

# 11. Welfare state

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Debates about the roles of markets and government are often framed as a binary choice between two polar cases, and often in ideological terms. This chapter recognises a spectrum, ranging from markets with light regulation (weights and measures) to heavy regulation (pharmaceutical drugs). I argue that it is useful to analyse the types and extent of government interventions as a mosaic comprising multiple objectives, multiple ways in which governments can intervene, multiple reasons why markets, including insurance markets may fail, and why governments may fail.

Sections I and II outline the approach. Section III discusses social insurance, including unemployment insurance, medical insurance, and long-term care. Section IV considers pensions and section V outlines a view to the future. The final section offers the main conclusions.

Drawing on findings for which multiple Nobel prizes in economics have been awarded since 1995, the chapter contrasts with the Washington Consensus by suggesting analysis based on a fuller model than the simple competitive market equilibrium. The idea is not to offer a blueprint, but to show how the elements in Boxes 11.1–11.4 offer building blocks for thinking about appropriate interventions. The elements of the mosaic are neither a mechanistic template nor an invitation to random artistry. Instead, they establish a strategic logic for discussing options for intervention. Answers will depend on the good or service in question, on a country's economic and institutional capacity, its demography, and its politics and social attitudes.

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## I. Introduction

I often start my course by asking students if they agree with two value judgements: (1) In a civilised society, everyone should have access to adequate nutrition (everyone's hands go up); (2) In a civilised society, everyone should have access to adequate healthcare (ditto). So why, I then ask, does the UK have a National Health Service (NHS), but not a National Food Service? Silence. More generally why, absent war or famine, do people buy food from supermarkets, market traders, and street stalls, with limited or no government intervention, whereas in almost all countries government has significant involvement in healthcare? This chapter explains why those outcomes are not accidental or mistaken, and for the most part not ideological (for fuller discussion see references for advanced countries<sup>1,2</sup>, reforming post-communist countries<sup>3</sup> and developing economies<sup>4</sup>). This argument contrasts with the Washington Consensus which argues that: 'government is not the solution to our problem, government is the problem,' an argument that implicitly assumes an idealised economic model.

Most branches of science have special and limiting cases. In physics, there is zero gravity and a perfect vacuum; in engineering, zero friction. These cases provide benchmarks from which to judge what happens when these conditions are relaxed. But it would be useless to build machines or set up experiments by relying on an understanding of what happens only in these special states.<sup>5</sup>

Idealised models are useful for understanding the main driving forces in the economy, but are incomplete and therefore misleading as a basis for policy design. A car designed assuming zero friction would have no lubrication or cooling. A vehicle with a seized-up engine will not get to the shops, let alone to the end of an Amazon delivery round. The analysis in this chapter is based on a fuller model that encompasses ways in which markets can diverge from the theoretical archetype.

In short, the Washington Consensus implies that government intervention should be minimised. In contrast, in the London Consensus, the extent and type of state intervention should be optimised. This chapter presents a framework for choosing whether to intervene and, if so, in what form. Section II outlines the economic theory that underpins later policy discussion – theory that is essential to show that the conclusions for policy are not personal opinions, but rooted in the best of modern economic analysis. Subsequent sections discuss social insurance (including unemployment benefits, healthcare, and long-term care), pensions, and a view to the future. Section VI offers conclusions. This chapter does not discuss education explicitly, on which I refer to Pritchett (this volume) and other references.<sup>6</sup>

The approach of this chapter suggests some core conclusions:

- The welfare state exists not only to assist the poor, but also to cover areas that private markets cover badly or not at all.
- Consumer choice does not always work well, particularly for complex products like pensions and healthcare. In such cases, offering less choice can be a better design.
- Competition does not always produce efficient outcomes.
- Private actuarial insurance<sup>7</sup> is unable to cover some individual risks, including unemployment and important medical risks. Nor can actuarial insurance cover losses created by systemic uncertainties, such as the Great Financial Crisis of 2007-09 and the COVID-19 pandemic, accentuating the role of the state as insurer of last resort.
- The fuller model, supported by international experience, creates a strong case in both efficiency and equity terms for relying mainly on public finance of healthcare, though not necessarily public delivery.
- Changes in the nature of jobs, increased diversity of family types, and the speed of technological change all have implications for the design and finance of the welfare state.

## II. Economic underpinnings

Good policy design starts by specifying objectives, of which two are central:

- Efficiency in the use of resources at a point in time (static efficiency), and in pursuit of sustainable economic growth (dynamic efficiency).
- Equity, including redistribution from richer to poorer (vertical equity) and assisting equal treatment of equals (horizontal equity).

Much of the discussion in this chapter is about efficiency because – paradoxically – it turns out that the answer to the efficiency question gives important guidance about how to pursue equity objectives.

While specific institutions vary widely, all advanced and middle-income countries have a welfare state of some sort, i.e., a system of income transfers, old-age pensions, and government involvement in the financing and/or provision of healthcare and education. Low-income countries generally have at least embryonic such institutions.

Government intervention, when it occurs, is of four generic types (Box 11.1).

### **Box 11.1: Types of government intervention**

*Regulation of quality* includes hygiene laws relating to food and regulation of pharmaceutical drugs. Regulation of *quantity* includes mandatory school attendance and social-insurance contributions. *Price* regulation includes minimum wages and rent control.

*Public finance* involves subsidies or taxes applied to the *prices* of specific goods or to the *incomes* of individuals. Price subsidies can be partial (public housing) or total (free pharmaceutical drugs). Similarly, prices can be affected by a variety of taxes (e.g., on pollution or congestion). Income subsidies raise different issues, discussed shortly.

*Public delivery*: regulation and finance modify market outcomes but leave the basic mechanism intact. Alternatively, the state can produce goods and services itself, e.g., owning the capital (school buildings) and employing the labour (teachers).

The fundamental distinction between the previous two types of intervention – finance and delivery – is prominent in later discussion.

*Income transfers* can be tied to particular expenditures (education vouchers) or untied (old-age pensions).

As discussed below, governments intervene to address distributional concerns, assist economic efficiency, promote economic growth, and share risk.

#### **1. Addressing distributional concerns**

Poverty, although declining globally, remains high. Policy responses include redistributive taxes and transfers, and investment in people's health and skills. For present purposes, the issue is sufficiently well known not to require extended justification of the need for government action.<sup>8</sup> Alongside issues of poverty, equity is also concerned with inequality of income and wealth, which has widened in many countries, and with wider inequalities.<sup>9</sup> Intergenerational distribution embodied in social contracts has recently received more attention.<sup>10</sup> Inequality is further discussed in Ferreira's chapter in this volume and other literature.<sup>11;12</sup>

#### **2. Assisting economic efficiency**

Less well-realised than its equity role is government intervention to address ways in which markets can be inefficient (generically referred to as market failures). Such inefficiencies have been identified by the award of multiple

Nobel prizes over the past 30 years for research on the economics of information, behavioural economics, search frictions, incomplete contracts, and optimal taxation.

The welfare state exists not only to protect the poor but because it does things that markets would do badly or not at all. Thus we would need a welfare state even if all poverty could somehow magically be eliminated. It follows that it is mistaken to seek to minimise the welfare state—rather, its scale and scope should be optimised.<sup>13</sup>

As a simple heuristic, [Box 11.2](#) sets out the core conditions under which markets produce efficient outcomes (what economists call a ‘first-best’ economy).

### **Box 11.2: Properties of an idealised market**

Well-functioning markets require a series of assumptions to hold:<sup>14</sup>

1. Perfect competition in production and distribution.
2. No externalities (e.g., no pollution or congestion), public goods or increasing returns to scale.
3. Well-informed buyers and sellers.
4. Frictionless economic activity, i.e., no search or transactions costs.
5. Rational economic behaviour, i.e., individuals seek to maximise their lifetime wellbeing.
6. Complete markets, e.g., the ability to buy insurance against unemployment or future inflation.
7. No distortionary taxation.

These characteristics apply reasonably well for many products, but can fail as outlined in the following points.

*Imperfect competition, externalities, public goods, and increasing returns to scale* violate assumptions 1 and 2. External benefits include the social benefits of education and medical interventions against infectious diseases, such as COVID-19 vaccinations. External costs (‘the tragedy of the commons’) manifest themselves, inter alia, through pollution (a health hazard) and global climate change.

*Imperfect information* violates assumptions 3 and 4. Buyers and sellers may be poorly informed about the quality and nature of goods or services (the topic of the Nobel Prize in 2001), for instance, about the quality of particular pharmaceutical drugs or a particular fund manager. Imperfect information can also occur for prices, including search theory (i.e., the impact on outcomes when economic activity faces frictions, such as time needed to gather information, the topic of the Nobel Prize in 2010).

*Behaviour different from narrow economic rationality*<sup>15</sup> violates assumption 5. Literature on behavioural economics (Nobel Prize 2002 and 2017) addresses this problem by drawing on insights from psychology and economics. Two aspects are particularly relevant:

- Bounded rationality questions whether, in the face of complexity, people know what choices will maximise their long-run wellbeing.
- Bounded-willpower arises where a person knows what they ought to do (lose weight, quit smoking), but does not do so.

*Missing markets and incomplete contracts* violate assumption 6 (Nobel Prize 2016). A missing market arises for pensions because private providers do not offer insurance against the inflation a worker will experience during their retirement. Incomplete contracts arise where aspects of the contract – particularly relating to quality – cannot be fully specified and/or effectively monitored, for example, the quality of teaching or hospital cleaning.

*Distortionary taxation*, which is necessary to finance redistribution, violates assumption 7. This issue is addressed in the literature on optimal taxation (Nobel Prize 1996). A tax causes distortions if it changes behaviour, for instance, the introduction of a window tax in England in 1696 led to smaller and fewer windows. A tax on earnings will generally affect labour supply, and a tax on interest income is likely to change savings behaviour. A core purpose of the welfare state is to provide poverty relief, which by definition requires redistribution from richer to poorer individuals or households. Thus, the taxes that finance the welfare state inevitably have some distortionary effects. Policy should not seek to minimise distortions, but instead, should aim to limit distortions to those that are necessary to achieve chosen distributional gains.

