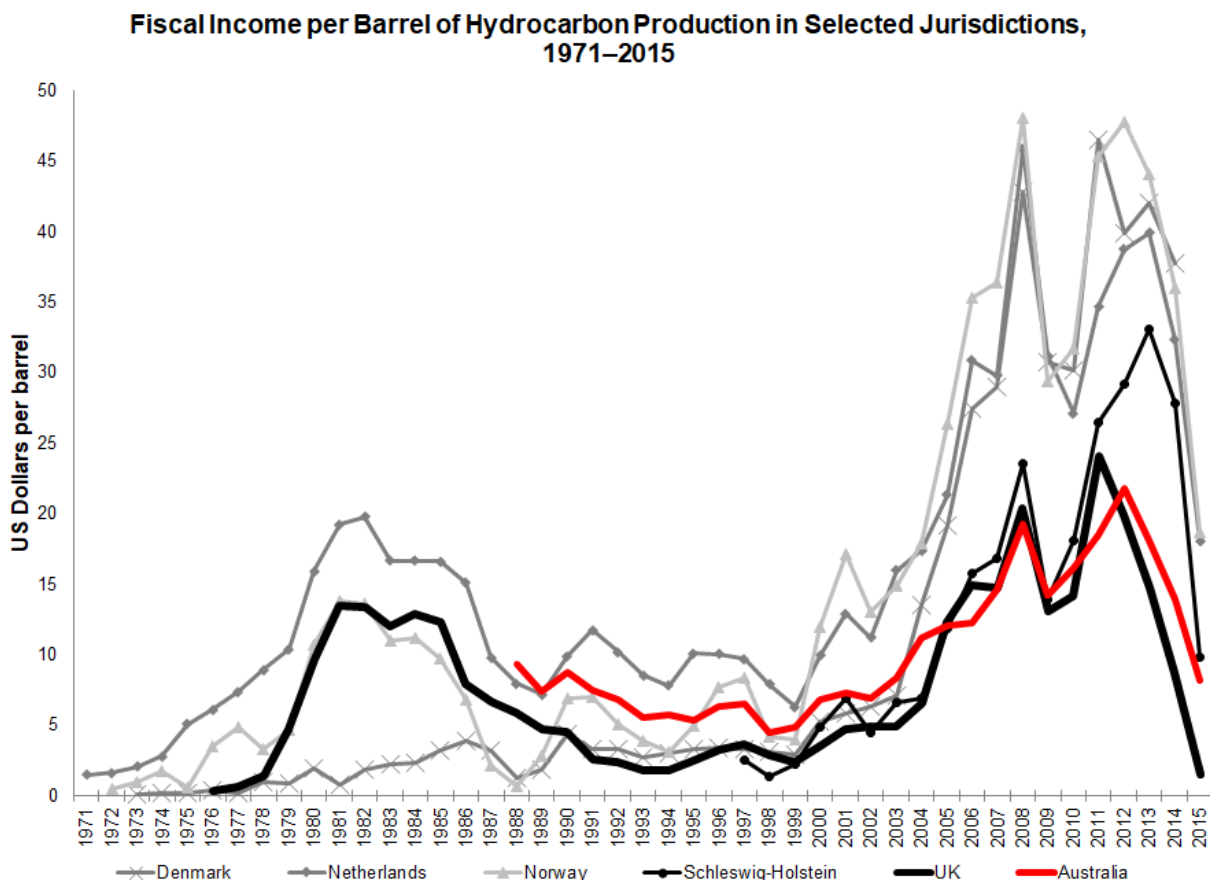
¹² The crude oil has gravity of 22.2° API and a sulphur content of 2.49 per cent.

14. The comparison between the ETR for Schleswig-Holstein, on the one hand, and that for Australia and the UK, on the other, is revealing precisely because it implies that both unit costs and geological prospectivity in Australia and the UK are higher and poorer, respectively, than they are in Germany. Since the exact opposite happens to be true, this suggests that it is warranted to conclude that both the Australian and the UK fiscal regimes for hydrocarbons are much too lax (and have been so for a very long time now).



15. On a per barrel basis, the picture does not look any less dismal from the perspective of the Australian or UK taxpayer. Australian and UK gross income per barrel of hydrocarbons produced (i.e. sales revenue divided by total production) has, through time, been very much comparable to that of the non-UK North Sea

producers (see figure above). However, in terms of the tax contribution per barrel of oil produced, Australia and the UK are in a league of their own compared to the other jurisdictions (as the figure below clearly shows).



