Public finances after the COVID-19 pandemic

Marc Robinson, International consultant specialising in public finances, PFM Results Consulting

OECD nations face particularly powerful fiscal pressures over the coming decades. To handle these pressures without lapsing into fiscally irresponsibility, they will need to make courageous decisions on both the expenditure and tax sides. This paper looks at the implications of this for budgeting. It focuses particularly on reallocation and expenditure discipline, including the role of spending review, and the design and implementation of expenditure ceilings. The question of the relevance of net worth as a fiscal policy measure is also discussed, as is the potential for efficiency savings to relieve the fiscal pressure on governments.

JEL codes: E620, H12, H50, H55, H61

Keywords: reallocation, expenditure ceilings, net worth.

The opinions expressed and arguments employed herein are solely those of the author, written in his personal capacity.

Acknowledgements

The author wishes to thank Jón Blöndal, Andrew Blazey, Álfrún Trygvadottir and Danièle Pralong for valuable comments on drafts of this paper.

Abbreviations and acronyms

EC	European Commission
EU	European Union
GDP	Gross Domestic Product
GFC	Global Financial Crisis
IFI	Independent Fiscal Institution
IMF	International Monetary Fund
MOF	Ministry of Finance
MTEF	Medium-Term Expenditure Framework
NFW	Net Financial Worth
NW	Net Worth
OECD	Organisation of Economic Co-operation and Development
SBO	OECD Committee of Senior Budget Officials

1.1. Introduction

In the era following the COVID-19 pandemic, government budgeting in OECD countries will be dominated by powerful pressures for additional spending in a range of high-priority areas and by the need, in most countries, for long-term fiscal consolidation. These challenging circumstances will require, over time, major changes in the composition of public finances. All OECD countries will need to strengthen their control over aggregate expenditure and their ability to reallocate expenditure within the aggregate. Some countries will also find it hard to avoid substantial increases in tax levels.

For budgeters, this has two major implications:

- It will be essential to strengthen control over the evolution of baseline expenditure and to exercise heightened strategic discipline in decisions on new spending.
- There will be unrelenting pressure to make substantial *policy-driven expenditure cuts* — i.e. targeted reductions in spending that are achieved by scaling back or eliminating some of the services or benefits which governments currently provide to their citizens. These will be essential to create the fiscal space for high-priority new spending. Efficiency savings alone will not suffice.

These expenditure-side budgeting imperatives will apply to all OECD member countries – albeit in varying degrees – irrespective of the future evolution of aggregate government expenditure in individual nations.

In what follows, we first set the scene by discussing the need for fiscal consolidation and the magnitude of upward spending pressures. We then consider the role reallocation will need to play, the respective contributions of policy-driven cuts and efficiency savings, and the ways in which spending review can best facilitate reallocation. The focus then turns to what needs to be done to tighten expenditure discipline, including in decisions on new spending, the management of demand-driven expenditure, and the enforcement of aggregate expenditure ceilings. Finally, the paper considers the relevance of balance sheet measures for fiscal sustainability.

The focus throughout is on the longer-term challenges of public budgeting in the post-pandemic era. As such, the paper is not concerned with debates about the appropriate stance of fiscal policy in the immediate aftermath of the pandemic.

1.2. Budgeting in the *post* pandemic era

1.2.1. Fiscal consolidation

The problem of high debt

In all but a handful of OECD countries, government debt stands today at levels which are too high, and which pose significant long-term risks. Many countries had excessive levels of debt prior to the pandemic. The pandemic increased debt-to-GDP ratios by an average of around 15 percentage points – to which will eventually be added an (uncertain) further amount rising from defaults on government-guaranteed pandemic loans. To assure long-term fiscal sustainability, a majority of countries will need over time to reduce their debt-to-GDP ratios substantially. This will require gradual *fiscal consolidation* – using the term in the OECD-defined sense to mean improvements in budget balances in order to stabilise and reduce debt.