### 3. Promoting economic growth

The arguments about the centrality of physical infrastructure – roads, bridges, etc. – for economic growth are well known. Recently, there has been increasing awareness of the importance of human capital for inclusive growth. Improving access to healthcare and education adds to a country's stock of skills, and widening access improves opportunities for disadvantaged groups. Well-designed income transfers can assist growth, for instance, the ability to

afford a healthy diet improves educational outcomes. Thus, a study by the International Monetary Fund concludes that: ‘...the combined direct and indirect effects of redistribution—including the growth effects of the resulting lower inequality—are on average pro-growth.’<sup>16</sup>

Studies of Latin America confirm the potential growth benefits of social policy for example, the positive impact of conditional cash transfers on health and education outcomes.<sup>17</sup>

### 3. *Sharing risk*

In some ways, risk sharing embraces the previous three rationales for intervention.

- Addressing distributional concerns can be regarded as risk sharing behind Rawls’ ‘Veil of ignorance’.<sup>18</sup>
- As discussed shortly, a second aspect is providing insurance against risks that are poorly covered by private insurance. As noted, governments also have a role as insurer of last resort, exemplified by responses to the COVID-19 pandemic.<sup>19</sup>
- Third, optimal risk sharing contributes to economic growth. Too much risk is bad; with no safety net, people will be reluctant to start a new business. Too little risk is also suboptimal; it can stifle entrepreneurial initiatives, exemplified by the communist economic system.

*The simple model of insurance.*<sup>20</sup> The business model behind insurance has an easy intuition. Suppose that 100 people are flying to a football match, each with a suitcase worth £500, and that on average 1% of suitcases are lost in transit. The expected loss is the value of the suitcase,  $L$ , times the probability,  $p$ , that the loss will occur. Thus, the insurer could collect  $1\% \times £500 = £5$  from each of the 100 people, i.e., a total of £500 – enough to reimburse the person whose suitcase was lost. [Box 11.3](#) sets out the circumstances in which such an arrangement will work well.

#### **Box 11.3: Properties of an idealised insurance market**

Just like markets for goods and services generally, the simple model of insurance rests on a number of assumptions.

1. Probabilities are independent; the probability of the insured event happening to person A is independent of it happening to person B, e.g., having a car accident. In contrast, with systemic risks, if one person suffers a loss, so does everyone else, e.g., inflation.

2. The probability of the insured event occurring is less than 1; the condition can fail, e.g., insurers often do not want to cover patients with a pre-existing medical condition because the probability of the condition recurring is too close to 1.
3. Risk, not uncertainty: the distinction is fundamental. With risk, the probability of an event is known. With uncertainty, it is not,<sup>21</sup> for example, an event a long way in the future. If the probability of the insured event is unknown, the insurer cannot calculate a premium, making probability-based insurance difficult or impossible. A central conclusion is that actuarial insurance can cope with risk but not uncertainty.
4. No adverse selection: the problem arises if an individual knows that they are a bad risk, but can hide the extent of risk from the insurer (e.g., a potential health problem).
5. No moral hazard: the problem arises if the individual who buys insurance can costlessly influence either (a) the probability that the insured event will occur, or (b) the cost to the insurer.

The failure of one or more of these assumptions leads to inefficiencies, discussed in section III.

#### *4. Limitations of government*

Box 11.4 offers a brief summary of the qualities of effective government.

### **Box 11.4: Characteristics of an idealised government**

Adequate capacity:

- Technical skills that are sufficiently advanced and available in sufficient quantity.
- Sufficient information on which to form policy.
- Adequate resources for financing good-quality public services.
- The ability to align decisions by legislators with actions by administrators.

Appropriate motivation:

- The desire and capacity to resist short-term political pressures in order to take a long-term view, including in situations

where incurring political costs today brings benefits mainly in the future.

- An absence of corruption.

Governments may lack key skills or have limited information on which to base policy (e.g., an out-of-date census). Financing high-quality public services involves fiscal, institutional, technical, and political constraints. The tighter the constraints, the more limited the policy options. A clever policy design that exceeds a country's ability to implement it is bad policy design.

Additionally, the links between legislators' political choices and the actions taken by administrators are complex. When operating public agencies, bureaucrats may seek personal benefits (e.g., avoiding time-consuming reforms) because politicians cannot fully monitor their actions (a manifestation of incomplete contracts). Similarly, a government may have other motivations than the welfare of its citizens.

### 5. *From theory towards policy*

Market failure is not an automatic trigger for intervention. A potential market failure poses three key questions for policymakers:

- Can the market solve the problem itself, e.g., through online reviews?
- If not, would intervention improve matters? Intervention is justified only if cost effective, which depends on (a) the seriousness of market failure(s), (b) government's capacity and motivation, and (c) the relative importance given to efficiency, equity, and other objectives like individual freedom. For a libertarian, a heavy weight for individual freedom may dominate efficiency considerations.
- If intervention is contemplated, which of the interventions in [Box 11.1](#) (regulation, finance, public production, or income transfers) or combination of interventions might improve efficiency?

### 6. *Wider applications*

*Mainly private activities.* Food broadly conforms with the assumptions in [Box 11.2](#). Consumers generally know about balanced diets and prices, and the production and distribution of food is competitive. Food, however, does not conform perfectly. Consumers generally do not know how food is produced, nor about its ingredients, hence government imposes regulations about hygiene and labelling. The prevalence of obesity may create additional reasons for regulation and/or taxation, e.g., a sugar tax. Choice and market allocation of food, albeit imperfect, are more efficient than alternative options

not least because of great diversity in consumer tastes. It is not surprising that there are no serious advocates of a national food service.

Clothing is less regulated than food because the costs of mistaken choices are lower. The exceptions, e.g., safety clothing and crash helmets, *are* regulated for precisely that reason.

Burglary and car insurance broadly comply with the conditions in [Box 11.3](#); probabilities are independent, known, and less than 1. Bad risks (living in a high-crime area, accident-prone drivers) cannot hide the fact, and inspection of claims can guard against moral hazard.

Applying the same approach to areas such as banking and cars also point to the advantages of market allocation with regulation (a) to protect consumers, e.g., reserve requirements for banks and safety standards for cars, and (b) to ensure proper competition, e.g., anti-trust legislation.

*Privatisation.* In the 1980s, the UK government rightly privatised telecoms, airlines, and steel. These industries conform with the conditions outlined in [Box 11.2](#) sufficiently well for market allocation with suitable regulation to work better than nationalisation. Other industries, e.g., railways, were privatised even though economic theory correctly predicted problems (in the case of railways the central problem is increasing returns to scale to the fixed cost of the track).

Under the Communist economic system most industries were state-owned, hence a substantial part of the reform agenda concerned large-scale privatisation, the issue being less whether to move to private ownership than the practical challenge of privatising large parts of the economy – banking, agricultures, most manufacturing – in a short time.

*Activities with a major role for government.* Other areas experience multiple market failures, examples below including unemployment benefits, the finance of healthcare, and pensions. Although all have some private elements, all are substantially public-sector activities.

## 7. Financing the welfare state

When designing policy within a budget constraint two issues are logically separate:

- What is the appropriate *structure* of activity – that is, what public/private mix? This question refers to earlier discussion about which activities are most efficiently privately funded and/or privately delivered.
- What should be the *scale* of government activity, i.e., what should be the size of public spending? The answer partly depends on taxable capacity and partly on political economy considerations: if there are two goods, food (produced privately) and education (produced

publicly), the scale of the public sector will depend in part on preferences between the two.

The distinction between structure and scale is important: a budgetary crisis is *not* a ground for privatisation, but rather a reason to consider the scale of government.

### III. Social insurance

#### 1. *The nature of social insurance*

While actuarial insurance covers some risks well, that does not mean that it can be applied uncritically. In a seminal article about medical insurance, Arrow wrote:

I propose here the view that, when the market fails to achieve an optimal state, society will, to some extent at least, recognize the gap, and nonmarket social institutions will arise attempting to bridge it....<sup>22</sup>

Social insurance is one such institution, where private markets, for technical reasons, provide insurance inefficiently or not at all, and where inability to acquire insurance would create a damaging gap in social policy.

Social insurance differs from private insurance in two fundamental ways. Since membership is generally compulsory, good risks cannot opt out, thereby sidestepping the worst problems of adverse selection, and, consequently, premiums can be related to an individual's earnings rather than to individual risk.

Second, the contract is not fully specified. Thus, benefits and contributions can be changed by legislation, and so can respond to unforeseen events, such as the COVID-19 pandemic and to social changes (e.g., a pension for the surviving partner in an unmarried couple or in same-sex marriages). Unlike actuarial insurance, social insurance can address uncertainty as well as risk.

Thus, social insurance has two mutually reinforcing rationales: as a response to market failure and as a redistributive device. The Washington Consensus ignores the first.

#### 2. *Unemployment insurance*

Unemployment can be high and long-term, with youth unemployment a particular problem in some countries, and underemployment in many low- and middle-income countries (LMICs).

Actuarial insurance is a bad fit for dealing with the unemployment risk.<sup>23</sup> A comparison with the conditions in [Box 11.3](#) shows the contrast with the Washington Consensus:

*Independent probabilities.* Although private insurance may be able to cope with cyclical unemployment, it cannot address common shocks like mass unemployment in the 1930s or the COVID-19 pandemic.

*Probability known and less than one.* There is good data on unemployment rates. However, for some groups the probability of being unemployed may be too high for private insurance to be viable, e.g., low-skilled young people or some ethnic minorities.

