#### 7 THE POLITICS OF ECONOMICS

### Highways: waste not, want not

Trams, light trains that run on rails on roads, were the most economical, environment-friendly way to move people around towns. At their peak, 300 systems were operating in Britain. Then, in the late 1920s, tram companies began to capitulate in the face of two challenges. One was financial: the trams needed renewing, and the money was not available. The other problem was patronage. As Henry Ford's revolution spread to Europe, the cost of manufacturing automobiles was brought down. People sought the 'freedom of the road' with their own vehicles. Capitulation came in the 1960s, when Britain was left with a single tram. It ran along Blackpool's promenade for the benefit of tourists.

Freedom of the road came at a price. The open spaces in towns, and the arteries between towns, became increasingly valuable assets as people competed for their use. Pricing that space according to the rents that users would pay was the most efficient and fair way to conserve it. Pricing it was also the way to share it with others who could not afford automobiles. The rents from motorists could have been used to upgrade the trams. The outcome would have been an integrated strategy for highway mobility.

A financial discipline for the highways was imperative. Canals

and railways were tightly contoured to the landscape, and they were economical in the use of land. Automobiles turned people into land-hungry travellers who could now wander almost anywhere. Roads had the potential to devour space, and they would do so if they were not disciplined by the pricing mechanism.

The economic case for integration has been thoroughly documented in the writings of Mason Gaffney. He stresses that the efficient use of land reduces the need for infrastructure. Compact cities reduce the length of highways and intensify the use to which we may put amenities such as sewerage, fire and police protection (Gaffney, 1964, 1969, 1970, 1972, 1973, 2001).

To achieve this outcome, people need to pay the competitive rate for the resources that they use. The beneficiaries should pay in proportion to the benefits that they derive. This is the principle applied in the private markets which we do not question when we buy a car or a pair of shoes. Similarly, the best results are achieved when the land market is free to operate efficiently by requiring beneficiaries to pay the rent that corresponds to the services they derive from the locations they occupy.

In automobile transportation, however, the tradition has been to treat time and space on our highways as free resources. The outcome is profligacy (see Box 6). But society, like nature, abhors a vacuum. The costs and benefits of the highways have to be registered in someone's profit-and-loss account. So if the people who invest in highway construction fail to recover the full value of the service they provide, the response is swift. The unclaimed value is internalised in other people's pockets! An example is the C\$600m that was promised to upgrade the twisting Sea-to-Sky Highway that links Vancouver with Whistler, in British Columbia. The improvements were predicted to cut 30 minutes or more off the

#### Box 6 Efficiency gains from rental payments

Waste is built into people's habits when they are not obliged to pay rents. If rents are not factored into their profit-and-loss accounts, they enjoy subsidised lives at the expense of others. This is apparent in the attitudes of property owners in the commercial sector.

Freeholders, for example, who are not obliged to defray the cost of the services that they receive, may relax. One measure of this is the inefficient use of labour and capital. This finding emerged from an elegant piece of research by the Sir John Cass Business School in London. The accounts of 2,000 public companies were studied for every year between 1989 and 2002. The market value of companies that leased their properties (expressed as their share price) tended to far exceed their book values. The market valuation was based on the growth that they were expected to achieve. In other words, when they had to pay rent for the locational benefits they used, they had to take care of customers' interests.

The companies that owned the real estate they occupied, on the other hand – they did not have to pay rents – were not obliged to remain on their commercial toes. Their market value was closely aligned to their book value. The survey identified a strong correlation between leasing and sales growth. Companies with 100 per cent leased property reported annual increases in turnover of over 31 per cent. This contrasted with the 15 per cent rises for firms that owned their property (Jansen, 2003: 40).

two-hour drive. That was real value which, because the highway agency could not recover it to defray the construction costs, would be captured by others. The announcement of the investment was sufficient to raise property prices in communities along the route, such as Squamish (Warn, 2003). Land rose in value because the occupants knew they would not be invited to defray the costs of providing the added benefits for which they would be subsidised by the taxpayers of Canada. They would be the free riders who would reap the windfall.

