In the Bleak Midwinter

How (and How Not) to Tackle the Energy Crisis

By John Macdonald, Emily Fielder and Alex Hughes

BRIEFING PAPER

EXECUTIVE SUMMARY

- Since the Adam Smith Institute published its paper on the cost of living crisis in March 2022, the problems facing households and businesses have been exacerbated by rising inflation and energy bills;
- Whilst the support that the Government has already committed is welcome—as are promises to reverse the National Insurance hike—it is clear that more needs to be done;
- Any support the Government provides should be properly targeted towards those who need it most, whilst avoiding the risks of energy rationing and excessive debt;
- With this in mind, the Government should not freeze energy bills. While the *scale* of intervention is justifiable, the policy itself will destroy price signals, subsidising energy consumption without incentivising reduced demand. With energy supply under immense pressure, this could lead to energy rationing;
- In order to ease the burden of the cost of living crisis on businesses and households, the Government should consider:
    - Continuing to use direct cash transfers to households to help them manage the cost of living in a manner best suited to individual circumstances. This could be done through targeted £350 payments every quarter from now through 2023, alongside a lump-sum energy relief payment on 2021 energy usage;
    - Offering businesses Government-backed loans (based on 2021 energy usage) to help them spread the cost of energy bills. Interest would be set at 1.75% for the first year, rising to 1.75% + CPI inflation afterwards;
    - Uprating benefits in line with inflation immediately, providing relief to lower income households;
    - Bolstering energy supply by doing deals to secure emergency electricity from Norway, and opening discussions with the Dutch to reopen Groningen gas field.

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Earlier this year, the Adam Smith Institute released '*Pulling Out All the Stops: How the Government can Go for Growth and Cut the Cost of Living*'. This paper called for the adoption of policies that would help manage the cost of living crisis. Some of those policies, such as targeted direct cash transfers (as first proposed by the Social Market Foundation[1]) have been implemented. The UK's new Prime Minister, Liz Truss, has committed to reverse the Health and Social Care Levy addition to National Insurance Contributions. Longer term pledges to look at increasing domestic energy supply through fracking and investment in nuclear are also welcome.

However, the problems facing households and businesses in the UK have been since been exacerbated by inflation and rising energy costs. In March 2022, when *Pulling Out All the Stops* was released, inflation was at 7%. It is now at 10.1%.[2] The energy price cap for households was at £1,277. It will now rise to £3,549 from the 1st October 2022.[3] Data from the Federation of Small Businesses shows that firms have experienced a 424% rise in gas costs and a 349% increase in the cost of electricity since February 2021.[4]

It is clear that more can be done. The Prime Minister has set out her strategy for addressing the cost of living and energy crisis, committing to do so primarily through tax cuts and relief on energy bills. However, unless properly targeted, this approach could be inefficient and risk applying even greater pressure to squeezed energy supplies, pushing the UK towards energy rationing at great taxpayer expense.

A combined approach of immediate, targeted support through cash transfers and the benefits system, combined with tax cuts designed to allow people to keep more of their own money, is the best way to ensure households get the help they need over the coming months. An extensive Government loan scheme would help viable businesses spread the cost of energy bills, helping prevent the economic scarring that would take place should they not be able to meet them.

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1 Aveek Bhattacharya, 'A 'cost-of-living bonus'? The case for direct cash payments to help squeezed households', 2022: https://www.smf.co.uk/commentary_podcasts/a-cost-of-living-bonus/

2 ONS, 'Consumer price inflation, UK: July 2022': https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/july2022

3 MoneySavingExpert, 'What is the energy price cap?', 2022: https://www.moneysavingexpert.com/utilities/what-is-the-energy-price-cap/

4 The Guardian, 'Small businesses warn they may not survive winter due to UK energy bills', August 2022: https://www.theguardian.com/business/2022/aug/25/sleepless-nights-business-owners-energy-bills-quadruple

Freeze energy bills

In 2021, the UK imported 560,831 GWh of gas; more than seven times the amount it exported. 58% of this is via Norwegian pipelines.[5] The UK has now effectively cut off Russian energy imports, leaving it to compete for Norwegian supply. It also competes for supply with the rest of Europe.[6] In short, if demand is high in Europe, competition for Norwegian energy will increase. The effect on price will be compounded by Norway's hydro-electric power generation problems following a dry summer, and France having both nuclear fleet problems and strong demand.[7]