*Adverse selection.* A hypothetical private insurer could ask about an applicant's employment history. However, verification is not always possible, not everyone has a previous work history, and individuals may have private information about potential future job loss.

*Moral hazard* arises because a worker may be able to influence the duration of unemployment. The literature on job search explains how taking time to find a new job can be efficient if it leads to a better match. The problem is that the optimal duration is unmeasurable. If a worker remains unemployed after six months, there are two potential explanations:

- The worker has tried hard to find a job, but failed – continuing unemployment is caused by a lack of jobs.
- The worker may not have looked very hard – continuing unemployment is partly by choice.

The first is an insurable risk; the second is not. The problem is that an insurer cannot tell which one applies. The same is true for publicly provided unemployment benefits, but governments have more tools at their disposal than a private insurer, e.g., requirements to undertake training and/or job search. The Danish 'flexicurity' model provides an example in an OECD context, where the private sector is able to hire and fire workers relatively easily, while the government provides workers with income support and training, hence the idea of 'protect workers, not jobs'.<sup>24</sup> An approximate analogue in LMICs is public works employment (e.g., working on a government road-building project), which makes it difficult for a person to receive benefits while continuing to work unofficially.

It is therefore no accident that there are no private unemployment insurance policies on offer. Benefits have to be financed via social insurance, taxation or a mix, alongside regulation such as a requirement to look for work or undertake training.

### 3. Health and long-term care

Medical spending is rising in the face of population growth and population ageing (increasing demand) and advances in medical technology (increasing

what can be offered). Although insurance cover is good in OECD countries, with the major exception of the United States, there are frequently gaps in LMICs. It is necessary to consider medical care and medical insurance separately.<sup>25</sup>

*The market for medical care.* Since medical treatment is often complex, healthcare raises problems with consumer information (violating assumptions 3 and 4 in [Box 11.2](#)), bounded rationality (assumption 5) and incomplete contracts (assumption 6). Individuals often do not know what treatments are available or the pros and cons of different treatments. The patient's information often comes from the provider and some treatment (e.g., of a broken leg) is not repeated, so that what the patient learns may be of little future use.

Similar problems arise for pharmaceutical drugs: consumers may not know whether the product is suitable for their condition, safe, and of high quality – the latter two aspects are especially a problem in LMICs.

There are other areas (e.g., used cars) where the consumer depends on the supplier for information. With medical care, however, information is often complex, and a mistaken choice can have high costs in terms of future health. Sick patients may not have time to shop around for options (in contrast to a car repair), and may lack the information necessary to weigh one doctor's advice against another's.

*The market for medical insurance.* The purpose of insurance is to protect a person from the risk that a bad thing may happen, which the person cannot stop happening, and which, if it happens, is very expensive. Needing medical attention or long-term care at some point in the future is precisely such a risk. Again, the conditions in [Box 11.3](#) draw out contrasts with the Washington Consensus:

*Independent probabilities.* This condition generally holds except during epidemics.

*Probability less than one.* This condition holds for ailments like appendicitis, but fails for chronic medical problems (e.g., diabetes) that arise before an insurance policy has been bought. This condition will also be violated as developments in genetic screening, by improving knowledge about future health problems, create more uninsurable conditions.<sup>26</sup>

*Known probability.* Although it is generally possible to estimate the relevant probabilities, problems arise for health problems a long time in the future.

*Adverse selection.* Akerlof's classic article asks why Americans over 65 cannot easily buy medical insurance, and concludes that:

...as the price [of insurance] rises, the people who insure themselves will be those who are increasingly certain that they will need the insurance; for error in medical check-ups, doctors' sympathy with older patients and so on make it much easier for the applicant to assess the risks involved than the insurance company.<sup>27</sup>

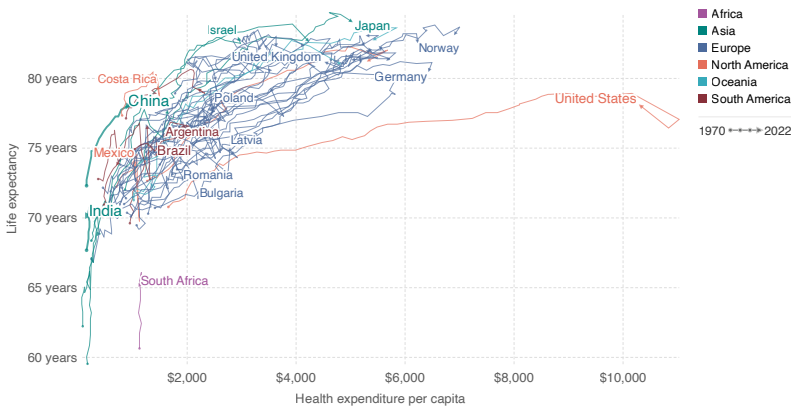
Similarly, if workers know better than employers that they are likely to have high medical bills, firms providing good medical benefits will tend to attract workers with health problems.

At its simplest, adverse selection causes inefficiency because there is an incentive for the worst risks to buy insurance and for the best risks to opt out. Where the problem is serious, the market may fail entirely. A partial solution is to restrict the range of choice, for instance, making membership compulsory to prevent low risks from opting out.

*Moral hazard.* An insured person might take fewer precautions. In addition, some healthcare is a matter of choice. Generally, elective medical care is not well covered by voluntary insurance, which is not a problem for interventions like cosmetic surgery, but matters greatly for an event like pregnancy. Moral hazard can also arise if all costs are paid by the insurer, so that the provider is not constrained by the patient's ability to pay. This point is not new:

That any sane nation, having observed that you could provide for the supply of bread by giving bakers a pecuniary interest in baking for you, should go on to give a surgeon a pecuniary interest in cutting off your leg, is enough to make one despair of political humanity.<sup>28</sup>

Figure 11.1 Life expectancy and health expenditure 1970–2022<sup>29</sup>



Source: Ortiz-Ospina and Roser (2017) – Our World in Data, published under a CC-BY licence.

One result of moral hazard is excessive medical treatment, as seen in the United States, where medical spending is considerably higher than in comparable countries, yet, with lower life expectancy. [Figure 11.1](#) shows (a) that those outcomes are not a random deviation and (b) that the difference with other countries is increasing.

*An array of policy options.* What do these problems imply for policy design? Information failures justify regulation; the externality of treating communicable disease, coupled with incomplete insurance; may justify public finance; and bounded rationality and incomplete contracts create a strong (although not overriding) argument for a significant public role in allocating resources.

Earlier discussion highlighted the fundamental distinction between finance (how healthcare is paid for) and delivery (who provides the services). Economic theory and international experience point to two conclusions:

- There is a strong case in both efficiency and equity terms for relying mainly on public finance.
- There is no similarly strong conclusion about delivery: there are successful healthcare systems with mainly public production, mainly private production or with a mix.

Public finance in the UK and Nordic countries is organised through taxation. Finance can also be arranged through social insurance; although usually organised by government, it can be administered by the private sector acting as agents of the state, e.g., German sickness funds. The Stanford Plan, designed to address the problems of actuarial insurance within a mainly private system, offers a third approach.

*The Stanford Plan.* The design has five components:

1. The university contracts with a small number of insurers.
2. As a condition of joining Stanford's 'club', each insurer offers a policy with three elements: an agreed core package of services; premiums that can differ with family size, etc., but must be unrelated to a person's medical risk; and agreement to accept all applicants.
3. The university operates a redistributive pooling arrangement so that plans with a higher-than-average risk group receive transfers.
4. Employees can choose which plan to join.
5. The university contributes a fixed sum to each person's package, broadly equal to the cost of the cheapest approved plan.

Under 1 and 2, the university acts as agent for badly informed consumers, ensuring that the insurance policy contains no hidden snags. Element 2

ensures that nobody is excluded, and 2 and 5 ensure that everyone can afford cover. Element 3 protects insurers from adverse selection. Element 5 assists with cost containment since the individual faces the full marginal cost of joining a more expensive plan.

Thus, the arrangement is a genuine strategy,<sup>30</sup> but the interesting question is what sort of strategy? From a US perspective, this is a private plan with regulation and transfers carefully chosen to address the main market failures. But the arrangement can equally be described as decentralised social insurance, since nobody is excluded, and premiums are unrelated to individual risk.

What emerges is an important conclusion: that intervention on the scale necessary to address the many and major technical problems faced by actuarial medical insurance leads to an arrangement which, though it may be private, is *de facto* social insurance.

*No single best system.* In broad terms, countries have adopted one of three stylised strategies: mainly public finance plus public delivery (the UK, Sweden); mainly public finance plus mainly private delivery (Canada); or mainly private finance plus mainly private delivery, the US being the only OECD example. Each strategy has different but predictable strengths and stress points – there is no such thing as a perfect healthcare system.

Policy should avoid two errors. First, the failure to distinguish finance from delivery. The strong arguments against major reliance on private finance should not inappropriately spill over into debates about delivery, which can be successful in either public or private sectors. A second error is that the ‘grass is always greener’, i.e., ‘public finance and provision has problems, therefore, the answer is private insurance’. It is essential to diagnose accurately whether a problem is the result of a faulty strategy, a fixable design problem, or bad implementation.

*Long-term care.* Many of the same issues arise for long-term care, i.e., residential or nursing care, or care in the home. As populations age, more people become incapable of caring for themselves, creating a rising demand for long-term care. As with medical care, the ability to buy insurance would raise wellbeing, but such insurance faces market failures similar to medical care. Perhaps the most serious is uncertainty: insurers do not know the probability that someone aged 35 today will need care in old age, nor the cost of that care.<sup>31</sup> As a result, private insurance, where it exists, is priced conservatively and includes many restrictions. As with medical insurance, market failures point to finance mainly from taxes and/or social insurance. Germany, for example, finances long-term care through an add-on to social insurance contributions.