An attempt has been made to quantify, on a global basis, the under-pricing of spatial resources used by road transport. In a global economy of \$30 trillion, subsidies totalled \$2 trillion, according to Professor Norman Myers. Road transport accounted for 48 per cent of all subsidies and 44 per cent of perverse subsidies (\$640 billion a year):

Car culture is most prominent in the US, supported by subsidies for both the oil and auto industries of \$464 billion a year. Americans make 80 per cent of their trips by car whereas Europeans make 60 per cent of theirs by public transit, cycling or walking. The US price of gasoline is only three-quarters of Canada's and two-thirds of Australia's, yet these are both geographically large countries which supposedly requires extended auto driving. (Myers, 1999: 87)

The bold nature of the Myers study is marred by his failure to recognise that the market is not to blame. Problems that arise because people are not required to pay for the resources they use cannot be attributed to 'deficiencies of the market-place'. Those problems are the collateral consequences of the failure of public policy to partner the private pricing mechanism. This failure was emphatically illustrated by Arnold Schwarzenegger.

On 18 November 2003, the Hollywood star's first act on assuming the role of governor of California was to announce that he was reversing the proposal for a threefold increase in the car tax. The gas guzzlers of California who swallow the prairies were determined to pervert market economics in favour of an antimarket lifestyle. The prairies create the illusion of space in abundance. In fact, that space is finite. It is confined by the materials that are sunk into the surface. If motorists are not obliged to pay for the costs of the highways, they fill the space to congestion; and the negative consequences are imposed on others, as reflected in damage to the environment and to the fabric of communities.

# Airways: appropriating the skies

For the builders of terrestrial transport systems, acquiring land was an expensive hurdle to overcome. No such problem ought to have arisen when mankind took to the skies, for the enclosers had not yet secured the title deeds to the heavens. If a problem did exist, this could not be attributed to private property or the markets. Here, then, we have a unique opportunity to identify the points of tension between transport systems, their funding and spatial location.

Defying gravity was the romantic heroics of Boy's Own comics. The Wright brothers led the pantheon of adventurers who turned Leonardo da Vinci's sketches into wood-and-steel frames that could be thrust above the ground. Individual displays of courage pepper the experiments in aerodynamics that enabled humans to compete with the birds for space among the clouds. The two bicycle mechanics who flew the first air machine in December 1903 heralded a new age by displaying the individual's imagination and

willingness to risk all to push outwards the boundaries of human endeavour. But the advances in airways, culminating in the walk on the moon, were the product of the state.

In Britain, canals and railways were promoted by individuals who were backed by the risk capital of entrepreneurs. The aviation industry was sponsored by the state with taxpayers' money. The military potential of aircraft was developed in the Great War, and confirmed with strategic bombing raids in World War II. During the 1950s, state policy was developed to protect the flag carriers more as a matter of national prestige than of commercial interest.

In 1938, the US Federal Government developed a subsidy policy to protect private aviation enterprises during the formative stage of their development. Losses that arose as a result of 'honest, economical and efficient management' were to be defrayed by taxpayers. This policy was consolidated by the Air Co-ordinating Committee in Civil Air Policy (1954), which declared that foreign competition would prolong the need for public subsidies (Wassenbergh, 1957: 116). Europe's governments adopted a similar posture, extending the rationale for protecting the aviation industry by citing the need for economic growth.

The military implications of aircraft that could drop fire and damnation on the enemy inspired governments to channel resources into research and development (R&D) and the provision of aerodromes. Aviation ministries were established as arms of the state's bureaucracy. Empire-building rather than entrepreneurial activity was to the fore as money was poured into developing the science of aerodynamics. Even privately owned enterprises were regarded as of state significance, as nurseries for the training of pilots whose services would be needed in wartime. The private sector's progress was in the form of spin-offs from military appli-

cations, as in the Boeing 707, which metamorphosed out of a flight refuelling tanker for the B-52 bomber.

Most airports were owned by municipalities. After World War II, in Britain, many of those aerodromes were acquired by central government with the intention of establishing a national airports system. In the event, many of them were returned to municipal control until privatisation began in the 1980s. But privatisation did not bring with it a complete programme based on the principles of commercialisation. Government mentality remained locked in the planner's paradigm.

With the creation of BAA plc, a new regime of regulation and charges was established. These were not based on the market principle of charging as much as the market would bear: allowing the willing customer to pay for the benefit of landing and picking up passengers and cargo. A similar policy void was evident elsewhere in the world. Planners were more concerned with physics than with the fisc. Landing charges were related to the weight of the craft and the damage it inflicted on the runway rather than the rent generated by the demand for the time-and-space slots above airports. The economics of the market took a back seat to the engineering values in which the planners were schooled.