Ordinarily this price signalling is a natural function of a competitive global energy market, but this has become distorted given the variety of large-scale government interventions seen in recent months. For example, France has pursued a cap on household energy bills, which has just been extended until next year.[8] Given that the price signal to reduce consumption has been severely hampered in France, the adverse supply pressure on non-capped markets is greater than it would otherwise be. The French Government is now pursuing a national campaign to encourage citizens to reduce their energy consumption, setting the context for Emmanuel Macron's 'end of abundance' comment in the face of energy rationing and potential blackouts.

Household bills

Freezing household energy bills would be a huge intervention, costing around £19 billion to do so until January alone.To extend this to 18 months would cost up to £130 billion.[9] While the Government can still borrow relatively cheaply to cover this kind of expenditure, it is an enormous subsidy not just for high energy consumption, but also for the Russian government's finances.

As Benjamin Moll, Professor of Economics at LSE, told the ASI: "prices increasing is a good thing. Why? Because there's a scarce resource – gas, or electricity – and we need to allocate it." In a recent paper, he wrote that while "it is absolutely crucial to support households, especially economically weaker ones, in the face of rising gas prices…this should be done by means of transfers that are not directly tied to gas consumption and that preserve incentives for reducing gas demand."[10]

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5 edie, 'In Numbers: The UK's Natural Gas Predicament', 2022: https://www.edie.net/in-numbers-the-uks-natural-gas-predicament/

6 House of Commons Library, 'Imports of energy from Russia'. August 2022: https://researchbriefings.files.parliament.uk/documents/CBP-9523/CBP-9523.pdf

7 Energy Live News, ''Will the cut in Norwegian interconnector flows bring more energy misery to UK?'', August 2022: https://www.energylivenews.com/2022/08/08/will-the-cut-in-norwegian-interconnector-flows-bring-more-energy-misery-to-uk/

8 New York Times, 'As Russia Chokes Europe's Gas, France Enters Era of Energy 'Sobriety'', 2022: https://www.nytimes.com/2022/09/05/business/russia-gas-europe-france.html

9 Bloomberg, 'Truss Plans £40 Billion Energy-Aid Package for UK Businesses', 2022: https://www.bloomberg.com/news/articles/2022-09-06/truss-plans-40-billion-energy-aid-package-for-uk-businesses

10 London School of Economics and Political Science, 'Focusing on gas storage levels distracts from what really matters: using less gas', 2022: https://benjaminmoll.com/storage/

Put bluntly, freezing household bills creates an artificial price signal for end users, who then have little incentive to adjust their consumption. This puts the public at more risk from outright shortages, pushing the nation closer to energy rationing and even blackouts. As discussed below, there are alternative approaches that are more efficient and would deliver the same level of assistance to households.

Business bills

There are reports that the PM is considering freezing energy bills for businesses as well, at a cost of an additional £40bn.[11] This would be a further subsidy for energy consumption. In France, where the same policy has already been implemented, businesses will now be forced to cut their energy use by 10% or face enforced rationing. Rationing energy use would likely result in restricted trading hours, which could severely damage the economy.

The bottom line on price freezes

Higher prices will only lead to a reduction in energy consumption if the price signal gets through to firms and households. It is crucial that households are supported, but support should come in the form of cash transfers that preserve the incentives for reducing gas demand.

Cut business rates

Business rates are a tax on non-domestic properties which are paid for by the occupier of the property. However, the tax incidence of business rates falls on the owner of the property, rather than the business renting it. When business rates are cut, property owners raise rent in relation to that cut.[12] According to a 2008 report by Cambridge Econometrics, 'the main conclusion is that 100% of the benefits [from business rate relief] are passed into rents and therefore accrue to landlords.'[13] This is because the rental value of property is determined by demand, chiefly due to a fixed supply of land and the UK's restrictive planning system.[14]

While it may take, on average, between 2 and 3 years for the value of business rates to be factored into rents[15], this is nonetheless an inefficient way of providing support to businesses, with individual firms having little certainty on how quickly their rents will rise in adjustment.