Low interest rates have led to complacency about high debt levels. Economists widely consider that low real interest rates are a long-term phenomenon – that, in technical language, the "natural" rate of interest will be low for many years to come due to long-term structural forces, the most important of which are population ageing and global savings imbalances. A more relaxed view of debt has also been encouraged by the recognition, following Blanchard and others, that it is more the norm than the exception for interest rates on government debt to be below the rate of growth of GDP – something which makes fundamental fiscal dynamics much less scary than in the traditional portrayal of "explosive" debt dynamics (Blanchard, 2019[1]; 2019[2]; Mauro et al., 2015[3]; Arestis and Sawyer, 2006[4]).

However, even if it turns out that the natural rate of interest remains low for years to come, this would not justify complacency about high debt. The structural forces behind low rates will not endure forever. Population age profiles will eventually stabilise, and there is nothing permanent about global savings imbalances. Given this, a long period of low real interest rates should be viewed as providing an opportunity to gradually and substantially reduce debt, rather than as a reason for tolerating the continuation, or further increases in, existing high levels of debt.

There is, in any event, considerable uncertainty about future trends both in real interest rates and in the other key determinant of debt sustainability, trend GDP growth rates. As Blanchard and Summers (2017[5]) have noted, "our limited understanding of the relative role of the factors that lie behind the low safe rate [the natural rate of interest]" makes it impossible to be confident about when and whether the current favourable relationship between interest rates and GDP growth will be reversed.

Complacency about the continuation of low interest rates has been shaken by the recent re-emergence of serious inflationary pressures and the consequent prospect of major monetary tightening. Despite the tardiness and timidity of the response of a number of central banks, there are persuasive reasons to believe that putting the inflation genie back in the bottle will require several years of substantially higher real interest rates, together with accelerated quantitative tightening. This will not, however, necessarily worsen the debt sustainability position. (A purely temporary rise in real rates will, given the maturity profile of public debt, have little impact on the interest burden while, at the same time, higher-than-expected inflation will somewhat reduce the stock of government debt in real terms.) Overall, the fiscal sustainability challenge will probably therefore remain a long-term one. Nevertheless, the emergence of a widely-unanticipated inflation problem is a reminder of the need to be modest about our capacity to foresee the economic future. Caution is required, particularly with respect to the sustainability of public finances. Again, this argues for taking seriously the risks associated with high debt levels.

How much of a contribution can and should fiscal consolidation make to reducing the debt burden?

Fiscal consolidation is, of course, not the only way of reducing the debt burden. The higher the rate of trend GDP growth, the less the need for fiscal consolidation. Growth – which must today mean *green* growth – reduces the debt burden by increasing the denominator of the debt-to-GDP ratio. This underlines the importance of growth-promoting structural policies and supportive public investment. There are, nevertheless, a number of question marks concerning the long-term growth prospects of many advanced countries. These include the impact of population ageing on growth, and the extent to which it will prove possible to decouple growth from carbon emissions. If it turns out that we face the prospect of low levels of long-term growth for supply-side reasons, fiscal consolidation will have to play a commensurately greater role in debt reduction.

The extent to which fiscal consolidation will be needed to bring down the debt burden also depends on the use made of other means of reducing debt. Inflation – as just mentioned – is one way of reducing the real debt burden without fiscal consolidation. However, no one – at least no one sane – thinks that letting inflation rip is a good way of restoring fiscal sustainability. As we know from experience in the 1970s and 1980s, the longer action to tame inflation is delayed, the higher the ultimate economic cost of dealing with the problem.

Other potential instruments include financial repression and the cancellation or repudiation of public debt. Financial repression – government regulation to keep interest rates very low – worked well to help reduce high public debt burdens in the decades immediately following WWII. But this was in the context of historically high rates of economic growth. It is hard to see how financial repression can make much of a contribution to reducing the debt burden in coming years if the natural rate of interest remains low and if, in addition, growth rates were tepid. The cancellation or repudiation of public debt, on the other hand, hardly represent credible policy options for advanced economies (see Box 1).

Box 1. Cancelling or repudiating public debt?