Additions to weight-related landing charges included passenger service charges, but the commercialisation of the privatised airlines was not matched with an equal concern to optimise either the pricing regime or the revenue of the state. The outcome, by default, was the privatisation of time and space above airports. Airlines asserted 'grandfather' rights in the resources of the heavens as they exploited the failure of government to enforce the proprietary interests of the nation on behalf of taxpayers who had financed the industry in the first place.

This fiscal failure did not stem from a reluctance to engage in the terms on which airlines and passengers might use airports. A veritable army of consultants was mustered to measure noise and the emission of pollutants so that surcharges might be imposed. The scope for controversy over environmental and social issues was endless, leading to arbitrary charges based, ultimately, on either subjective values or political expediency.

Government and privatised airlines evolved a self-serving tangle of regulations that conspired to confuse passengers. Airports now have more in common with shopping malls than aerodromes. The profits from renting retail space enable airport owners to claim that they are profitable enterprises, even though they fail to charge the full market rents for the right to use their runways. The result is a distorted pricing regime and the guerrilla warfare in which lobbyists engage to preserve vested interests. This helps to obstruct a coherently integrated network of roadways, railways, airways and waterways.

The history of state sponsorship is now cited as evidence against the deregulation and privatisation of the airline industry (Reed, 2002). In public policy terms, the origin of airways is significant, but not necessarily for the reasons favoured by those who oppose market economics. Unfortunately, the debate between those who favour state regulation, and their opponents who favour markets, continues to be conducted in the conceptual categories of the past century when capitalism and socialism were locked in mortal combat. The epistemological damage inflicted by that doctrinal contest was profound. It bequeathed a language that concealed a more complex reality, one that, had it been correctly excavated, might have led to a negotiated settlement between ideological enemies.

An enormous economic value was created as a result of the state's investment in aircraft technology. That investment could not be obstructed by the costs of access to the sky, for the state claimed eminent domain over the heavens above its territory. The rents of the skies belonged to the nation. So when the time came to privatise airlines and airports, it was incumbent on governments to ensure a smooth transition to the correct combination of pricing and property rights. They failed to show due diligence and deprived their citizens of the financial rewards that would flow from tapping the rents of the skies. That, in turn, created barriers to entrepreneurship and the investment of private capital in the airline industry. So today the privatised industry of the 21st century is confronted by a legacy of regulatory and financial practices that constrains its performance.

A sense of the scale of the problem was identified by Sir Rod Eddington, who censured American bankruptcy laws that protected inefficient airlines. Speaking in September 2005, he declared in his final speech as chief executive of British Airways: 'In the last four years, the US airlines have soaked up \$15 billion to \$20 billion (£8.3 billion to £11 billion) of public subsidies and loan guarantees. They're operating in protected markets, they're hoovering up public funds and still they can't make a profit' (quoted in Boxell, 2005).

The dispute between the EU and the US government over subsidies to their respective aircraft makers stems from their commitment to a dysfunctional 'business model', the costs of which ultimately fall on taxpayers. If new approaches on land, water and in the skies are not developed based on rolling back the power of the state, we may anticipate further deterioration of productivity in the sector committed to private enterprise.

#### The corruption of enterprise

We have established that, in the nineteenth century, the enterprise economy was not constructed on integrated foundations. Because the pricing mechanism was compromised, enterprises (and the ownership of capital itself) were ultimately vulnerable to state control. In the fate of the canal we may observe the embryonic forces that nurtured the corruption of enterprise. By failing to provide the legal and institutional framework for optimal pricing, Parliament fostered a legacy in which choices were increasingly narrowed even as science and technology were expanding people's options. The ethics of individualism and communalism were compromised in favour of authoritarian collective structures. Thus were sown the seeds for the emergence of twentieth-century statism and welfare dependency. There were four stages in this unfolding drama.