16. The laxity of the Australian and UK fiscal regimes is put into an even starker perspective by analysing their fiscal yields against those obtained by producers whose production volumes, unlike those of Schleswig-Holstein, are more in line with those of Australia and the UK. Consider the following: in Australia, during the 2008-2015 period, the total government receipts from taxation on petroleum exploration and production activities came to 55.5 billion US dollars, representing an average ETR of 21 per cent on a gross industry income of 258 billion US

dollars.¹³ If the quantum of gross income generated by upstream oil and gas activities in Australia during these years had attracted the ETRs which oil and gas activities attracted in Denmark and Norway during this same period (49 and 54 per cent, respectively), then the Australian federal government would have received an additional 71 or 84 billion US dollars, respectively, in fiscal income.¹⁴

17. As for the UK, in the eight years going from the outbreak of the global financial crisis to 2015 inclusive, British government receipts from taxation on petroleum exploration and production activities came to 65.6 billion US dollars, representing an average ETR of 20.3 per cent on a gross industry income of 323 billion US dollars.¹⁵ If the quantum of gross income generated in the UKCS oil and gas activities during these years had attracted the ETRs which oil and gas activities attracted in Denmark and Norway during this same period, then the UK would have received an additional 92 or 108 billion US dollars, respectively, in fiscal income. Indeed, over the period beginning in 2002 and ending in 2015, the difference between the hydrocarbons taxes levied by the UK government and the fiscal yield that would have obtained over this same period at an ETR comparable to that of Norway (a country that produced comparable volumes of petroleum from essentially the same geological setting) comes to a staggering 324 billion US dollars.

18. It is not possible to conclude, solely on the basis of the above data alone, that petroleum activities in Australia and the UK could shoulder a fiscal burden identical

¹³ Australian production, gross income and fiscal statistics come from the Australian Petroleum Production & Exploration Association (APPEA) Financial Survey report (available at <https://www.appea.com.au/appea-financial-survey-2015-16/>). The fiscal years of North Sea producers – other than the UK – run concurrently with calendar years, so Australian fiscal data has to be annualised on a calendar basis to make it properly comparable.

¹⁴ As of the time of writing, Danish fiscal income statistics have only been published for the years up to 2014.

¹⁵ Gross income figures from the table “Income from and Expenditure on UK Continental Shelf Exploration Development and Operating Activities” (available at <http://www.gov.uk/guidance/oil-and-gas-uk-field-data>) and Table 11.11 “Government Revenues from UK Oil and Gas Production” from the report *Statistics of Government Revenues from UK Oil and Gas Production* (available at <http://www.gov.uk/government/statistics/government-revenues-from-uk-oil-and-gas-production>). UK fiscal data also has to be annualised on a calendar basis to make it properly comparable to that of other North Sea producers.

to that which they have borne in Norway, say. However, given that Danish hydrocarbons production is much smaller than that of Australia and the UK and that, as a consequence, Danish unit costs are considerably higher, it is difficult to accept that petroleum activities in Australia and the UK could not have withstood taxation at levels comparable to those of Denmark (certainly in recent years). Furthermore, the burden of proof in terms of this particular hypothetical would appear to lie on the side of those who suggest otherwise, not least because among the ETRs of all the hydrocarbons producers shown in the chart, only those of Australia and the UK did not increase over the ascending cycle of oil prices spanning the 2000-2014 period.¹⁶ With the post-2014 price downturn, fiscal receipts have adjusted sharply downwards across the board, but nowhere more so than in Australia and the UK.

19. The economic analysis presented above is conceptually very simple, which might suggest to some that it is not at all suited to the capture the highly complex interactions (both at the financial and the temporal level) between the myriad levers, reliefs and cost deductions that make up the Australian and UK fiscal regimes. That is true to an extent but, by the same token, the comparative dimension to the analysis undeniably reveals the Australian and UK fiscal regimes to be outliers (by a significant margin) when their outcomes are set against those

