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About us

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He is author of 'Popular Morality and the Black Market in Britain, 1939-55' in *Food and Conflict in Europe in the Age of the Two World Wars* (Basingstoke, 2006) edited by Frank Trentmann and Flemming Just and is working on his first book *Black Market Morality* examining evasion of price control and rationing during the 1940s. This memorandum draws upon this work. He is also the author of 'Rationing returns: a solution to global warming?' published on the *History & Policy* website, available at <http://www.historyandpolicy.org/archive/policy-paper-54.html>, and 'Carbon Copies?' published in *History Today* (July 2007), available at <http://www.historytoday.com/MainArticle.aspx?m=32210&amid=30248854>.

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Summary

- Politicians from all parties acknowledge the need to reduce consumption of energy from fossil fuels if carbon emissions are to be cut.
- There are two policy instruments available to politicians: carbon taxes and carbon rationing.
- Carbon taxes are currently the frontrunner, although doubts have been expressed about their efficacy and equity.
- Personal carbon allowances have been proposed as an alternative to taxation by the Green Party and independent experts, and were recently floated by the former Environment Secretary David Miliband.
- Personal carbon allowances are carbon rationing by another name; in assessing their feasibility, it makes sense to consider the British experience of rationing during the 1940s and 1950s
- In 1939 and 1940 the government rejected proposals to rely upon increased taxation to cut consumption because the impact of tax rises would be inequitable and slow.
- The government introduced rationing instead as it was the best way to cut consumption quickly and ensure that reduced supplies were shared out equitably.
- Policymakers rejected tradable rations, a feature of current carbon rationing proposals, fearing they would undermine the moral basis of rationing, encourage coupon fraud and feed inflation, thereby negating the socially progressive aspects of tradable rations.
- The public accepted that rationing was a temporary but necessary measure due to persuasive economic arguments, underlying trust in central government, and positive memories of rationing during the First World War.
- To introduce a successful carbon rationing scheme, the experience of World War II indicates that the government must convince the public that rationing levels are fair; that the system is administered transparently and fairly; and that evaders are few in number, likely to be detected and liable to stiff penalties if found guilty.



1 Introduction: a historical perspective on personal carbon trading (PCT)

1.1 PCT is one of a range of proposed policy instruments for reducing domestic carbon emissions. There are several variants of PCT, but they share the following characteristics:

- a. The government determines the level of greenhouse gas emissions from energy use they will permit during a fixed period ('the ration period')
- b. The government allocates emissions rights to final consumers of fuel and electricity as 'carbon units'
- c. Final consumers surrender carbon units when they pay for their fuel and electricity
- d. Final consumers can buy or sell surplus carbon units from one another.
- e. Retailers pass these carbon units back up the supply chain to a small number of energy suppliers.

1.2 PCT is points rationing of carbon emissions by another name. As such it bears close comparison with points rationing of clothes and food during the 1940s. The PCT schemes currently proposed differ from wartime points rationing schemes on two important issues:

- a. Transfer of units: consumers can gift or trade their surplus carbon units, unlike during the 1940s and 50s when members of a household could pool their points, but were not permitted to transfer surplus points to people outside the household.
- b. Ration entitlements: only adults will receive carbon units and they will all receive the same number of units whereas all consumers received points with a small number of groups receiving additional points.

1.3 The idea of carbon rationing is not new:

- a. The environmentalist Mayer Hillman first put forward the idea in 1991 while head of the Policy Studies Institute's environmental group.
- b. Several variations have been proposed over the past fifteen years.
- c. But proponents have drawn only superficial lessons from history.

1.4 The wartime Coalition government considered and rejected proposals for tradeable rations and flat rations. Looking at the reasoning behind these decisions and the experience of rationing, casts light on the following questions:

- a. When should rationing be used?
- b. What type of ration should be used?
- c. Should rations be tradeable?
- d. Should individual allocations be fixed or variable?
- e. How best to make the case for rationing?

2 Alternative Models and their likely impact

2.1 Taxation vs. rationing

2.1.1 The current debate about the relative merits of 'green taxes' and PCT mirrors the debate about motoring taxes and petrol rationing during the Second World War. The government needed to rapidly reduce civilian consumption of motor fuel to economise on shipping space and maximise the amount of motor fuel going to the Armed Forces.

2.1.2 John Maynard Keynes and others suggested that the government could use the tax system to change civilian motorists' behaviour instead of rationing petrol. They wanted to



make motoring more costly by raising the duty on petrol, and the cost of motor vehicle and driving licences.