## IV. Pensions

Many countries face upward pressure on pension spending, often combined with significant pensioner poverty. The problem is partly caused by a pincer movement of rising life expectancy and lower birth rates. Without adjustments, projected trends in longevity, fertility, and economic growth suggest that pension spending in some countries could double as populations age.<sup>32;33;34</sup>

One response to longer life expectancy is a combination of later retirement and improved options for flexible retirement. An important response to lower fertility is to increase saving: declining fertility will lead to a smaller workforce than otherwise; a rational response is to make each individual in that smaller workforce more productive through increased investment in human and physical capital, and to that end, higher saving is important provided (and the proviso is crucial) that it leads to investment in productive assets.<sup>35</sup>

*Problems with a voluntary approach.* In the simple economic model, individuals save the optimal amount over their working life, retire at the optimal time, and convert an optimal fraction of their savings into an annuity (i.e., a monthly or annual pension payment for life).<sup>36</sup>

In the face of complexity, many individuals make bad choices (violating conditions 3 and 4 in [Box 11.2](#)) and behave in ways that are at odds with economic rationality (condition 5). Individuals often do not save enough, retire too early, delay choice or make no choice, choose an unsuitable advisor, and/or choose an unsuitable portfolio.<sup>37</sup>

It is a major policy error to assume widespread good financial literacy. An international survey of financial literacy asked respondents three questions.<sup>38</sup> The first was: 'If you have \$100 in a bank account and the interest rate is 2%, how much money would you have in your account after five years: \$102, less than \$102, or more than \$102?' Although the other two questions were equally simple, only about 35% of respondents in the US answered all three questions correctly, and in Japan and New Zealand only 25%. Additionally, financially literate people may not devote sufficient time and energy to making complex choices – we may think of these twin problems as 'Can't' and 'Won't'.

Problems also arise on the supply side because firms may exploit asymmetric information through high charges and/or biased advice. In addition, though often overlooked, administrative charges matter greatly: if a pension fund charges 1% of a worker's accumulation per year, over a full career the worker's accumulation (and hence their pension) will be 20% smaller than without the administrative charge.<sup>39</sup> That figure is not opinion but simple arithmetic fact.

These problems contrast sharply with the view that government involvement should be minimised.

*Different responses to rising pension spending.* Government responses include:

- Reducing benefits.
- Increasing contributions.
- Raising pension age over time.
- Reinforcing incentives to save, intended to increase national output.
- Adopting a mix of these policies.
- Leaving painful reform to later governments.

*Ways of organising pensions.* In a *funded plan*, pensions are paid out of a fund built over a period of years from member contributions. Thus, funding is a method of accumulating financial assets that are exchanged for goods at a later date. In a *Pay-As-You-Go plan*, pensions are paid out of current contributions, relying on the state's ability to tax the working population to pay the pensions of retired workers.

A separate dimension is the relationship between a worker's contribution history and their resulting benefit:

- In a *defined-contribution plan*, the worker accumulates a set of assets which finance their consumption in retirement, either by drawing down capital or through an annuity.
- In a *defined-benefit plan*, a worker's pension is based on a measure of length of service and the worker's final pay or some form of career average. The pension takes the form of an annuity covering the individual and frequently also their partner.

The relative merits of Pay-As-You-Go and funding have been debated widely, with questions about the right economic model, empirical magnitudes (e.g., life expectancy in 2050), the quality of a country's government, and the political economy of reform and ideology.<sup>40</sup>

*No single best system.*<sup>41</sup> Pensions have multiple objectives, including consumption smoothing (e.g., redistributing from ones younger to ones older self), insurance, poverty relief, and redistribution. The pursuit of those objectives faces a series of constraints, including fiscal capacity, institutional capacity, behavioural parameters, and the shape of the income distribution (a heavier lower tail increases the need for poverty relief).

There is no single best system because (a) across countries and over time policymakers will attach different relative weights to the objectives, and (b) the pattern of economic, institutional, and political constraints will differ. If the objectives differ and the constraints differ, the optimum will generally also differ.

*Resulting policy directions.* Pension systems vary considerably:

- Chile has a system which comprises a tax-financed non-contributory pension for low- and middle-income workers complemented by a defined-contribution plan organised through mandatory contributions to individual funded accounts from competing regulated providers. Australia has a similar strategy.
- Canada has a national partially-funded defined-benefit plan, supplemented by a tax-financed non-contributory pension for low- and middle-income workers.
- Sweden has a partially-funded national plan paying benefits that have a broadly actuarial relation to a worker's total contribution record (known as a notional defined-contribution plan<sup>42</sup>), supplemented by a tax-financed pension guarantee for low earners.
- The Netherlands has a non-contributory tax-financed pension along with fully-funded occupational plans.

The range of options widens with increasing fiscal and institutional capacity.<sup>43</sup> Thus, a low-income country may be able to offer only a small income-tested benefit, perhaps with subsidies of some basic commodities. With greater capacity, a country could offer a non-contributory pension or a simple Pay-As-You-Go contributory pension, though noting that the reach of a contributory plan is reduced by informal labour-market activity.

## V. A view to the future

Labour market relations are changing.<sup>44</sup> In 1950, the main labour market connection in OECD countries was long-term, full-time, formal employment. Today, portfolio careers are common, including spells of employment, part-time employment, self-employment, unemployment, and time outside the paid labour force. In addition, precarious employment, like zero-hour contracts and work in the gig economy, are common.

Levy argues that employment-related social insurance contributions fail to cover all workers in OECD countries because labour market relations have become more diverse in the ways described in the previous paragraph, and in LMICs because they discourage formal employment.<sup>45;46</sup> Thus, there is some convergence between advanced economies with their historical archetype of formal employment, and developing economies with continuing informality and movements of workers between formal and informal work.

Levy therefore suggests a move away from employment-related finance. Clearly, benefits aimed at consumption smoothing, such as an earnings-related pension, require an explicit contribution. However, benefits whose primary aim is poverty relief (e.g., basic pensions) or insurance (e.g., healthcare) are better financed from broadly-based taxation.

Looking into the future, pension contributions could be based on consumption spending rather than income, for example, as a percentage top slice of a person's credit or debit card payments, as illustrated by an experimental programme in Mexico.<sup>47;48</sup>

## VI. Some takeaways

### 1. Analytical conclusions

**Conclusion 1:** *The Washington Consensus adopts an over-simplified economic model.* As noted, a series of Nobel prizes since 1995 have been awarded for fundamental research published in the 1970s and 1980s that identifies multiple potential market failures. The Washington Consensus reflects economic theory that pre-dates those findings. The fuller economic model facilitates policy based more closely on the world as it is, not a world as some people might imagine it.

**Conclusion 2:** *Well-designed policy should be a thoughtfully assembled mosaic.* The elements of the mosaic in [Boxes 11.1–11.4](#) are neither a mechanistic template nor an invitation to random artistry. Instead, they establish an agenda for discussion of options based on a strategic logic. The mosaic can show more complex patterns than a binary market-state classification. Food, although mostly provided by the market, is not a pure market activity, partly because of extensive regulation on hygiene and labelling. Equally, the UK National Health Service is not fully public; the service has never grown its own food for hospital patients, and it buys much of its equipment and pharmaceutical drugs from the private sector.

Within the elements of the mosaic, different intellectually honest people could reach different conclusions because of:

- Differences in ideology, for example, about the role of the state or about the relative weights accorded poverty relief and other objectives, e.g., a greater weight to poverty relief leads to increased distributional activity.
- Different views about the appropriate theory, e.g., how to model individual behaviour in the face of uncertainty.
- Different empirical views, for example about a country's fiscal or institutional capacity, or about the extent of market failures, e.g., whether financial education could empower better choices about pensions and retirement, or the extent to which compliance with contracts (e.g., for hospital cleaning) can be monitored and enforced.
- Different views about political economy, for example, whether citizens regard their pensions as safer based on a Pay-As-You-Go promise by government or as owners of capital.

**Conclusion 3: *Ideology in the right place.*** The distinction between the *objectives* of a policy and the *mechanisms* for achieving it, i.e., between the ‘What’ and the ‘How’, is central. The primary place for ideology is the choice of objectives, but, once objectives have been agreed, the choice of mechanism has a substantial technical dimension. Whether a particular good or service is provided publicly or privately should be based on which mechanism more nearly achieves the chosen objectives. Thus, market versus state provision should be regarded as a contingent matter rather than an item of dogma. Okun presents a classic defence of the mixed economy on broadly similar grounds.<sup>49</sup>

How, then, should we choose between different methods? If the assumptions in Boxes 11.2 and 11.3 broadly hold, private markets, with regulation where appropriate, are likely to be more efficient, and distributional objectives generally better served by *income* transfers.

In contrast, where the assumptions fail, intervention in the form of public production and allocation may increase efficiency, and equity can be enhanced by *in-kind* transfers, e.g., free or heavily subsidised education or healthcare.

The differences between the Washington Consensus and the London Consensus are clear. Instead of adopting a solution – market allocation – as the default, the approach is to adopt a process for deciding which mosaic pattern to use in pursuit of given objectives, ranging from largely unconstrained individual choice and market allocation (e.g., clothes) through models that constrain choice (e.g., by nudges, such as automatic enrolment in a pension plan), through models with mainly public finance (e.g., healthcare) and/or mainly public finance and public delivery (e.g., school education).