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11 Bloomberg, 'Truss Plans £40 Billion Energy-Aid Package for UK Businesses', 2022: https://www.bloomberg.com/news/articles/2022-09-06/truss-plans-40-billion-energy-aid-package-for-uk-businesses

12 Adam Smith Institute, 'Business rates are a tax on landlords, not on businesses', March 2016: https://www.adamsmith.org/blog/economics/business-rates-are-a-tax-on-landlords-not-on-businesses

13 Cambridge Econometrics, 'The Relationship between National Non-Domestic Rates and Rents on Commercial Property: Empirical Evidence from Enterprise Zones', February 2008: https://webarchive.nationalarchives.gov.uk/ukgwa/20080727055859/http://www.hmrc.gov.uk/research/report42.pdf

14 IFS, 'Submission to Treasury Committee inquiry: The impact of business rates on business', May 2019: https://ifs.org.uk/publications/submission-treasury-committee-inquiry-impact-business-rates-business

15 Adam Smith Institute, 'Business rates are a tax on landlords, not on businesses', March 2016: https://www.adamsmith.org/blog/economics/business-rates-are-a-tax-on-landlords-not-on-businesses

Subsidise energy consumption via a VAT cut on bills

Another option would be to reduce energy bills through a VAT cut or even temporary VAT holiday. While less distortive of the price signal than a complete freeze on prices, it would still act in the same way, effectively subsidising energy consumption. Once again, cash transfers to households and business loans could provide an equal level of support without the perverse effect on energy consumption.

A 5% cut on all VAT

One possible lever that has been touted is a 'nuclear' cut to VAT by 5 percentage points. However, this is likely to be of considerable cost to the Treasury, whilst failing to suitably target those in most need of Government help.

VAT is a fairly well designed and efficient tax. In the current context it should not be used as a lever nor should even more carve outs be made. Cutting it by 5 percentage points would cost roughly £3.2bn a month and £38bn over a year.[16] Directly, the effect would be to reduce inflation 'mechanically', by lowering the final price consumers pay for a given basket. Indirectly, it would put upward pressure on inflation by 'leaning against' the Bank of England's intended path of monetary tightening.[17] Overall, the magnitude is likely to be relatively small, and therefore of little relevance.

Of greater relevance is the fact that the forgone revenue would not be targeted at poorer households, and will be more of a tax cut for those with greater discretionary spending power. Moreover, most food and drink is exempt from VAT[18] so cutting this tax will do little to lower the cost of basic items that households need to get through the winter.

Cut fuel duty

Equally, extending the 5p cut in fuel duty, which is due to expire in March 2022[19] is poorly targeted. Government data shows that 40% of the poorest households do not own a car.[20] The result is that the top fifth of households spend almost as much as five times on motor fuel each year as the bottom fifth.[21]

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16 Telegraph, 'Truss Considers Nuclear Option of Five Per Cent VAT Cut', 2022: https://www.telegraph.co.uk/politics/2022/08/27/liz-truss-considers-nuclear-option-five-per-cent-vat-cut/

17 Rishi Sunak's claim that a year-long VAT cut of 5 percentage points would cost the treasury £39bn implies, all else equal, a 1.8% rise in the UK's debt/GDP ratio. The additional borrowing would exert upward pressure on the neutral interest rate, i.e. the rate consistent with stable inflation, via its effect on demand. Simplifying a little and taking an upper-bound of the estimates provided by Rachel and Summers (2019, p. 23), who find a rise in the neutral interest rate of approximately 2-4 basis points per 1% rise in the debt/GDP ratio, the implication is that the Bank of England would have to raise its inflation-adjusted policy rate by 7.2 basis points more than it would have in the absence of the VAT cut, to maintain its intended path of monetary tightening. For comparison, the Bank raised its policy rate by 50 basis points on August 3, and currently, interest rate derivative prices imply a market expectation of a further 225 basis point increase before the policy rate is expected to peak in May 2023.

