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WELFARE STATE – NECESSITY NOT LUXURY

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Professor Nicholas Barr

Introduction

It is a great pleasure to be in Malta for the first time, but I very much hope not the last. Many congratulations to the Central Bank on your 50th anniversary, which is being celebrated at an important time in the life of the European Union and of the Euro.

Today, I would like to talk about the welfare state, which many people regard either as an outdated 20th century institution or as a socialist plot. I want to make the argument that it is neither. It is arguably even more important in the 21st century than in the past.

The welfare state exists to increase individual wellbeing. It does so, first, through income security. That element includes helping people to find earning opportunities and offering insurance against adverse outcomes such as unemployment. Income security also involves assisting people with consumption smoothing over the life-cycle, so that younger people in their productive years can redistribute to themselves in retirement. A third aspect is poverty relief.

Alongside income security, the welfare state contributes to individual wellbeing also through the maintenance and improvement of physical and emotional health, and by expanding access to education and training, both for labour-market activity and personal development. Even more broadly the welfare state seeks to increase family and societal wellbeing.

I will discuss two questions: “Why do we have a welfare state?” and “How does one design a welfare state?”.

Why do we have a welfare state?

There are four sets of reasons.

Distribution

It is well known that the welfare state seeks to address distributional concerns, notably poverty and inequality. Although the early founders hoped that poverty would be a disappearing problem, that has not proved to be the case; additionally, inequality has widened in many countries. The policy responses to address these problems include redistributive taxes and transfers, including social insurance. Poverty and inequality can also be tackled by investing in people’s health and skills, and through family-friendly policies. Thus, the welfare state is not just about giving people money.

Addressing market failures

A second reason for a welfare state is to address market failures. I sometimes start my lectures at the London School of Economics (LSE) by asking students to put their hand up if they think that in a civilised society everybody should have access to adequate nutrition – and everybody’s hand goes up. I then say that in a civilised society everyone should have adequate access to health-care – and again everyone’s hand goes up. I then ask why Britain has a national health service

¹ Lecture delivered on 11 September 2018 by Nicholas Barr, FRSA, Professor of Public Economics at the London School of Economics as part of a series of lectures to commemorate the fifty years since the establishment of the Central Bank of Malta.

but not a national food service. It is mistaken to argue that if something is a necessity the state should provide it; in that case the state should distribute food as well as health care. The reason that governments intervene is to address market failure, to do things that private markets would do either inefficiently or not at all. Thus, the welfare state is not a socialist plot. Rather it exists to promote both equity and efficiency.

Although the welfare state's role in relieving poverty is well known, its role in addressing market failure is less well understood. Markets can fail to be efficient for multiple reasons.

Well-functioning markets require that consumers are well informed, but that condition can fail, particularly for complex products like healthcare. The problem is addressed by the economics of information, for which the Nobel Prize was awarded in 2001.

Well-functioning markets require also that people behave in a way that economists regard as rational. The failure of that assumption is addressed by the literature on behavioural economics, for which the Nobel Prize was awarded in 2002 and again in 2017.

Financial literacy – in particular the lack of it – illustrates both sets of problem. An international survey of financial literacy asked respondents three questions. 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 that sounds like a very simple question, and the other two questions were equally simple, only about 35% of respondents in the United States (US) – the heart of capitalism – answered all three questions correctly. In Sweden, Japan and New Zealand the comparable figure was 25%, while in Russia only 2% got all three correct. In another survey, only 50% of Americans knew the difference between a stock and a bond. Limited financial literacy amongst the public is a major problem. In addition, some people who do have the necessary financial knowledge do not make the effort to make good financial decisions – we may think of these twin problems as “Can't” and “Won't”, respectively.

Alongside imperfect information and non-rational behaviour, a further market failure arises from missing markets. As an example, it is not possible for an individual to buy insurance against the inflation that he/she will experience in retirement – for technical reasons, such insurance policies do not exist. The topic is addressed by the literature on incomplete markets and incomplete contracts for which the Nobel Prize was awarded in 2016.

Finally, a welfare state that redistributes from rich to poor will necessarily require distortionary taxation, again resulting in inefficient markets. This issue is addressed by the literature on optimal taxation for which the 1996 Nobel Prize was awarded.

The reason for mentioning this array of Nobel prizes is to make the point that what I am arguing is not some strange, idiosyncratic view of the world, but one that is rooted in the very best of modern economics.

These market failures are directly relevant to the welfare state.

- It is not possible to buy private insurance against unemployment; there is a missing market because of asymmetric information, whereby the unemployed worker has better information than the insurance company about whether he/she is genuinely trying to find a job.