## 2. Policy conclusions

**Conclusion 4: *Practical experience confirms the theory.*** Institutions that ignore market imperfections face predictable problems. Private unemployment insurance is not offered. Private medical insurance faces predictable gaps in coverage and upward pressures on medical spending. Workers and pensioners often do not behave as predicted by the simple model. Instead, they often make poor choices about saving and retirement and respond sluggishly, if at all, to differences in administrative charges by different funds. An infamous example of policy based on the simple economic model was the ill-fated UK mini-budget of September 2022.<sup>50</sup> In contrast, institutions that go with the grain of economic theory, such as social insurance, have broadly stood the test of time. The literature on social investment fits into the fuller model as a discussion about the balance between spending on income transfers and investment in health and skills.<sup>51;52;53</sup>

**Conclusion 5: *Insurance matters – arguably more than ever.*** There are good reasons for thinking that government as the insurer of last resort will become increasingly important. Risk and uncertainty are likely to intensify: economic (another economic crisis), political (instability and war), environmental

(accelerating effects of climate change), technical (artificial intelligence, nuclear safety) and social (the multiple effects of a changing age structure).<sup>54;55</sup> Critically, these are (a) mostly uncertainties and (b) are mostly systemic. Those twin problems reinforce the centrality of the welfare state – not only a device to address individual risk but also to protect against systemic uncertainties. Actuarial insurance cannot address problems like the 2008 economic crisis, COVID-19 and war in Europe in the 2020s.

**Conclusion 6:** *There are good but no perfect solutions.* Earlier discussion outlined cases where industries were rightly privatised, but they may still face problems as private firms. The same is true for activities that are rightly in the public sector. Social insurance covers risks where private policies would leave gaps, but publicly organised unemployment insurance faces similar problems of moral hazard as hypothetical private policies, but governments have greater powers to impose checks; and different strategies for healthcare will have different and predictable pressure points. The same is true for pension systems.

The conclusion that there are no perfect solutions is not mere logic chopping, but important for correct diagnosis and, hence, sound policy prescriptions. A common fallacy is that ‘X does not work well, therefore the answer is Y’. That the UK National Health Service has imperfections does not automatically translate into an argument for privatisation. The issue for policy design is whether the strategy is sound. If so, the implication is to keep the strategy and work within it to improve outcomes either by fixing correctable design flaws or by improving implementation. It is important that the best does not become the enemy of the good. Only if the strategy is flawed, is there on that account a strong case for radical reform.

**Conclusion 7:** *A wider range of policy tools.* The mosaic of potential interventions that emerges from the fuller economic model offers a wider range of policy designs and types of intervention. Examples include recognition of:

- Less choice, e.g., of pension options, as a deliberate part of good design.
- Nudges such as automatic enrolment in a default pension plan, or simply for a cafeteria to have smaller plates.
- A greater role for quality assurance where (a) consumers are not well-enough informed to do their own quality assurance *and* (b) the costs of getting it wrong are high, for example, hospital cleaning.

It should now be clear why the UK has a National Health Service but not a National Food Service. Food, subject to some regulation, broadly conforms with the assumptions in [Box 11.2](#). On the demand side, healthcare faces major problems of imperfect consumer information, and the supply side of the market for medical insurance fails badly to comply with the conditions in [Box 11.3](#).

Thus, if we want to protect grandma against malnutrition, the efficiency arguments point to income transfers, with grandma using her pension to buy food in the same shops as the rest of us, at the same prices. In contrast, to ensure that grandma has good access to medical care, the efficiency arguments point to provision at a zero or below market price. Counterintuitively, the answer to the question of how best to pursue distributional objectives is given largely by the answer to the efficiency question.

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## Notes

<sup>1</sup> Barr (2020).

<sup>2</sup> Barr (2001).

<sup>3</sup> Barr (2005).

<sup>4</sup> Levy (2008).

<sup>5</sup> Woolley (2014).

<sup>6</sup> Barr (2020).

<sup>7</sup> As explained more fully in section II, an actuarial insurance premium is based on (a) the probability that the individual buying insurance will experience the loss in question (e.g., a car accident), and (b) the size of the loss against which they are insuring.

<sup>8</sup> Ravallion (2016).

<sup>9</sup> UK Equalities Review (2007).

<sup>10</sup> Shafik (2021).

<sup>11</sup> Atkinson and Bourguignon (2015).

<sup>12</sup> Lustig (2018).

<sup>13</sup> Barr (2020).

<sup>14</sup> Barr (2020).

<sup>15</sup> Thaler (2015).

<sup>16</sup> Ostry et al. (2014).

<sup>17</sup> Stampini et al. (2023).

- <sup>18</sup> Rawls (1971). The Veil of Ignorance is a hypothetical construct by the philosopher John Rawls in which rational individuals negotiate a just constitution for a country in which they will have to live, but without knowing who they will be (i.e., whether they will be a chief executive or a sharecropper).
- <sup>19</sup> Velasco (2020).
- <sup>20</sup> Barr (2020).
- <sup>21</sup> Kay and King (2020).
- <sup>22</sup> Arrow (1963).
- <sup>23</sup> Barr (2020).
- <sup>24</sup> OECD (2021).
- <sup>25</sup> Barr (2020).
- <sup>26</sup> Barr (2001).
- <sup>27</sup> Akerlof (1970).
- <sup>28</sup> Shaw (2011).
- <sup>29</sup> Ortiz-Ospina and Roser (2017).
- <sup>30</sup> This is not surprising, since Alain Enthoven, a Stanford faculty member and one of America's leading health economists, chaired the committee that designed the plan. For further details, see Stanford Medicine Health Care (2025).
- <sup>31</sup> Barr (2010).
- <sup>32</sup> Barr (2020).
- <sup>33</sup> Barr and Bosch (forthcoming).
- <sup>34</sup> Barr (2023).
- <sup>35</sup> Barr (2021).
- <sup>36</sup> For discussion of the analytical errors in applying a first-best approach to pensions see Barr and Diamond (2010); on limits to choice, see Barr (2022a).
- <sup>37</sup> Barber and Odean (2013).
- <sup>38</sup> Lusardi and Mitchell (2014).
- <sup>39</sup> Barr and Diamond (2010), Box 7.2.
- <sup>40</sup> Barr (2023); Orenstein (2011).
- <sup>41</sup> Barr and Diamond (2010), Ch. 2.

- <sup>42</sup> Barr and Diamond (2010), Ch. 2.
- <sup>43</sup> Barr and Diamond (2009).
- <sup>44</sup> Packard et al. (2019); or more briefly, Barr (2018).
- <sup>45</sup> Levy (2008).
- <sup>46</sup> Levy (2021).
- <sup>47</sup> Hernández et al. (2020).
- <sup>48</sup> Walker (2018).
- <sup>49</sup> Okun (1975).
- <sup>50</sup> Barr (2022b).
- <sup>51</sup> Shafik (2021).
- <sup>52</sup> Hemerijck (2013).
- <sup>53</sup> Hemerijck (2017).
- <sup>54</sup> OECD (2003).
- <sup>55</sup> Reis and Velasco, chapter 6 in this volume.

## References

- Akerlof, G. A. (1970) ‘The Market for “Lemons”: Qualitative Uncertainty and the Market Mechanism’, *The Quarterly Journal of Economics*, 84: 488–500. <https://doi.org/10.2307/1879431>
- Arrow, K. F. (1963) ‘Uncertainty and the Welfare Economics of Medical Care’, *American Economic Review*, 53: 941–73.
- Atkinson, A. B. and Bourguignon, F. (eds) (2015) *Handbook of Income Distribution*, Volume 2A–2B, North-Holland: Elsevier.
- Barber, B. M. and Odean, T. (2013) ‘The Behavior of Individual Investors’, in Constantinides, G., Harris, M. and Stulz, R. (eds) *Handbook of the Economics of Finance*, Elsevier: 1533–1569. <https://doi.org/10.1016/B978-0-44-459406-8.00022-6>
- Barr, N. (2001) *The Welfare State as Piggy Bank: Information, Risk, Uncertainty, and the Role of the State*, Oxford and New York: Oxford University Press. <https://doi.org/10.1093/0199246599.001.0001>
- Barr, N. (ed) (2005) *Labor Markets and Social Policy in Central and Eastern Europe: The Accession and Beyond*, Washington, DC: The World Bank. <https://openknowledge.worldbank.org/server/api/core/bitstreams/490f9f70-5063-52bb-8bfb-fedcd051e0f4/content>

- Barr, N. (2010) 'Long-term Care: A Suitable Case for Social Insurance', *Social Policy and Administration*, 44(4): 359–374. <https://doi.org/10.1111/j.1467-9515.2010.00718.x>
- Barr, N. (2018) 'Shifting Tides', *Finance and Development*, 55(4): 16–19. <https://doi.org/10.5089/9781484386194.022>
- Barr, N. (2020) *The Economics of the Welfare State*, 6th edn., Oxford and New York: Oxford University Press.
- Barr, N. (2021) 'Pension Design and the Failed Economics of Squirrels', *LSE Public Policy Review*, 2(1): 5, 1–8. <https://doi.org/10.31389/lseppr.40>
- Barr, N. (2022a) 'Pensions: How Much Choice?', CENIE International Centre on Ageing [21 April]. <https://cenie.eu/en/pensions-how-much-choice>
- Barr, N. (2022b) 'Trussonomics for Dummies', *LSE Politics and Policy* [28 September]. <https://blogs.lse.ac.uk/politicsandpolicy/trussonomics-for-dummies/>
- Barr, N. (2023) 'Individual Funded Pension Accounts and the World Bank: Evolving Views', *Social Insurance, Theory and Practice*, 158 (3): 63–75. <https://doi.org/10.5604/01.3001.0053.8834>
- Barr, N. and Bosch, M. (forthcoming) 'Pensions in Low- and Middle-Income Countries', in Hanna, R. and Olken, B. (eds) *The Handbook of Social Protection: Evidence and New Directions for Low- and Middle-Income Countries*, Cambridge: MIT Press.
- Barr, N. and Diamond, P. (2009) 'Reforming Pensions: Principles, Analytical Errors and Policy Directions', *International Social Security Review*, 62(2): 5–29. <https://doi.org/10.1111/j.1468-246X.2009.01327.x>
- Barr, N. and Diamond, P. (2010) *Pension Reform: A Short Guide*, New York and Oxford: OUP. <https://doi.org/10.1093/acprof:oso/9780195387728.001.0001>
- Hemerijck, A. (2013) *Changing Welfare States*, Oxford: Oxford University Press.
- Hemerijck, A. (2017) *The Uses of Social Investment*, Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780198790488.003.0035>
- Hernández, A., Galindo, F., López, J. and Salas, F. (2020) 'Saving with Gusto', *Journal of Applied Business and Economics*, 22(13). <https://doi.org/10.33423/jabe.v22i13.3899>
- Kay, J. and King, M. (2020) *Radical Uncertainty: Decision-making for an Unknowable Future*, New York: W. W. Norton.
- Levy, S. (2008) *Good Intentions, Bad Outcomes: Social Policy, Informality, and Economic Growth in Mexico*, Washington DC: The Brookings Institution.