#### Stage I: eighteenth-century canals

The state was not equipped to intervene in private enterprise. Its bureaucratic and legislative capacities would need to develop before government could entertain the idea of nationalising a major enterprise. The state had hitherto relied on freebooters as its economic extension of the political structure, notably on the high seas. So when investors in canals found that they were locked into debts that deprived them of dividends, subsidies from taxpayers were not an option. The fate of the Leominster Canal illustrated the risks of sinking one's savings into infrastructure.

Britain was swept by canal mania in the early 1790s. Excavations across the landscape appeared to be money-making ventures, and the Leominster project in Herefordshire was one

speculative outcome. The nearby coal deposits could be tapped for consumers in Ludlow and Leominster. An engineer was hired, a consortium of investors assembled and the first seven boat-loads extracted from the land of Sir Walter Blount were towed from Marlbrook to Woofferton in 1794. Two years later a second Act of Parliament was passed to authorise the issue of a further £180,000 capital, and in that year the entire section between Leominster and the Marlbrook wharves was completed. Fourteen boat-loads of Sir Walter's coal halved the wharf price at Leominster on the first day.

Fifty years later, the owners of the canal viewed the impending competition from railways as a mixed blessing. The proprietors wanted to be bought out because the canal had

absorbed vast sums of capital without payment of a single penny of dividend to its subscribers. The proprietors, having seen the writing on the wall, must then have awaited the impending railways and positively welcomed the prospect of any railway encroachment on their territory — as seemingly the only likely escape from their financial difficulties. (Calderbank, 2001: 1)

Success or failure? In the 60 years of its operations, the canal failed to pay dividends. Was this venture, then, a reckless one from its inception? The truth is, we cannot tell without an accounting of all the benefits generated by the canal, including those that were not shown in its profit-and-loss accounts. To brand the canal a commercial loss is premature, because some of the value it generated was 'off balance sheet'.

First, there were the acres from which the coal was extracted. Without the canal, those deposits would have remained worthless. Landowners such as Sir Walter of Sodington Hall enriched

themselves with the rents that were made possible by the canal. We have it on the authority of Adam Smith that the likes of Sir Walter would not have leased out their coal deposits if they had not been induced to do so with the offer of rent. Referring to coal mines in Scotland, Smith (1776 [1981]: 182) noted that 'the landlord will allow nobody else to work them without paying some rent'.'

A second source of externalised value was the increased productivity achieved in locations such as Ludlow and Leominster. Amazing things happened when you brought a horse to water:

A pack-horse could move, perhaps, one eighth of a ton. The same animal could move five-eighths of a ton by stage wagon on soft roads, but 30 tons by river barge and as much as 50 tons when dragging a narrow boat along a canal with no current. It is clear that the advent of the inland canals was indeed a transport revolution. (Heatley, 2000: 395)

The dramatic reduction in the cost of coal increased the disposable incomes of the town dwellers. The benefits did not remain with the wage earners, however. Through the competition for access to residential properties in the catchment area of a canal's wharves, landlords were able to raise the rents of dwellings. Because the price of coal was reduced people could afford to pay higher rents.

The canal made a majestic contribution to the economy of this part of the English Midlands near the Welsh border. So it would be premature to pronounce the Leominster Canal a commercial loser. But because of competition, and in the absence of a mechanism for recycling back into the canal some of the rents it generated, some investors were bound to lose. They were the

The Blounts worked some of the coal deposits themselves and leased out others until they ceased direct participation in the extraction of coal in 1868.

shareholders who responded to the 1791 Act of Parliament and contributed to the capital that was needed to acquire land and employ the navvies to dig the channel along which the coal would be transported.

The winners were the shareholders, who, although they did not receive a dividend, benefited from the rents of their coal deposits. Among them was Sir Walter, a prominent member of the founding committee. These investors could write off the capital they sank into the canal as part of the costs of exploiting coal deposits. But because of the structure of property rights, canal shareholders who were not landowners could not claim part of the coal rents. Parliament, for its part, saw no reason to sanction a mechanism that would enable all investors to benefit from the value they helped to create. Thus, Parliament sponsored a new system for transferring wealth from the investors in companies to the owners of land. The nation's financial architecture was one gigantic wheel for rolling value away from those who created it to those who happened to have their names on the title deeds of land.