- Skills development faces problems of imperfect information. It may be difficult to decide in which skills to invest and which training institution is best; and if an individual needs to borrow money to finance his/her investment in skills there are major capital market imperfections.
- Pensions raise problems both of imperfect information and non-rational behaviour: people know they should be saving for their old age but they do not save or do not save enough. Moreover, as mentioned, there are uninsurable risks like inflation in old age.
- Uninsurable risks arise also for health care. Actuarial insurance, with premiums related to individual risk, is not a good fit for medical risks – the problems of US medical finance are entirely explicable in terms of economic theory.² Social care faces very similar insurance problems.

A counterpoint to market failure is government failure. Governments may be inefficient because of lack of capacity, or limited information or limited resources. Even where governments try to do the right things they may not do them well. Separately, a government may be corrupt or driven by political short-termism. Thus, market failure does not lead automatically to government intervention. Intervention increases efficiency only if it is cost-effective, that is, where the market failure is relatively large and where government is competent enough to improve matters.

Assisting economic growth

A third reason for a welfare state is to assist economic growth. Again, this topic is relatively new in the literature. Human capital is an increasingly important element in inclusive growth. Expanding access to education and health care invests in the nation's stock of skills. Thus, reducing inequality in access to education and health care reduces inequality of opportunity, improving the chances of poorer people to earn a decent living. Well-designed income transfers are not an unnecessary drain on a country's fiscal resources but also assist growth. The ability to afford a healthy diet improves educational outcomes. In addition, in the absence of a good safety net, people will be reluctant to start a new business because of the risk of destitution for the individual and his/her family.

An over-arching purpose: risk sharing

A framing that encompasses all three sets of reasons is to think of the welfare state as a device for risk-sharing. Poverty relief can be regarded as risk sharing behind Rawls' 'Veil of ignorance'.³ Another aspect is addressing major failures in private insurance markets. Optimal risk sharing also contributes to innovation and growth. Too much risk is bad: if there is no safety net, people are less likely to risk new business start-ups. But too little risk is also suboptimal, as shown by the Communist economic system, which stifled effort and initiative.

How should we think about risk?

Continuing with the idea of the welfare state as a device for sharing risk leads to consideration of the nature of risk. The narrow definition of insurance is an actuarial mechanism (i.e. with premiums related to individual risk), for example, automobile insurance and burglary insurance. In a broader definition, insurance does not have to be strictly actuarial, but is any institution that protects individuals against risk.

² See Nicholas Barr (2012), *The Economics of the Welfare State* (5th edition), Oxford University Press, Ch. 12.

³ The Veil of Ignorance is a hypothetical situation (used by the philosopher John Rawls) in which rational individuals negotiate a just constitution for a country in which they will all have to live, but without knowing who they will be (i.e. whether they will be born as one of the most or the least fortunate).

Actuarial and social insurance

The intuition of actuarial insurance is straightforward. The insurance company charges a premium based on (a) the probability that the insured event will occur and (b) the size of the loss. This can be shown as:

$$\text{Premium} = (1+\alpha) pL$$

where p is the probability that the insured event will occur, L is the size of the loss against which the individual is insuring, and α is the insurer's mark-up to cover administrative costs and competitive profit.

Insurance can take different forms.

- Premium based on individual risk: the premium charged to insure one's car depends on the probability of having an accident, which is higher for younger drivers, and the size of the loss which is higher for more expensive cars.
- Premium based on the average risk: this arrangement places everyone in the same pool and bases the premium on the average risk. This is the approach to social insurance in the Beveridge Report,⁴ which set the foundations for the modern British welfare state.
- Even more broadly, as noted, redistribution financed from general taxation, can be thought of as insurance behind Rawls' veil of ignorance.

Actuarial insurance works well only if a number of technical conditions hold. First, the insurance company needs to know the probability distribution of outcomes. With risk, the probability distribution of outcomes is reasonably well-known and, consequently, insurers can calculate a premium. But if the probability distribution is not well known, the problem is not one of risk but of uncertainty, for example, the probability distribution of future rates of inflation. The actuarial mechanism can cope with risk but not with the more difficult problem of uncertainty.

Adverse selection – a second problem – arises when the person buying insurance has a better knowledge than the insurance company of how risky he/she is. In those circumstances the people who buy insurance are disproportionately bad risks, creating an upward spiral in insurance premiums and, in the limit, the collapse of the market.

Social insurance can cope with both these difficulties. It differs from actuarial insurance, first, because membership is compulsory, thus finessing the problem of adverse selection because good risks cannot opt out. In addition, being compulsory, social insurance can be redistributive. The second difference from actuarial insurance is that the contract is not fully specified, so that the rules can be adjusted to accommodate unforeseen events, thus enabling protection against uncertainty.

The new social risks

The welfare state has had to adapt to what are sometime referred to as the 'new social risks'. Social policy in 1950 was based on a series of assumptions about work, families and skills.