18 Gov.uk, 'VAT rates on different goods and services', 2022: https://www.gov.uk/guidance/rates-of-vat-on-different-goods-and-services

19 Gov.uk, 'Temporary cut to fuel duty', 2022: https://tinyurl.com/yt2jm6dc

20 Gov.uk, 'Travel by vehicle availability, income, ethnic group, household type, mobility status and NS-SEC', 2022: https://www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access

21 Guardian, 'Fuel price cuts in the UK will largely benefit the SUV-driving elite', 2022: https://www.theguardian.com/commentisfree/2022/mar/22/fuel-price-cuts-uk-suv-driving-elite-rishi-sunak

Furthermore, over the period of May-July 2022, concerns were raised that the 5p cut was not being passed onto consumers.[22] Although fuel prices are now beginning to fall again as of August,[23] this appears to be primarily a reflection of falling crude oil prices, which RAC FuelWatch states is a dominant factor in setting fuel prices.[24]

WHAT TO DO

Start on-shore drilling as soon as possible

It is welcome news that the Government is seeking to end the moratorium on fracking. The global energy market is unlikely to fully stabilise in the short term and it is in the national interest to boost supply as quickly as possible. Shale gas might present the most viable option to do so. In 2020, a Warwick Business School study suggested that UK production of shale gas could meet between 17 and 22 per cent of UK cumulative consumption between 2020 and 2050[25]. While it isn't yet clear how fracking would affect wholesale market prices, having a domestic supply can increase resilience to future supply shocks. Companies looking to begin on-shore drilling should be encouraged to provide residents near the site with financial compensation.

Pursue a deal with Norway to ensure electricity interconnectors remain open during periods of exceptionally tight margins

The North Sea Link is the first electricity interconnector between Norway and the UK, intended to drive down wholesale electricity prices. However, at the end of 2021 the Norwegian Government decided to cancel a proposed follow up project, a 1,400 MW interconnector, given domestic political pressure surrounding Norwegian fuel prices. They have also considered rationing electricity exports after hydro dam production dropped after a dry summer.[26] The UK should seek to ensure that the North Sea Link remains open and that a deal is made to secure emergency supplies.

22 ITV News, 'Petrol and diesel giants accused of not passing on full 5p fuel duty cut to motorists', 2022: https://www.itv.com/news/2022-05-17/retailers-accused-of-not-passing-on-full-5p-fuel-duty-cut-to-motorists

23 Express, 'Relief for UK drivers as petrol prices drop below 175p a litre with further cuts expected', 2022: https://www.express.co.uk/life-style/cars/1654399/petrol-diesel-average-prices-175p-litre-falling-costs-aa-forecast

24 Parkers, ' UK fuel prices: Motorists still overcharged', 2022: https://www.parkers.co.uk/car-news/uk-petrol-prices/

25 LSE, 'How much shale gas is there in the UK and what is the status of fracking?', 2022: https://www.lse.ac.uk/granthaminstitute/explainers/what-potential-reserves-of-shale-gas-are-there-in-the-uk/

26 The Telegraph, 'Norway threatens to ration electricity in fresh blow for UK and European energy supplies', August 2022: https://www.telegraph.co.uk/business/2022/08/08/ftse-100-markets-live-news-inflation-interest-cost-living/

Open discussions with the Dutch to reopen Groningen gas field

Up until 2018, the Dutch pumped 50 billion cubic metres of gas annually, mostly from their Groningen gasfield: the largest in the EU.[27] This is as much natural gas as was flowing through the Nord Stream pipelines until they were recently taken offline due to 'maintenance work', and could provide Europe with a much needed alternative. Groningen was shut down in 2018 due to lack of effective repair work and lack of compensation for locals. Britain and EU partners should engage the Dutch Government with an investment plan, seeking to reopen the field for production and export as soon as possible.[28]

Extend cash payments

As we argued in *Pulling Out All the Stops*, targeted cash transfers, which offer households flexibility in deciding how to use the funds to best suit their own needs, are preferable to more complicated rebate methods.

The Government has already adopted targeted cash transfers to support the least well off households, alongside a host of other measures including a discount on energy bills. This has been done via two tranches; one £326 payment was rolled out in July, and a second £324 payment is due in winter.[29] However, given that prices are forecast to rise higher than they were when this support was initially announced, this will not sufficiently shield those most in need from energy price hikes.