2.1.3 The government opted for petrol rationing. Increasing the cost of driving and vehicle licences was too crude a policy instrument as all drivers bought these licences regardless of their contribution to the war effort. Increasing licence fees would have taken too long to change behaviour as drivers bought their licences annually. Although increasing petrol tax and motoring taxes would make motoring more expensive and perhaps lead to a reduction in private motoring, it would have been inflationary and socially regressive. Rationing allowed the government to ensure supplies of controlled goods reached the groups who needed them at a reasonable price.

2.1.4 Conclusion: rationing is the best way to effect a very rapid change in consumption of a particular commodity in a crisis.

2.2 Specific vs. group rationing

2.2.1 During the 1940s economists classified rationing schemes into one of three types:

- specific rationing of an individual commodity such as petrol
- group rationing of related goods such as clothing and footwear using points
- general rationing of purchasing power

The British government operated a mixture of specific and group rationing schemes, but did not introduce a general rationing scheme. The government used the tax system to limit consumer expenditure.

2.2.2 Group rationing of related goods using points was a wartime innovation. Government economists persuaded the Board of Trade to points ration clothing and footwear in June 1941. They argued that points rationing

- allowed the government to control aggregate consumption
- allowed the government to balance demand and supply by varying the points value of individual goods within the scheme
- was cheaper and easier to administer than several specific rationing schemes
- preserved a degree of consumer choice within a group of products

2.2.3 The scheme proved so successful that the Ministry of Food introduced points rationing of some foods later that year. Reflecting on their wartime experience of government service, academic economists felt that the introduction of points rationing was one of their greatest successes and recommended that future policymakers opt for points rationing above specific rationing, although it was only feasible for products whose supply could be guaranteed.

2.2.4 Conclusion: group rationing of related commodities such as fuel and electricity is cheaper, simpler and less restrictive than rationing fuel and electricity individually.

2.3 Inconvertible vs. convertible rationing

2.3.1 Tradeable rations were not a feature of wartime rationing schemes. Members of a household could pool ration coupons, but they were not permitted to give them or sell them to people outside of their household.



2.3.2 A black market in surplus points emerged, which brought previously law-abiding citizens into conflict with the law and proved hard to stop. Consumers felt morally justified in using their ration entitlement as they saw fit and did not consider that gifting or trading surplus points deprived others of their ration. Law enforcement agencies found it impossible to police the law effectively, bringing the law into contempt.

2.3.3 It is important to note that black markets never realised their full potential. Many consumers possessing the means and motives to evade rationing regulations did not do so when they had the opportunity. High levels of compliance have often been attributed to patriotism and respect for the law, but support for rationing remained high once the war had ended.

2.3.4 Contemporary critics pointed out that the government could have prevented the emergence of black market by allowing consumers to freely exchange surplus points. They also argued that a legal market in surplus points would be socially progressive as working-class consumers could sell surplus points to wealthier middle-class consumers.

2.3.5 The government rejected the arguments for tradeable rations, because policymakers felt that:

- a. the trade would undermine the moral principle of equality of sacrifice as wealthier consumers would not have to make substantial changes to their lifestyle
- b. the redistributive effect of trading in rations which might offset this was an illusion because the cost of goods would increase to match increased demand

2.3.6 Conclusions: a black market is an inevitable by-product of a non-tradeable rationing system. Tradeable rations avoid criminalising large number of consumers but could undermine the principle of equality of sacrifice and the socially progressive effects of trading may be negligible.

2.4 Who should participate?

2.4.1 The architects of the wartime rationing schemes did not limit rations to adult consumers nor did they grant all consumers the same ration entitlement. Popular notions of distributive justice did not accord with the idea of a one size fits all 'fair share'.

2.4.2 Policymakers tried to strike a balance between political necessity and administrative efficiency by limiting the number of groups receiving supplementary rations. Clearly identifiable groups such as vegetarians, Jews, young children and expectant mothers received extra food supplies. Public sympathy for their plight or the existence of a vociferous political lobby helped a group's case.