As regards labour markets, the assumption in 1950 was that the husband was the main breadwinner and was in long-term full-time employment; thus the main risk was short-term unemployment. Today, long-term, full-time employment is less frequent. Labour-market relations are

⁴ Beveridge Report (1942), *Social Insurance and Allied Services*, Cmd 6404 (London: HMSO).

more fluid: people build portfolio careers with spells of employment, part-time employment, self-employment, unemployment or outside the formal labour force. Precarious employment such as zero hour contracts and the gig economy are also increasingly common. Because of these changing labour market patterns, contributions related to a worker's employment lead to less good coverage than in the past. A separate labour-market issue is widening inequality of pay.

Families also face changing risks. The post-war archetype was that men and women got married and stayed married, the man was the breadwinner and the woman the carer. In that world, the main risk was widowhood. Today, female participation in the labour market has increased greatly, more marriages end in divorce, and in many countries parenthood is less closely tied to marriage than formerly. Thus, social policy today is more interested in designing policies aimed at widening the choices between paid work and family obligations, including access to affordable childcare. Another issue is to design pensions in a gender neutral way, though noting that the concept of gender-neutrality is a complex one.

Changing risks present themselves also for skills development. The post-war assumption was that skills acquired when young would mostly serve the individual throughout their career. The main risk, a relatively rare one, was that somebody's skills would become redundant. Today, technical change creates a need for more, and more-highly skilled, workers; and the speed of change means that skills go out of date more rapidly. What is needed, therefore, is more education and training, more diverse education and training and repeated education and training, i.e. lifelong learning, and the need to finance these activities on a large-scale.

In addition to these social risks, the world faces major uncertainties, including economic uncertainties (a trade war, another economic crisis) and political uncertainties (instability in the Middle East). There are also technological risks such as globalisation and nuclear safety, and environmental risks, most obviously climate change. Finally, there are social risks which include the changing age structure of the population. It is important to note two things about these risks: they are mostly systemic; and they are also uncertainties rather than risks.

In sum, sharing risk and addressing systemic uncertainty are fundamental reasons for a welfare state in a modern economy and society.

How do we design the welfare state?

Turning from the 'Why' to the 'How', it is helpful to consider separately how to fit policy to social circumstances and how to do so in a way that fits economic circumstances. These can be thought of as the Ministry of Social Policy agenda and the Ministry of Finance agenda, respectively.

Fitting policy to social circumstances

When addressing income risks during working life, the policy agenda includes providing income to the jobless, restoring earning opportunities and expanding earning opportunities.

An issue in this context is whether there is a case for some variant of a universal basic income, an idea that has cropped up at intervals over the years. The difficulty is that in most countries there are many more poor people than rich ones. As a result, the level of taxation necessary to finance a generous universal basic income would create major disincentives against work. It is sometimes suggested that robots will soon take over many jobs. Historically, however, waves of technical advance have not caused mass unemployment. The question with robots and artificial

intelligence is whether the speed of change exceeds the absorptive capacity of labour markets and training. In this regard, Robert Shiller, a Nobel Prize winner, has proposed a tax on robots to allow society and labour markets time to adapt.

Alongside risks during working life are income risks in retirement. With fewer people in long-time full-time employment, fewer people have a fairly complete record of contributions. One approach which is gaining ground is to provide poverty relief through a non-contributory basic pension, that is, a flat-rate pension financed from taxation, awarded on the basis of age and a residence. There are plans of this sort in Australia, Canada, Chile, the Netherlands and New Zealand, and in a variety of developing countries (see the database on <http://www.pension-watch.net/>).

Though there is no single best pension system for all countries, there are interesting designs for earnings related pensions. A noteworthy approach is illustrated by the US Thrift Savings Plan (TSP) (www.tsp.gov) and the fairly new UK National Employment Savings Trust (NEST) (www.nestpensions.org.uk). Instead of giving workers considerable choice over pension provider, which is a choice that many workers do not want and which is administratively costly, TSP and NEST each has a single default into which workers who make no choice are placed. The default is a target date fund in which the asset allocation becomes more conservative as the target date (retirement) approaches. NEST has four additional options from which a worker can choose: a higher risk fund, a lower risk fund, an ethical fund and a Sharia fund. However, the vast majority of members of NEST are in the default fund. Overall, this design is beneficial because it provides a simple way for people to build up pension savings at low administrative cost and without the need to make complex choices.

Turning to health, private actuarial insurance is a bad fit for medical risks because of intractable market failures, the United States of America being a sad illustration. As with pensions, employment-related social insurance contributions are less useful than in the past because of changing social and labour-market realities. Thus it may be that what is left standing, at least in some countries, is to finance health care mainly from taxpayer resources, either through general taxation or a dedicated revenue source unrelated to a person's employment status, such as a fraction of value-added tax.