In May, when the support was announced, Ofgem were planning to raise the energy price cap to £1,971 for the average household.[30] Ofgem's October price cap will instead increase to £3,549.[31] Quarterly cash transfers of £350 over the next year under the same targeting scheme could be therefore justified. This would represent an extension of a current policy, as opposed to a new form of cash 'handout'.

Allocate lump sum energy relief based on last year's consumption

An optimal policy response would allow prices to rise while providing households with support proportionate to their needs. Subsidising energy consumption could lead to rationing, a situation in which politicians ultimately decide who has their energy turned on, and when.

Tying the amount of relief a given household or business receives to its *current* energy consumption reduces the incentive to cut down. Instead, relief should be

27 Financial Times, 'Letter: Dutch PM is wrong not to restart Groningen gasfield', 2022: https://www.ft.com/content/3c65fa73-47ea-4658-96d5-6acf4fd2fef4

28 Adam Smith Institute, ''Business Rates Are A Tax On Landlords, Not On Businesses', 2016: https://www.adamsmith.org/blog/economics/business-rates-are-a-tax-on-landlords-not-on-businesses

29 Gov.uk, 'Millions of most vulnerable households will receive £1,200 of help with cost of living', May 2022: https://www.gov.uk/government/news/millions-of-most-vulnerable-households-will-receive-1200-of-help-with-cost-of-living

30 FT, 'Sunak prepares new support package for UK households', May 2022: https://www.ft.com/content/23190e26-1732-4b48-a231-7c82082f0513

31 Ofgem, 'Ofgem updates price cap level and tightens up rules on suppliers', August 2022: https://www.ofgem.gov.uk/publications/ofgem-updates-price-cap-level-and-tightens-rules-suppliers/

proportional to the recipient's level of energy consumption in the previous year, before Russia's invasion of Ukraine sent prices soaring.[32] We propose a 75% coverage of rises for those eligible for the £350 cash transfer, 50% for households with a higher income taxpayer.

In the face of this year's surging energy prices, consumers could then choose how much they're willing to reduce their energy consumption, and be compensated for doing so, by being able to spend their relief payment elsewhere. Meanwhile those who, for whatever reason, value their current usage enough to maintain it will be forced to demonstrate that preference by paying the price that reflects the underlying scarcity, while at the same time the negative shock to their overall income can be greatly reduced.

Offer extensive Government-backed business loans

The Government should provide 100%-backed loans to businesses struggling to meet monthly energy payments, in partnership with banks, such that only businesses assessed to be creditworthy are eligible, to reduce the amount of fraud and support for non-viable businesses seen with Covid loan schemes. Unlike Covid loan schemes, repayments should incur a 1.7% interest rate for the first year, rising to 1.7% + CPI inflation thereafter. This is to preserve energy price signals: an interest free loan would likely encourage businesses to maintain, rather than reduce energy use. The loan amount should be based on the difference between current energy bills and those paid through 2021.

Supporting creditworthy businesses struggling to make monthly repayments via Government backed loans must be paired with efforts to bolster energy supply. Its ability to reduce economic scarring is relative to prices: the longer prices remain high, the greater the amount the Government must loan out and the greater the repayment cost for business.

Uprate benefits to inflation immediately

In April 2022, benefits were uprated using inflation figures from September 2021 (3.1%).[33] Recipients of benefits have therefore already seen a real-terms fall in their income, as CPI inflation stood at 9% by the time they were uprated,[34] and has since risen further to 10.1% in July.[35]

The next planned uprating is due in April 2023 and this will use inflation figures from September 2022. This leaves several months in which benefit income fails to keep pace with inflation.[36] The Government should therefore consider an emer-

32 Bachmann, Rüdiger et al, 'How It Can Be Done: ECONtribute Policy Brief No. 034', 2022: https://www.econtribute.de/RePEc/ajk/ajkpbs/ECONtribute_PB_034_2022_EN.pdf

33 House of Commons Library, 'Rising cost of living in the UK', 2022: https://researchbriefings.files.parliament.uk/documents/CBP-9428/CBP-9428.pdf

34 Office for National Statistics, 'Consumer Price Inflation, UK: April 2022',: https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/april2022

35 Office for National Statistics, 'Consumer Price Inflation: July 2022': https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/july2022

36 House of Commons Library, 'Rising cost of living in the UK', 2022: https://researchbriefings.files.parliament.uk/documents/CBP-9428/CBP-9428.pdf gency uprating of benefits in line with the most recent inflation figures as soon as possible.