The Leominster Canal survived until 1847. By then, railways had made their appearance. The shareholders solicited a deal with the Shrewsbury and Hereford Railway in the hope of recovering part of their capital. Whether the canal was self-funding depends on the total value that accrued to the landowners in its catchment area. No accounting convention was available to enable investors to reach a conclusion on that question. In the event, the Shrewsbury and Hereford Railway paid £12,000 for the canal's assets in 1857, and the canal was closed down a year later.

The financial logic that underpinned the canals was designed to part people from their money, but were the promoters aware that they were luring dupes into investing in enterprises from which they could not receive a square deal? Landowners like Sir Walter recovered part of their capital by selling their shares to cash-rich urban merchants. Theirs was a double-take. First, they reaped the rents from their estates. Then, they made super-profits from the sale of canal shares during the boom times. The losers, caught up in the spells of mania, did not realise that they were walking into a financial trap.

#### Stage II: nineteenth-century railways

The same financial process played itself out in the railway sector. Small investors found themselves as vulnerable as those who had sunk their savings into canals. The financial model sanctioned by Parliament failed to buttress the enterprise economy, but it would be another century before the state, drawing on its successful engagement in World War II, felt confident enough to assume ownership of the industry and bail out the shareholders.

When a Labour government took control of Britain's railways, it was possible for socialists to claim that 'the significant thing is that the railways were not paying their way when nationalised' (Labour Research Department, 1950: 81). They appeared to have a case. In 1938, the last complete year before wartime government control of the network, three railway companies with over £200 million of ordinary stock paid no dividends. Great Western paid 0.5 per cent on its £43 million ordinary stock. The analysis, however, was partial, characterising 'the basic problem' as being the difference between the rates the railways charged their customers and the prices they had to pay for labour and raw materials. This was a crude accounting. If a railway's productivity

included value that was beyond the reach of the rates it could charge, that value nonetheless had to be imputed if a correct financial portrait of commercial viability was to be developed. This was not done in time to save the nation's railways from the clutches of a state that now believed it knew how to run a railway.

### Stage III: twentieth-century highways

The state had the opportunity to learn from earlier mistakes. The economics of the new age of mobility were understood by the Liberal politicians who rose to power at the turn into the twentieth century. They knew that as the costs of mobility came down, the value of highway space went up. So it made sense to use those rents to upgrade highway surfaces and fund trams for people on lower incomes. Surfaces would have to be relaid with more durable materials and the roads would have to be widened. Political leaders and the emerging automobile industry accepted that the capital cost ought to fall on those who would reap the windfall gains.

In the Public Street Works Acts of the 1890s, the cost of paving urban streets was laid on the owners of land.<sup>2</sup> The construction industry appreciated that the added value which spilled over into land values would have to be recycled into the infrastructure. This economic insight was not lost on Liberal MPs, one of whom was the author Hilaire Belloc. He was commissioned by the British Reinforced Concrete Engineering Co. to study the highways of England. Belloc proposed a national

<sup>2</sup> This fiscal philosophy was applied in the waterlogged region of East Anglia in the 1920s. The cost of draining the fens was placed on landowners in the vicinity, under the Land Drainage Acts.

fund to finance a network of highways that would internalise part of the added value:

The grant of new roads should include the purchase, if not of a continuous belt along each side, at least of blocks of land, especially in the neighbourhood of existing communications, near railway stations, near villages or other centres now established, etc. the price to be determined by arbitration upon the old price basis before the scheme of the Road was developed. If this were done the great difficulty for certain purposes (not residential, but other) of using these sites would accrue to the public purse and would gradually relieve the cost of construction. (Belloc, 1923: 204)

Belloc argued that the landowner should not pocket the benefit: compensation should be based on existing values, rather than those that would arise from the enhanced productivity delivered by a new highway. The reservation of land 'on either side of the way for the purpose of helping to pay for the new scheme would be of direct advantage to the community and of disadvantage to no one'. Without such a funding model, the nation would 'make a direct and immediate present of millions to the chance owners of land upon their trajectory. It would be a gross case of actual endowment at the expense of the community' (ibid.: 204–5).

Landowners, through the House of Lords, resisted the logic of this plan. The Liberal government of 1905—10 attempted to formalise the philosophy in the nation's budget, but policy was skewed to accommodate the fact that 'the landed interest [feared] it would lose the benefit it could expect from the growth of road transport in a consequent increase in land values' (Hibbs, 1982:

47). Parliament was not to be allowed to integrate the financial system at the interface between private users and social spaces.