- Levy, S. (2021) 'Informality – Addressing the Achilles Heel of Social Protection in Latin America', WIDER Annual Lecture 23, UNU-WIDER. <https://www.wider.unu.edu/publication/informality-%E2%80%93-addressing-achilles-heel-social-protection-latin-america>
- Lusardi, A. and Mitchell, O. S. (2014) 'The Economic Importance of Financial Literacy: Theory and Evidence', *Journal of Economic Literature*, 52(1): 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Lustig, N. (ed) (2018) *Commitment to Equity Handbook: Estimating the Impact of Fiscal Policy on Inequality and Poverty*, Washington, DC: The Brookings Institution.
- Okun, A. M. (1975) *Equality and Efficiency: The Big Tradeoff*, Washington, DC: The Brookings Institution.
- OECD (2003) *Emerging Risks in the 21st Century: An Agenda for Action*, Paris: OECD.
- OECD (2021) *OECD Economic Surveys: Denmark*. OECD Publishing, Paris. [https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/12/oecd-economic-surveys-denmark-2021\\_76fa110a/86f7b2d9-en.pdf](https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/12/oecd-economic-surveys-denmark-2021_76fa110a/86f7b2d9-en.pdf)
- Orenstein, M. A. (2011) 'Pension Privatization in Crisis: Death or Rebirth of a Global Policy Trend?', *International Social Security Review*, 64(3): 65–80. <https://doi.org/10.1111/j.1468-246X.2011.01403.x>
- Ortiz-Ospina, E. and Roser, M. (2017) 'Healthcare Spending', Published online at Our World in Data. <https://ourworldindata.org/financing-healthcare>
- Ostry J., Berg, A. and Tsangarides, C. G. (2014) *Redistribution, Inequality, and Growth*, Washington, DC: IMF. <https://doi.org/10.5089/9781484352076.006>
- Packard, T., Gentilini, U., Grosh, M., O'Keefe, P., Palacios, R., Robalino, D. and Santos, I. (2019) *Protecting All: Risk Sharing for a Diverse and Diversifying World of Work*, Washington, DC: The World Bank. <https://doi.org/10.1596/978-1-4648-1427-3>
- Ravallion, M. (2016) *The Economics of Poverty: History, Measurement, and Policy*, Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780190212766.001.0001>
- Rawls, J. (1971) *A Theory of Justice*, Cambridge, MA: Belknap Press.
- Reis, R. and Velasco, A. (2025) 'Fiscal Policy and Public Debt', in Besley, T., Bucelli, I. and Velasco, A. (eds) *The London Consensus: Economic Principles for the 21st Century*, London: LSE Press.
- Shafik, M. (2021) *What We Owe Each Other: A New Social Contract*, London: The Bodley Head. <https://doi.org/10.1515/9780691220277>

- Shaw, B. G. (2011) *The Doctor's Dilemma*, London: Constable.
- Stampini, M., Medellín, N. and Ibarrarán, P. (2023) 'Cash Transfers, Poverty, and Inequality in Latin America and the Caribbean', III Working Papers (116). International Inequalities Institute, London School of Economics and Political Science, London, UK. <https://doi.org/10.18235/0005235>
- Stanford Medicine Health Care (2025) *Benefits Guide 2025. Choose You, Live Better*. [https://cdn.phenompeople.com/CareerConnectResources/SHCAUS/documents/2025SHCBenefitsGuide\\_NonRep\\_SEIUFINAL-1731683516891.pdf](https://cdn.phenompeople.com/CareerConnectResources/SHCAUS/documents/2025SHCBenefitsGuide_NonRep_SEIUFINAL-1731683516891.pdf)
- Thaler, R. H. (2015) *Misbehaving: The Making of Behavioral Economics*, New York: W. W. Norton & Co.
- UK Equalities Review (2007) *Fairness and Freedom: The Final Report of the Equalities Review*. <https://justice.org.uk/equalities-review/#:~:text=The%20Equalities%20Review%20was%20set,the%20Commission%20for%20Equality%20and>
- Velasco, A. (2020) 'Are We All Keynesians Again?' CGTN Opinion [16 August]. <https://news.cgtn.com/news/2020-08-26/Are-we-all-Keynesians-again--Tgxckqpv6U/index.html>
- Walker, O. (2018) 'How Millennials and Savings Apps are Making Asset Managers Wake up and Smell the Coffee', *Financial Times* [14 October]. <https://www.ft.com/content/567f4684-8084-3f5b-82b0-9a150de7b3a6?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8>
- Woolley, P. (2014) 'The Fallibility of the Efficient Market Theory: A New Paradigm', *CFA Institute Conference Proceedings Quarterly*, Second Quarter, 1–4. <https://www.fmg.ac.uk/sites/default/files/2021-02/Woolley-CFA-April-2014-cp.v31.n2.6.pdf>

# Response to Nicholas Barr by Santiago Levy

Professor Barr provides an excellent review of the theoretical justifications for the welfare state, highlighting two central messages. First, contemporary economic theory strongly supports the need for a welfare state, yet its exact contours should depend on objectives and context, recognising that a uniform solution will not work across very diverse circumstances. Second, policy prescriptions should be based on specific objectives and the nature of the problem/market and on considerations of government incentives and administrative capabilities.

I largely concur with Barr's arguments. My value added in this comment is to focus on their implications for Latin America, while noting that my insights may be useful to other regions with similar characteristics.

## I. No welfare in the Washington Consensus

Recall the 10 dictums of the Washington Consensus:<sup>1</sup>

1. Reduce national budget deficits.
2. Redirect spending from politically popular areas towards neglected fields with high economic returns.
3. Reform the tax system.
4. Liberalise the financial sector with the goal of market-determined interest rates.
5. Adopt a competitive single exchange rate.
6. Reduce trade restrictions.
7. Abolish barriers to foreign direct investment.
8. Privatisate state-owned enterprises.
9. Abolish policies that restrict competition.
10. Provide secure, affordable property rights.

These dictums were inspired by the failures of Latin America during the 'lost decade', a period in the 1980s characterised by economic stagnation and debt crises in the region. They were mostly focused on issues of macroeconomic stabilisation, and international trade and foreign investment, while they said nothing about social insurance, pensions, inequality, or poverty. Certainly, there was no mention of a welfare state.

With the benefit of hindsight, it is clear that as a development model the Washington Consensus was incomplete and, ultimately, flawed. There was an expectation that macroeconomic stability combined with competitive product markets would lead to better functioning labour markets. Greater coverage of social insurance and reduced inequality would follow (aided by investments in human capital). As we now know, by-and-large countries in Latin America achieved macroeconomic stability and all of the countries in the region invested in human capital. Some opened to trade more than others, and a few achieved notable export success. However, few, if any at all, experienced socially inclusive growth (exhibit 1: Mexico).

## **II. The evolution of social protection in Latin America**

Countries in Latin America began constructing their welfare states long before the Washington Consensus, in the 1920s and 1930s in South America, and in the 1940s and 1950s everywhere else in the region.<sup>2</sup> Throughout the region, the cornerstone of the welfare state was the 'Bismarckian model', made up of three components:

1. A bundle of pensions, health and other programmes like day care, housing, and labour training for salaried (or dependent) workers paid from an earmarked wage-based tax.
2. Protection against the loss of employment mostly through stringent firing conditions, supplemented by unemployment insurance in some cases.
3. Minimum wages, sometimes set relatively high in the wage distribution.

In the early 1990s, coverage of the Bismarckian model was far from universal. Though it varied across countries, for the region as a whole coverage was less than 50% of the labour force. Thus, in parallel to the implementation of the Washington Consensus, and very much linked to the pressures for greater redistribution associated with the transition to democracy, most countries expanded the coverage of social protection. However, expansion did not follow any over-arching view. It took place through a series of 'scheme-by-scheme' piecemeal additions of programmes on an ad-hoc basis, mostly through a mix of:

- Targeted income transfers to redistribute income to the poor, often through Conditional Cash Transfer programmes (a Latin American innovation), but sometimes through transfers in-kind.
- Parallel social insurance programmes, mostly for health and pensions, financed from general revenues, like income, trade and value-added taxes.

In practice, programme combinations and targeting criteria varied substantially, and the insurance and redistribution objectives were conflated. General principles, like the ones laid out in Barr's chapter as to when and how to intervene, were de facto set aside and superseded by a desire to increase the coverage of social protection to those excluded from the Bismarckian model, but an unwillingness to reform the underlying tax, labour, and social insurance regulations that limited its coverage.

Figure 11.2 provides a stylised description of the resulting welfare state for the 'typical' country in the region. The columns refer to the insurance objective and divide the working-age population between those covered by the Bismarckian model (A + B), commonly referred to as formal workers, and those receiving some form of insurance through parallel programmes; informally employed workers, the unemployed and those outside the labour force (C + D). In turn, the rows refer to the redistribution objective, with individuals divided by an exogenously determined poverty line. Those below it (B + D) receive income transfers from targeted programmes, sometimes with behavioural conditions (like in Conditional Cash Transfer programmes); those above it (A + C) do not.