2.4.3 Of particular interest, are the two groups of private motorists who received a supplementary ration of petrol:

- a. motorists in rural areas received enough extra to permit a weekly shopping trip and a weekly trip to church
- b. motorists who used their private vehicles for business purposes, such as clergymen, family doctors and vets



2.4.4 The ration scale for the planned fuel rationing scheme covering coal, gas and electricity differs from PCT schemes too. Sir William Beveridge, who drew up the scheme in 1942, intended all civilians, young and old, to receive a personal fuel ration. Supplementary rations would be issued to the following groups:

- a. People over the age of 65
- b. The long-term sick or disabled

2.4.5 Beveridge also planned to vary fuel rations according to where a consumer lived. He assumed that the further north consumers lived the more fuel they would need to heat their homes. Not taking this into account would have penalised people for living in northern Britain. Beveridge divided the country into three climatic zones:

- a. Scotland and Northern England
- b. Wales and the Midlands
- c. London and Southern England

The further south you went the smaller the fuel ration you received. The public acceptability of the scheme was never tested because of determined resistance from Conservative backbench MPs and mine owners.

2.4.6 Conclusion: while a universal flat-rate ration is easy to administer, it conflicts with popular notions of fairness. Rationing schemes have to balance administrative simplicity and public pressure to grant exceptions.

3 Public acceptability

3.1 The Minister of Food Lord Woolton understood that popular support for food rationing depended upon the public feeling that ration levels were fair and that rationing was administered fairly. He referred to this as ‘fair shares and fair play’. Today, political philosophers would talk about distributive justice and procedural justice.

3.2 Many civilians did not appreciate the economic case for rationing, but trusted the government’s judgement enough to give rationing their support. They supported rationing because:

- a. it had worked so effectively during the First World War
- b. it was a temporary emergency measure

Public support was wide and shallow as it did not rest upon a full understanding of the economic need for rationing.

3.3 Given the provisional nature of public support for rationing, it was crucial that it worked smoothly. In addition to fair shares policies, administrators had to ensure that:

- a. appeals and complaints were handled quickly, efficiently and equitably
- b. rations were always honoured, with everyone able to obtain their full share when they wanted.

3.4 Enforcement was very important. Evaders had to be detected and punished swiftly and publicly. The authorities understood that support for control could be undermined if the public thought significant numbers of people avoided or evaded the regulations with impunity.



3.5 Policing methods and sentencing had to be proportional. The use of undercover policing tactics to detect minor offences and harsh sentences for ‘technical’ offences threatened to undermine support for food rationing between 1942 and 1944.

3.6 Conclusion: given contingent consent for rationing, ensuring procedural justice is as important as ensuring that ration levels are in accord with popular notions of distributive justice.

4 General conclusions

4.1 Historical perspectives on the desirability of PCT

- Rationing is an effective policy instrument for swiftly reducing personal consumption in times of crisis.
- PCT, or carbon rationing, would dramatically cut domestic energy consumption.
- Taxation would work more slowly and its effects on consumer behaviour are harder to predict and control.

4.2 Historical perspectives on operational feasibility

4.2.1 Feasibility of a rationing system

- Wartime and post-war governments rationed the British people with great success using paper-based technologies; today, the technological challenges would be far greater.
- Rationing depends on a national identity scheme to establish people’s entitlement; one of the biggest challenges for PCT would be the civil liberties issues raised, rather than implementing the scheme itself.

4.2.2 Feasibility of PCT

- The British experience of points rationing of food and clothing shows that this is preferable to rationing individual commodities.
- Allowing consumers to gift or trade surplus carbon units would prevent the emergence of a black market in spare carbon units.
- However, tradeable rations could undermine the principle of equality of sacrifice and the redistributive effects of trading in surplus carbon units could prove to be exaggerated or non-existent.

4.3 Historical perspectives on the public acceptability of PCT

- Persuading the public of the need for carbon rationing is probably the biggest hurdle policymakers will have to face.
- Public support for rationing during the 1940s suggests that consumers will accept carbon rationing as a temporary crisis measure, provided they trust the government’s judgement.
- The government would have to convince the public that:
 - a. the risk of catastrophic climate change is serious and increasing in severity;
 - b. such climate change poses a grave threat to British society and will have a direct and dramatic impact on their way of life if unchecked;



- c. catastrophic climate change can be prevented if the government takes immediate action, implementing a strategy to reduce carbon emissions;
- d. a carbon rationing scheme is central to this strategy and without it the strategy will fail;
- e. the scheme is a temporary measure during the transition from a high carbon economy to a low carbon economy (it will be removed when the unit price and/or consumption levels drop below a certain level);
- f. ration levels are fair (i.e. in accordance with popular notions of distributive justice and not those of political philosophers);
- g. the system is administered transparently and fairly; and,
- h. evaders are few in number, likely to be detected and liable to stiff penalties if found guilty.

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