¹⁶ Exchange rate data come from the OECD's *Monthly Monetary and Financial Statistics* (available at <http://www.oecd.org/std/>). Danish fiscal and output data can be found at section 7 of the annual report *Denmark's Oil and Gas Production and Subsoil Use*, published by the Danish Energy Agency (<http://www.ens.dk/en>), and national accounts data from Statistics Denmark (<http://www.dst.dk/en>). Norwegian production data can be found at the Norwegian Petroleum website maintained by the Norwegian Petroleum Directorate and the Ministry of Petroleum and Energy (<http://www.norskpetroleum.no/en/>) and annual gross oil and gas production as well as fiscal income can be found at Statistics Norway (<https://www.ssb.no>). For The Netherlands, annual petroleum fiscal revenues since the start of production can be found in *Natural Resources and Geothermal Energy in the Netherlands - Annual Review*, and annual gross oil and gas production income in *National Accounts of the Netherlands* at Statistics Netherlands (<http://www.cbs.nl/>). Finally, for Schleswig-Holstein, the annual royalty income and royalty rate is reported in WEG, *Jahresbericht* (<http://www.erdoel-erdgas.de/Medien/Publikationen/Jahresberichte>), production data are reported in the annual *Erdöl und Erdgas in der Bundesrepublik Deutschland* (published by the Landesamt für Bergbau, Energie und Geologie in Hannover, and available at <http://www.lbeg.niedersachsen.de/>) while yearly income tax payments as a percentage of gross income are derived from *BASF A.G. Annual Report*, Supplementary Information on the Oil & Gas Segment (Unaudited) for Wintershall Holding GmbH., available from the year 1997 onwards (<http://www.basf.com/group/corporate/en/investor-relations/news-publications/reports/index>).

of other fiscal regimes which are just as complex and also happen to pursue analogous policy imperatives (notably the desire to prioritise and promote both investment and maximum ultimate recovery, in preference to fiscal income).

20. Whatever public officials might say, the statistics cited in this paper indicated that both the Australian and UK governments have given up on the idea of collecting any resource rents on behalf of the owner of the petroleum resources in their respective jurisdictions, the Crown and Commonwealth. It is this factor which explains the significant differences observable between Australian and UK oil fiscal income, on the one hand, and the fiscal incomes of other producers (Norway and Denmark, say) which, to reiterate, also have very investor friendly fiscal regimes in place. The belief, in the face of statistical evidence derived from official government figures, that the Australian and UK fiscal regimes are not somehow aberrant seems akin to the drunken driver's conviction that it is actually everybody else who is going the wrong way down the motorway.

21. In view of how sharply Australian petroleum fiscal revenues have been declining, it seems entirely reasonable to pose the following question: "[w]ill Australia succeed in becoming the country with the lowest share of government revenue from oil and gas production?"¹⁷ The answer appears to be in the negative, but only because, as mentioned before, the UK fiscal regime is nowadays – astonishingly enough – generating *negative* fiscal receipts: in Fiscal Year 2015-16, for example, PRT receipts amounted to minus 562 million sterling. Thus, the British public can look forward to a future in which the UK North Sea will continue producing quite substantial volumes of oil and gas (north of 1 MMBOED), while the British government – whose finances are under considerable stress – realises a negative (or at best marginal, if prices recover) petroleum fiscal income.

22. However, this answer should come as small consolation to Australians, because mechanisms such as the 150 per cent exploration rebate (introduced by the

¹⁷ ITF note 1 supra: 5.

Howard government in 2004) and the 18 per cent uplift virtually ensure that the PRRT tax base will be obliterated for decades to come.¹⁸ As far back as 2008, the Henry tax review had warned that uplift rates were over-compensating successful investors for the deferral of PRRT deductions.¹⁹ This phenomenon had already been attested in, among other places, Denmark, where tax collections pursuant to the Hydrocarbon Tax (*Kulbrinteskatt*) – a resource rent levy adopted in 1981 and (broadly) patterned after PRT – had amounted to only 1 per cent of cumulative fiscal income. The main culprit behind this result was an investment uplift of 250 per cent (25 per cent annual rate over 10 years).

23. In connection with a broad restructuring of fiscal arrangements in the Danish hydrocarbons sector, undertaken in 2003, the investment uplift for the purposes of calculation of Hydrocarbon Tax obligations was reduced to 30 per cent (6 per cent over five years) from 2004 onwards. This is one of the key reasons why, as can be appreciated in the figure in page 8 of this document, the hydrocarbons ETR in Denmark underwent a remarkable resurgence after 2003, from an average level of 20 per cent for the 1981-2003 period to 47.7 per cent for the 2004-2014 period. If Australia declines to take a leaf out of the Danish fiscal restructuring book, the country seems fated to become the jurisdiction obtaining the second lowest share of government revenue from oil and gas production, just after the UK. This is a silver medal finish that no Australian should desire.

¹⁸ As was pointed out by an article in *The Guardian* (Mikey Slezak, “Oil Companies Skip Main Resources Tax Thanks to Fossil Fuel Search Incentives”, 14 May 2016), an expenditure of one billion dollars on an offshore oil rig would immediately be worth 1.5 billion dollars in credits against any PRRT payments, and would grow to 3.4 billion dollars (deductible against taxable profits) after five years and 41 billion dollars after twenty years (assuming no change to the regime).

¹⁹ *Australia's Future Tax System: Final Report*: C1–2.