Ignoring targeting errors, in this 'Latin American welfare state' everybody receives some social protection, although the scope of insurance provided to formal workers is wider as it includes coverage against disability, death, and loss of employment. The quality of protection is usually also better, although differences in health services between formal and informal workers or those who are unemployed or outside the labour force have narrowed, and in some countries like Colombia even disappeared.

**Figure 11.2: A stylised description of the Latin American welfare state**

|                |          | Insurance |                                             |
|----------------|----------|-----------|---------------------------------------------|
|                |          | Formal    | Informal + unemployed + out of labour force |
| Redistribution | Non-poor | A         | C                                           |
|                | Poor     | B         | D                                           |

$$A + B + C + D = \text{working age population}$$

Source: created by author.

Most countries in the region have more individuals in group C than in D; and, in parallel, more in D than B. In other words, most informal workers are not poor, although the majority of the poor are informal. As a result, countries allocate anywhere between 2–4% of gross domestic product (GDP) to social insurance programmes for individuals in groups C + D, but around 0.5% to targeted poverty programmes for individuals in groups B + D.

Critically, and contrary to what is often assumed, individuals move between the columns. Throughout their lifetime, they transit from formal to informal employment, or to unemployment, and in and out of the labour force. Indeed, two facts are well established (for countries where data is available): first, the average individual is formally employed only about 50% of the time that they work. Second, time spent in formality is positively correlated with incomes.

### III. Challenges of the Latin American welfare state

Given these labour market dynamics, the welfare state described in [Figure 11.2](#) has two substantive problems. The first problem is that it is ineffective. Protection against risks is erratic because workers are protected against disability, death, or loss of unemployment only half of the time that they work, while they and their families bear risks on their own the other half of the time. Moreover, when workers are formal, they contribute to a retirement pension (defined benefit or defined contribution plans), but the majority of them will not get one, because they will not accumulate the required years of contributions; instead, they will bear the risks associated with longevity on their own. Lower-income workers will also be relatively less protected than higher-income workers because they spend less time in formality.

The ineffectiveness of the type of welfare state depicted in [Figure 11.2](#) is reflected in its weak impact on income inequality. While there is some country heterogeneity, for the region as a whole, the difference in the Gini coefficients (a measure of income inequality, ranging from 0 to 1 where 0 denotes perfect equality and 1 denotes perfect inequality) between incomes before and after taxes and transfers is very small, from 0.51 to 0.49. In the OECD, the difference is much larger, from 0.47 to 0.30.

The second problem is that it punishes productivity. When workers are formal, they and their employer contribute to a pension that half of the workers will eventually not get access to, or they contribute to health services that are often of low quality. For these and other reasons, contributions are undervalued. De facto, formality is taxed. Furthermore, high minimum wages sometimes create entry barriers and firms that hire workers formally bear large contingent costs of firing, which ultimately result in less formal hiring.

Meanwhile, informal employment is subsidised because workers receive some benefits – health services, a pension, maybe day care services – that neither they nor the firm they are associated with will have to pay for. Sometimes even illegal behaviour by firms is subsidised, particularly when the firm is small and enforcement of labour and social insurance laws is

proportional to firm size: their salaried workers receive benefits even if they do not enrol them in the Bismarckian scheme.

In some countries, targeted poverty programmes create poverty or informality traps, depending on the inter-phase between targeting rules and social insurance programmes; exactly the opposite of what is needed to incorporate poor workers into higher productivity jobs and break the intergenerational transmission of poverty.

The incentive structure implicit in the overall scheme depicted in [Figure 11.2](#) affects occupational choices, the distribution of firms and firm dynamics. Self-employment or employment in firms with a maximum of five workers is often close to half or more of all employment. The patterns of firm exit, entry, and survival are distorted, as small informal firms are subsidised while larger formal ones are taxed. Needless to say, this hurts aggregate productivity because it is well established that the productivity of capital and labour is substantially higher in the formal sector.

Of course, many other factors impact occupational choices and firm behaviour. However, the patterns of resource misallocation that we observe in the region are consistent with the ones induced by the taxes, subsidies, and regulations that are part of the dual nature of its welfare state.

#### **IV. Concluding remarks and next steps**

Since the onset of the Washington Consensus, Latin America has made significant efforts to increase the coverage of social protection. Between 1990 and 2020 (before the COVID-19 pandemic), the average country in the region increased public spending on social protection from 7–15% of GDP. Nevertheless, Latin America continues to be one of the most unequal regions in the world and has poverty rates that are high relative to countries' per capita income. At the same time, total factor productivity has stagnated and even decreased in some Latin American countries. While many other factors can explain part of these outcomes, a welfare state that is relatively ineffective in pursuing its own aims and generates persistent misallocation of resources is certainly an important part of the explanation.

What is next? First, we need to recognise that socially inclusive growth is impossible with dysfunctional welfare states and that it is time (in fact, long overdue) to give up on the Bismarckian model. Second, we need to recognise that the goal of universal coverage of social protection often expressed by governments in the region should not be pursued through an ever-expanding combination of social protection programmes, each with its own sources of finance, rules, and targeting criteria. Third, we need to recognise that social protection programmes affect the behaviour of firms and workers, and that if productivity stagnates the welfare state will be fiscally unsustainable.

Looking forward, Latin America needs a new vision of its welfare state, with universalism at its core. This does not mean that redistribution and social insurance programmes should be the same across all countries. In fact, the

principles laid out in Barr's chapter would advise against this. Barr argues, and I agree with him, that one size does not fit all. Policy prescriptions should be based on specific objectives and constraints. Because these vary across countries, so should the design of the optimal welfare state.

A new consensus, labelled the London Consensus or something else, should not be about specific policy recommendations for all; it should be about principles. Social protection policy needs to adapt to a context where labour market dynamics imply that individuals have different labour status throughout their life cycle; it should facilitate rather than hinder productivity growth; and it should be fiscally sustainable. Reaching a consensus about the urgent need to renovate the welfare state in Latin America and about the principles that should guide this endeavour would be a significant achievement.

## Notes

<sup>1</sup> Williamson (2004).

<sup>2</sup> Levy and Cruces (2021).

## References

Levy, S. and Cruces, G. (2021) 'Time for a New Course: An Essay on Social Protection and Growth in Latin America', United Nations Development Program, Latin American and Caribbean Bureau, Working Paper Series 24, New York.

Williamson, J. (2004) *A Short History of the Washington Consensus*, Washington, DC: Peterson Institute for International Economics.

# Response to Nicholas Barr by Paul Johnson

Barr's conclusions that the Washington Consensus is 'oversimplified', that 'well-designed policy should be a thoughtfully assembled mosaic', and that there are 'good but no perfect solutions', should be obvious to anyone who has looked at the design, theory, or practice of the welfare state. Clearly, the market alone cannot adequately address the needs for healthcare or pensions, let alone for unemployment insurance or poverty relief. That does not mean the private sector has no role to play. Barr's statements are all descriptive of the welfare state in most developed countries, as well as prescriptive. But economics does not support simply minimising state involvement, nor ruling out the private sector. It is much more complicated than that. Optimisation depends on the extent of market and government failures, the degree of concern for redistribution, the need for insurance, and a range of other factors.

In practical terms, where does this stance lead us? For a start, it takes us one step further than the ideologues on either end of the spectrum. A publicly-funded, and largely publicly-provided, universal healthcare system may be anathema to proponents of the Washington Consensus. *Any* use of the private sector within that system appears to be anathema to the opposite side of the ideological spectrum in the United Kingdom. One side ignores the well-known market failures in health insurance and the extraordinary experience of the United States in overprovision of healthcare at exorbitant costs. The other side dismisses the idea that public management can ever fail and ignores the fact that significant elements of healthcare provision are run privately in all countries, for good reasons. The ideas that the UK's National Health Service should be either fully privatised or should make no use of the private sector at all are both patently absurd.

But how and where do we place the boundaries to construct the mosaic of policies advocated by Barr? How do we find the good but imperfect solutions? Barr provides a series of general guidelines as to where markets are likely to be more or less effective, and where government failure is more or less likely. These will be familiar to any student of welfare economics. We generally know when insurance markets will fail, when moral hazard and adverse selection are likely to be problematic, and when governments are likely to lack the information or the ability to replicate incentives that make markets function. However, I want to illustrate some of those difficulties and trade-offs by reference to three aspects of welfare policy specific to the UK: pensions, student finance, and healthcare.

## I. Pensions

The perspective on the state's role in pension provision in the UK has undergone significant changes over the past 80 years. Beginning in 1945, we had a flat-rate state pension, set close to subsistence level, funded by flat-rate contributions, creating an actuarially 'fair' social insurance system. The flat-rate contributions quickly gave way to earnings-related contributions, and in the late 1970s a substantial earnings-related pension was added on top. This adjustment acknowledged the importance of private sector occupational defined benefit schemes, allowing individuals to opt out of the state earnings-related pension. During the 1980s, those opt-out rights were extended to personal, defined contribution pensions as a broader role was recognised for the private sector. Mis-selling resulted in huge compensation schemes. The escalating costs of state earnings-related pensions, coupled with changing ideological perspectives, gradually led to the demise of the state earnings-related scheme, leaving just a flat-rate basic pension, amounting to slightly below 30% of median earnings. In part because of excess regulation, virtually all private sector employer-sponsored defined benefit schemes ceased to accept new members. A combination of complexity, cost, and short-sightedness meant that many private sector employees had no pension provision beyond their state pension. In response, auto-enrolment into private pensions was successfully introduced in the 2010s, with coverage now exceeding 80%. These private pension pots are tax privileged but come with no annuitisation requirement – they serve as a savings vehicle rather than guarantee a stream of income in retirement.