In a number of countries, there are calls from the fringes of the public policy debate for the public debt burden to be radically reduced either by central bank debt cancelation, or by government repudiation of debt obligations. Economists understand that the cancellation of public debt by the central bank does not improve the fiscal position of governments – broadly speaking, because the central banks are part of government. (Other things being equal, apparent gains from debt cancellation are offset by equivalent reductions in future dividends paid by the central banks to government.) The repudiation of debt obligations – which is equivalent to the imposition of a selective wealth tax on bondholders – makes no sense unless a country is burdened with unaffordable debt obligations to foreigners. If this is not the case, it will always be preferable to impose exceptional tax measures such as a one-off additional wealth tax (as opposed to a discriminatory de facto tax on bondholders) and use their proceeds to repay debt. Use of such exceptional tax measures to reduce debt constitutes, however, an instrument of fiscal consolidation rather than an alternative to it.

Source: Author

It is in the context that it can be said that fiscal consolidation must play an important role in any overall strategy for progressively reducing debt-to-GDP levels in heavily indebted OECD countries.

The extent of fiscal consolidation required will also be greater in those OECD countries with excessive *structural* budget deficits — deficits which have in many cases been increased by spending and tax measures of a permanent nature implemented during the pandemic, or as part of recovery programmes.

Fiscal consolidation will inescapably be a gradual process. How soon it should start is a question for debate. There was at the height of the pandemic a strong consensus that avoiding premature fiscal consolidation – as occurred in many countries after the global financial crisis – was essential and that this would mean that fiscal policy would need to remain highly supportive for some years following the pandemic. The unexpected strength of the recovery, and the emergence of inflationary pressures, have resulted in some fraying of this consensus. However, this is a debate which is of limited relevance to this paper, the focus of which is on the longer term.

More debt to finance investment?

What about the influential proposition that, notwithstanding the pandemic-induced increases in debt, it is reasonable for governments to use additional borrowings to finance high-priority public investment – i.e. investment to address infrastructure deficiencies, improve the economic infrastructure that supports growth, and address the challenge of climate change?

The most general argument for this is based on the "golden rule," which holds that it is legitimate to use debt to finance (net) public investment as a means of achieving intergenerational equity in the distribution of the costs of long-lived assets. This is an entirely respectable position, with a well-established pedigree in public finance theory. The problem is that the applicability of the golden rule in specific countries must always be subject to the overriding constraint of fiscal sustainability. This means that, while there is no reason why countries with moderate or low levels of debt should feel constrained in applying the golden rule and accumulating some additional debt to finance worthwhile public investment, the situation is different in the large number of countries with high levels of debt. If debt is unsustainably high already, the golden rule cannot reasonably be used to justify pushing it to even higher levels.

Some economists consider that its major problem with the golden rule is the danger of the definition of investment being fudged so as to re-classify substantial amounts of current expenditure as investment (Martin, Pisani-Ferry and Ragot, 2021[6]; Creel and Ragot, 2022[7]). However, this problem is arguably exaggerated, and can be dealt without undue difficulty through the application of appropriate accounting rules. The real main problem with the golden rule is that its application *in isolation* would remove any ceiling on debt, and make it possible to increase the debt burden in an unconstrained manner as long as the additional debt is used to finance investment. It is precisely because the golden rule alone cannot guarantee fiscal sustainability that countries that have applied the golden rule successfully in the past (for example, the United Kingdom) have combined it with debt ceilings.

This is a reality which seems sometimes to be forgotten in the current debate about the appropriate future framework of fiscal rules for advanced economies. Many contemporary proponents of the golden rule suggest that it should replace rules setting ceilings for debt. However, it remains as true today as in the past that any government that wishes to improve or maintain the sustainability of public finances must concern itself first and foremost with the burden of debt. Countries with very high debt burdens cannot wish away the problem by shifting their focus away from debt to other fiscal variables. (We return to this topic later, with reference to the question of the relevance of *net worth* as a fiscal policy variable.)