Eliminate fiscal drag by unfreezing income tax thresholds, starting with the personal allowance

At present, both the personal allowance and the higher rate threshold of income tax are frozen until April 2026. A refusal to index thresholds in line with inflation effectively drags more and more people into higher tax brackets via fiscal drag, increasing the tax burden under the guise of doing nothing. These freezes are forecast to raise an estimated £2.9 billion in 2022/23 for the Treasury, which will rise to £19 billion in 2025/26.[37]

Furthermore, the freeze in personal allowance may mean that, in 2022/23, 0.6 million more people will pay income tax, whilst 0.4 million may be brought into the higher rate of income tax.[38]

At the very least, the Government should index the personal allowance to inflation, in order to take those on the minimum wage out of income tax.[39]

Remove sin taxes

As highlighted in *Pulling Out All the Stops*, the costs from 'sin taxes,' excise taxes on goods such as fast food and sugar, are passed to consumers in such a way that disproportionately places the burden on lower-income households.

According to a report by the Food and Drink Federation (FDF) which analyses the economic impact of 7 Government policies in this area, including the Soft Drinks Industry Levy, the advertising bans, and the price and location restrictions on promotions of food deemed to be high in fat, salt or sugar (HFSS), the combined cost on the food and drink sector will be £8.3bn.[40] Due to the increasing shrinkage of profit margins, exacerbated by rising energy prices and the fact that the FAO Food Price index is 7.9% above its value last year[41], it is likely that some of these costs will be passed on to consumers. The FDF report found that, assuming there is an equal division amongst households, this will result in the cost of food and drink increasing by £160 per year, an increase of 11% for the poorest households.[42]

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37 Ibid.

38 House of Commons Library, 'Rising cost of living in the UK', 2022: https://researchbriefings.files.parliament.uk/documents/CBP-9428/CBP-9428.pdf

39 Adam Smith Institute, 'Pulling Out All The Stops: How The Government Can Go For Growth And Cut The Cost Of Living', 2022:
https://www.adamsmith.org/research/pulling-out-all-the-stops-how-the-government-can-go-for-growth-and-cut-the-cost-of-living

40 Food and Drink Federation, 'Eating Into Household Budgets: The Government's Recipe for Food Price Inflation', 2021: https://www.fdf.org.uk/globalassets/resources/publications/reports/eating-into-household-budgets-report.pdf

41 Food and Agricultural Organization of the United Nations, 'World Food Situation', 2022: https://www.fao.org/worldfoodsituation/foodpricesindex/en/

42 Food and Drink Federation, 'Eating Into Household Budgets: The Government's Recipe for Food Price Inflation', 2021: https://www.fdf.org.uk/globalassets/resources/publications/reports/eating-into-household-budgets-report.pdf

With this in mind, the Government should remove these distortionary taxes, which are unnecessarily punitive for lower-income households and have questionable effects on reducing consumption.[43]

CONCLUSION

As is abundantly clear, the incoming Truss Government has an enormous and complex challenge in addressing the cost of living and energy crisis. It must immediately seek to bolster both the UK's domestic supply and links with reliable partners. The stakes are incredibly high: pursue the wrong policy and the country could drive itself further into debt whilst failing to avoid energy rationing this winter. Direct cash transfers, energy relief based on previous consumption, updated income tax thresholds and uprated benefits are not only the most effective ways of getting support to the households that need it most, they are also the least economically damaging means of doing so.

43 Adam Smith Institute, 'The Wages of Sin Taxes: The True Cost of Taxing Alcohol, Tobacco and Other "Vices"', 2012: https://www.google.com/amp/s/www.adamsmith.org/blog/tax-spending/the-wages-of-sin-taxes-the-true-cost-of-taxing-alcohol-tobacco-and-other-vices%3Fformat%3Damp