This thumbnail sketch of the development of UK pension policy lays bare some of the trade-offs and complexities inherent in designing policy, each component contributing to the mosaic.

Across most developed countries, there is consensus that it is the state's responsibility to provide a minimum income in retirement. That can be means-tested, as in Australia, universal, or contribution-based, or some combination thereof, each carrying its own set of advantages and drawbacks. Where disagreements often arise is in defining the state's role beyond this minimum provision, particularly in providing earnings replacement. While the state is capable of providing such replacement, doing so requires high levels of taxation, significant redistribution between generations, and a sustained cross-generational consensus. Simply leaving it to the private sector can lead to substantial under-saving and, in a complex market rife with information asymmetries, could result in considerable consumer detriment. Thus, careful and intelligent regulation is necessary. The success of auto-enrolment underscores the power of inertia and default options. State action, or inaction, is not neutral. Indeed, with so little opt out from auto-enrolment the difference between state compulsion and a strong default is less than might initially appear.

It is possible to rely largely on the state or the private sector for earnings replacement in retirement. The appropriate mix will depend to some extent on a country's political economy. In the UK, trust in the state to provide, and willingness to pay the level of taxes required, seemed to wane in the 1980s. No subsequent government has been willing to contemplate the increase in taxation that a return to state-provided earnings-related pensions would require. Belief in the social insurance system and a willingness to accept higher levels of taxation seems to run deeper in many other European systems. The economics are the same; the political choices have been different. Not that reliance on the private sector releases the state from responsibility. Such reliance still requires a central role for careful and appropriate state engagement and regulation to set boundaries for how the market works. This is complex, and can go wrong.

A central choice is about risk sharing. State provision allows risk sharing across and within generations. This principle is also evident in employer-sponsored defined benefit schemes, where the employer – and hence some combination of shareholders and current employees – assumes much or all of the risk. However, when these risks appeared too great, employers withdrew. In contrast, within individual defined contribution schemes there is no risk sharing in the accumulation phase and, without annuitisation, none during drawdown either. Consequently, beyond the basic state pension, there is no risk sharing in the UK pension system. All risks, whether pertaining to investment returns or longevity, are borne by the actor least able to bear it – the individual.

A similar risk burden is evident in our social care system, where state support is entirely means-tested. Individuals bear the risk of high care costs that cannot be mitigated through private insurance.

These situations underscore the need for state intervention through social insurance. In the case of pensions, the state used to compel annuitisation, hence sharing longevity risk, but has stepped back even from that. People can choose to annuitise, but market failures, including adverse selection and underestimation of life expectancy, persist. There is a case for more, rather than less, state involvement in pensions.

Finally, it is worth mentioning how the value of the basic pension and other state benefits for pensioners has changed over time. Nearly 30 years of consensus that the basic pension should grow only in line with prices was replaced by a 15-year consensus that it should grow each year by the higher of price inflation, earnings growth, or 2.5%. Once a trajectory is set, it proves exceedingly challenging to deviate from it. Under the current trajectory, benefits for those over pension age consistently rise relative to those for younger cohorts. Politicians feel unable to move away from this equilibrium. It is hard to take away something once it has been provided, even if we are talking about an indexation rule. The design of the welfare state is highly path-dependent, and any changes to it need to consider that.

## II. Student finance

Decisions about risk allocation are also central to the design of student finance policies. When higher education tuition is free, it is tax-financed. The students bear no risk – they gain the full benefit of higher earnings, and suffer no penalty for doing poorly in the labour market. Alternatively, a graduate tax concentrates the risk among graduates, but shares it among them. While graduates generally would pay more than under a pure tax-financed arrangement, high earners pay back more than the cost of their course and low earners less – resulting in risk sharing between them. A pure loan system gets rid of the redistribution and risk sharing. The incentive to earn well to pay back the loan is strong, but the unlucky and unsuccessful face high repayments as a fraction of their lifetime income.

The UK's student finance system is a hybrid of these models. Repayments are limited to the amount borrowed, albeit subject to the interest rate charged), and low earners pay back less than they borrowed, partly because there is an earnings threshold below which no repayments are required, and partly because debt is forgiven after a certain period. Adjusting these parameters can move the system closer to either a graduate tax or a pure loan. Until 2023, with a positive real interest rate, a 30-year repayment limit, and a relatively high earnings threshold, the system resembled a graduate tax. High earners paid back more than they borrowed, low earners much less. The majority was set not to pay back in full. By reducing the real value of the threshold, extending the repayment period to 40 years, and setting the interest rate equal to inflation, a set of reforms have moved the system much closer to a loan-based model. Most graduates will repay their loans in full, with high earners not repaying more than they borrowed or more than most modest earners.

These are all plausible choice parameters. A degree of cost and risk sharing between graduates and the population as a whole, and between high and low earning graduates, seems appropriate. Many possible designs would fit within a 'thoughtfully assembled mosaic'.

Most of these parameters have proven remarkably easy to adjust. The notion that the current system will endure 40 years is unrealistic. But one parameter will not shift – the tuition fee itself. Perceived as a loan, it has proven almost impossible to increase the fee even in line with inflation, and the real value of tuition fees has dropped precipitously since they were introduced, creating financial management problems for universities. Similar problems of policy stickiness are evident in other parts of the welfare state, such as the long periods of generous indexation of state pensions, as previously mentioned, as well as the persistent challenges in reforming social care funding.

The design of any aspect of the welfare state needs to consider these political economic constraints. Incorporating automatic indexation from the outset might help in cases like this. Mosaics, however thoughtfully assembled, can either become rigid and resistant to change or subject to constant meddling. We have residual elements in our pension system that hark back decades,

including a £10 Christmas bonus. At age 80 the pension payment rises by 25 pence. What has been given is hard to take away. In other areas, like the structure of tuition fee repayments the only constant is change. You could say the same for the system of vocational education post-16, but absolutely not for the apparently unchangeable system of academic A levels.

### III. Healthcare

The political and the economic perhaps butt up against one another more in the design of healthcare funding than anywhere else. Reform of the US system has been notoriously difficult. In the UK, former chancellor Nigel Lawson famously described the NHS as more akin to a national religion than a public service. Whatever the theoretical attractions of changing the funding model for the NHS, the benefits of doing so would be far outweighed by the costs associated with such an attempt. Given its reliance on public funding and the widespread support for a system that offers care that is free at the point of use, there are infinite options for the organisation of the system and the use of private provision within it. Many of the upheavals in the decades since the NHS was founded have been experiments with different ways of organising it, the use of internal markets, greater or lesser central control, and the use of private providers.

Barr effectively outlines the rationale for public funding of healthcare, highlighting multiple market failures and equity concerns that have made public provision the dominant model in affluent countries. Instead of getting lost in the details of optimal design – which in healthcare presents a far more complex mosaic than in any other part of the welfare state – I want to explore two different, but related issues: the scale of healthcare spending, and what happens when things start to go wrong.

One cannot consider the design of welfare systems – and healthcare systems – without grappling with their scale. In 2023–2024, the UK is projected to spend around 150 billion GBP on benefits for pensioners and over 120 billion GBP on benefits for children and those of working age. The Department of Health and Social Care (DHSC) will consume another 180 billion GBP. Together, these expenditures account for a fifth of national income. The proportion of current public services spending attributable to the DHSC has surged from around a quarter of the total at the start of the century to more than 40% by the mid-2020s, with further increases anticipated. Just accounting for planned increases in the workforce, spending will rise by a further 2% of national income by the mid-2030s. The UK's expenditure levels are not uncommon from an international perspective.

From the perspective of a rational economist, these trends are both understandable and predictable. Not only is the population ageing, medical salaries must also keep pace with salaries in the rest of the workforce. Additionally, technology is making more treatments available. Since healthcare is a superior good, as we get richer, we want more of it. There is no

point being better off if you are either sick or dead. But that does not mean that persuading the electorate to cough up more money to pay for it, or to accept greater cuts in other areas of public spending, will be easy. The only alternative is increased rationing. No amount of welfare economics is going to provide an answer to how those trade-offs should pan out.

Currently, we are going down all three routes. Healthcare spending is rising, putting pressure on both taxes, which are increasing, and spending on other public services, which is being squeezed. The increase in spending has not been enough to prevent serious additional rationing as evidenced by prolonged waiting times. Moreover, this is leading to more private spending, both through health insurance and out-of-pocket spending.

The design of the welfare state should consider political constraints on available resources for public spending. Such constraints can lead to behavioural responses, including more opting out of public provision by those who can afford it. Given the shortcomings of the private market, this could reduce overall efficiency. If there is also a constraint on total resources, such as medical personnel, at least some of that additional private spending may either further reduce public capacity or increase the prices the public sector has to pay.

## IV. Conclusions

Examining just these three areas of the welfare state suggests some additional guiding principles for action.

All analyses stress the role of the welfare state in creating mechanisms for risk sharing. In the UK, occupational pensions once facilitated significant risk sharing between different workers and generations. But these no longer exist, partly as a result of poorly designed regulation. The end of compulsory annuitisation has taken another big chunk of risk sharing out of the pension system. A few apparently minor tweaks to the system of student finance have substantially reduced the risk sharing within that system. Once lost, risk sharing can be hard to put back together.

We must not overlook the stickiness of policy and the importance of political economy. England's dysfunctional social care system exists as an accidental consequence of decisions made in the 1940s. Change, when it costs money, is hard. Some decisions quickly become part of the policy architecture in ways that can be difficult to alter. The nominal level of student loans has been raised only once in more than a decade, putting pressure on university finances in a way that was never initially intended. Concessions to one group, for example, generous indexation of the state pension, can become impossible to undo.

Ultimately, it all boils down to resources. The design of the welfare state will be increasingly constrained by the willingness of the population to pay for it. This may compel us to adopt solutions that deviate considerably from the optimal course.