#### Stage IV: 21st-century space travel

Governments, repeating the errors and omissions of the terrestrial age, failed to secure the correct configuration of property rights and payments for the space age. Instead, they subsidised both the airline industry and the corporations that benefit from the rents of the satellites in geo-synchronous orbit around earth. The failure to charge sky rents will one day emerge as serious as the financial problems that afflicted investors in canals and railways.

## Pricing amenities in social spaces

Public and private finances are interlocked. Unless we adopt Adam Smith's financial template, we will not be able to develop an integrated transport system. The looming crisis in Britain's rail industry accentuates the urgency of the need for new directions in fiscal policy.

Train operating companies have warned that overcrowding on some routes will become intolerable by 2015 (Association of Train Operating Companies, 2005). Under the current financial model, they are led to recommend the closure of some stations and a hike in fares to squeeze out some of their prospective passengers. Overcrowding will become even more acute if Britain does shift to a road pricing policy that persuades some motorists to travel by train.

The shortfall in the quality of the amenities provided by railways is matched by the shortfall in funds. The 'funding gap' is predicted to shrink from £4.9 billion a year to £2.2 billion in the years up to 2015, but an increase in revenues may not be the best outcome. A flexible fare regime that reflects the costs of peaktime travel, for example, would be desirable; but the problem remains with the upgrading of the infrastructure. The train operators appear to be pessimistic about the prospects of expanding the network to keep pace with demand – and to reduce the pressure on highways. And yet, that is precisely where the debate should be focused: on funding improvements to the tracks that take the wheels that create the fortunes. Otherwise, a pricing squeeze on motorists will not be offset by a diminishing fare structure on the railways.

This is not a uniquely British problem. The integration of the European economy is likely to be prejudiced unless the funding problem is resolved. To gain the benefits of an expanded domestic market, the eastern European countries that were admitted to EU membership in May 2004 must upgrade their communications networks. They hope that private capital will come to their aid, but they are not able to offer the state guarantees that are sought by investors (Anderson, 2004). Should such guarantees be necessary? The size of the domestic capital markets in countries like Poland need not constrain the provision of infrastructure. EU governments could reform taxes in favour of the self-funding model. This would yield a double dividend. The eastern Europeans would rebuild their infrastructure, while encouraging people to save and invest in domestic businesses that create jobs and marketable products.

The economics of the new financial strategy were succinctly noted by *Financial Times* columnist Samuel Brittan. There could be no 'valid free market objection to taxing pure increases in land

value if this can be done without unintentionally taxing enterprise too' (Brittan, 2003). The challenge for Europe's statesmen is to shift the structure of taxes so that the 'social opportunity costs' are progressively reduced.

The democratic debate, however, needs to reach beyond purely economic considerations. Personal liberty and the vitality of communities are of equal concern — and integral to the character of the free market. We may approach these broader issues in terms of one of the objections to road pricing. We are warned that Big Brother would track us through the satellites connected to the black boxes in our cars. Is this an intrusion into our personal space? In a strong sense, the answer must be in the affirmative. And if we did not approach this question in a comprehensive way, the libertarian objection might carry force. But it has to be qualified in at least two ways.

First, the individual on a highway is occupying a social space. It is not the motorist's space. At best, the traveller is renting the time and place between two points on a journey. Social obligations attach to the opportunity, for which the individual is answerable. Hitherto, the individual has not been able to fulfil his obligations (as with pollution of the environment, which is an intrusion on other people's right to a healthy atmosphere). Rebalancing rights and responsibilities with respect to the use of social space must form part of the fiscal reform agenda.

Compensating for that intrusion, however, would be the reduction in Big Brother's engagement in our personal lives through the taxes that are currently levied. Citizens are subject to the most draconian inspection of their persons and property. They have to account to the Inspector of Taxes in minute detail for their affairs. Most of that intrusion can be eliminated by the simple expedient

of retiring the bad taxes that are levied on earned incomes and savings.

This adjustment of the structure of public finance both emancipates the individual and liberates the market economy to deliver on its historic promise – prosperity for all who are willing to work, save and invest. But this can be achieved only if governments rely more on pricing the use of amenities that are accessed through the common spaces in our communities. The social dividends, as we shall now see, would be enormous.