When it comes to investing in skills, a country can opt for taxpayer finance for school and a mix of taxpayer finance and well-designed student loans for post-school education and training. The modern approach to student loans differs from a conventional loan like a mortgage or bank overdraft. With a conventional loan, when a student leaves university, he/she has to repay a fixed amount per month, which is problematical for low earners. In what are known as income contingent loans, repayments are a fraction of the borrower's subsequent earnings until he/she has repaid the loan, collected alongside income tax and social security contributions. Thus repayments automatically adjust to a person's monthly earnings: higher earners repay more quickly, lower earners more slowly. Income-contingent loans are another example of risk sharing. The arrangement works well in Australia, New Zealand and the United Kingdom.

Fitting policy to economic circumstances

It is not enough for policy to fit social circumstances – it needs also to fit economic circumstances. A fundamental distinction is between the structure of an activity and its scale. The structure question is about whether the activity is done more effectively by the market or the state. This issue is often treated as ideological, because people can have strong beliefs about the relative roles of

markets and government. However, the question should not be treated as ideological: it is more a technical question, the answer to which depends on (a) the extent of market failures and (b) the capacity of government. If there are no substantial market failures, one should use market allocation to achieve efficiency, complemented by income transfers to achieve distributional objectives. On the other hand, if market failures are significant, there is a potential role for state activity. So structure is really a question of micro economics.

Scale is a very different question, the answer to which depends on what a country can afford to spend on the welfare state. What is affordable depends partly on the fiscal situation, which rests on the country's level of income and the effectiveness of tax collection. It also depends on the political economy of the country. For example, in the Scandinavian countries, people are prepared to pay high taxes in return for high-quality public services in a way that is not a political option in the United Kingdom or United States of America. Consequently, the scale of welfare activities in the Northern European countries is more generous than in the United Kingdom.

It is important to keep the issues of structure and scale separate. Following the 2008 economic crisis, some countries have felt the need to spend less on the welfare state, but fiscal constraint is not an argument for dismantling it.

Although in part their concerns differ, the Ministry for Social Security and the Ministry of Finance have a common agenda in addressing demographic risk. Advanced countries typically face population ageing, creating financial stress for pensions and health care. On the other hand, younger people in African countries create financial stress for financing education and training. The common denominator in tackling these different pressures are policies to promote economic growth, which have two strategic elements:

- Increasing the number of workers from a given population: to do so requires efficient labour markets and family policies that help to reconcile paid work with family obligations. Those, in turn, require flexible labour markets so that parents – typically women – can avoid a binary choice between full-time paid work and no paid work. Additionally, it is desirable also to have a pension design that supports flexible retirement, to encourage older people to stay in the labour force.
- Increasing the productivity of each worker through investment in human capital and in the physical capital that the worker will be using.

Implementing policy

The biggest lesson from my time on sabbatical at the World Bank is that implementation really matters. The message I want to give is “three skills, two parties, one table”.

The first of the three skills is strategic policy design which, I have come to learn, is the easy part. Implementing policy is harder. The second necessary skill is political implementation, requiring people with practical political skills, and the third, skills in technical and administrative implementation. The last is immensely important; many reforms fail because of inadequate administration.

Two parties: for example, in response to a country's request for technical assistance, the World Bank needs a team that includes a strategic policy design person, a political person and a technical implementation person (or several). A parallel group is necessary for the country receiving the support, in order to internalize the provider's suggestions and filter them through detailed local knowledge. Thus in principle six people are required.

One table: these people all need to be round the same table from the first day of talks. The only opportunity I had to put this approach into practise was when I was asked to advise the Hungarian government on the design and introduction of a student loan scheme. I led an LSE team: I provided the strategic policy design, accompanied by my LSE colleague Iain Crawford, in charge of political implementation, and a third team member, from the UK student loans administration, to cover technical aspects. We had three Hungarian counterparts with matching skills. Whichever one of us was talking would look round the table for nods of agreement. When someone disagreed, we would pause and discuss till we could devise an arrangement that made sense both in policy terms and in terms of politics and administration.

I have come to learn that it is profoundly mistaken to think that policy can be designed by PhDs and then handed over to peons to implement. A second profound mistake is an unrealistically short time frame.

Conclusion

The world is changing in ways that makes risk sharing more important than ever. The welfare state is able to do things that private markets would do badly or not at all. The single most important point is that the proper (and vital) place for ideology is in setting the objectives of policy, for example, how generous we want to be to the poor and how much we care about reducing inequality. Whether a particular activity should be organised by the market or the state, or whether there be an economically sensible partnership between them, should not be treated as ideological, but based on technical arguments relating to market efficiency.

To conclude where I started, the welfare state is not a 20th century anti-poverty institution whose time has gone, but an institution that is fundamental to sharing risk as countries move into an uncertain future – possibly a future that is more uncertain than the past.