Certain economists have argued for a very limited version of the golden rule which would cover only public investment devoted to tackling climate change. Thus in the European context, Darvas and Wolff (2021[8]) have proposed exempting from EU debt limits climate-related public investment, which they plausibly suggest will require spending in the range of 0.5-1% of GDP annually for the next decade. Their argument

is that if additional debt is not used, it will be politically very difficult to finance these important investments. This is a line of argument which many will find persuasive. However, we should be clear about what it means for countries where debt is already too high. It amounts, essentially, to the proposition that some further erosion of the sustainability of government finances is acceptable to tackle the climate crisis. Implicitly, it says that, in order to avoid the difficult politics involved in making current generations bear the cost of this investment, we should defer the cost to the future even though we know that this will increase the risk of future debt crises.

Another limited version of the golden rule holds that we should exempt from debt limits those public investments which promise to be self-financing in the sense that they are so growth-enhancing that they will generate additional tax revenues sufficient to cover their costs. In theory, such an exemption would be reasonable. In practice, however, it is unworkable. There is no practical methodology which would allow us to confidently designate certain investments as self-financing. Creating such an exemption would simply be an invitation to abuse.

Advocates of the golden rule as a replacement for debt limits often justify their position by reference to the very real problem of investment being unduly sacrificed during periods of fiscal consolidation. However, in countries where debt is already too high the solution to this problem is not to remove any constraints on the accumulation of further debt for investment purposes. What is required in such countries is, rather, action to ensure that, within the context of an appropriate aggregate expenditure ceiling (see the next section), capital expenditure is not unduly crowded out by current expenditure. One way of doing this would be to impose a sub-ceiling for current expenditure within the aggregate expenditure ceiling.

Given that fiscal consolidation will be required once national economies have recovered, what does this mean for aggregate expenditure?

This depends not only on the extent and pace of consolidation required, but also on the pre-existing levels of taxes and expenditure in individual countries. The pressure to contain aggregate expenditure will be particularly pronounced in countries where tax levels are already high and political resistance to any further increases is most intense. On the other hand, there are some OECD nations where the scope for tax increases is much larger, potentially implying less intense pressure on aggregate expenditure. It would therefore be wrong to assert as a general principle that post-pandemic fiscal consolidation necessarily means reducing aggregate expenditure levels. In at least some countries, there is nothing inherently unreasonable about favouring *increased* government spending, financed by tax increases, while simultaneously favouring a gradual long-term reduction in the debt burden to be achieved primarily through higher taxes and economic growth.

A range of options for increasing taxes have been proposed by various participants in the debate about post-pandemic fiscal policy. In low-tax countries like the United States, there is a large menu of potential measures (Sarin, Summers and Kupferberg, 2020[9]; Gale, 2021[10]). However, in many other countries the options are more limited. One major possibility is a one-off wealth levy – something which could achieve a worthwhile one-off reduction in debt levels, but should not be expected to bring debt down to sufficiently low levels as to eliminate the need for ongoing measures to improve the structural budget balance. Another interesting proposal is to use large increases in carbon taxes to achieve a "green" fiscal consolidation by using the additional revenue to improve the budget balance (McWilliams, Tagliapietra and Zachmann, 2020[11]). While attractive in technical terms, the political feasibility of this latter option is uncertain. It is already proving very tough in many countries to secure political acceptance of higher carbon taxes even when promises are made to return the additional revenue to citizens in the form of some type of "carbon dividend".

1.2.2. Spending pressures

There are considerable differences between countries with respect to the degree of fiscal consolidation required and the scope for tax increases in the coming era. Everywhere, however, a further factor will be at work — powerful pressures for additional spending in a range of high-priority areas.

OECD governments already face immediate pressures for additional spending which it is very hard for them to ignore. There is a requirement here and now to spend more to repair public health systems and to respond more aggressively to global warming. Added to this is the fact that most OECD countries continue to face rising age pensions spending – a pressure which will endure for the next decade or two (although after that pension spending is projected to stabilise or fall in many countries).

But the problem is broader and more lasting than this. There are reasons to believe that governments face long term spending pressures which will, other things being equal, cumulatively increase government spending by an amount equivalent to 7% or more of GDP in most advanced countries by the middle of the century (Robinson, 2020[12]). These spending pressures will be particularly pronounced in the areas of healthcare, long-term care, climate change and, in certain countries, infrastructure and defence.

The biggest source of long-term expenditure pressure will be healthcare. Increased spending to build better defences against future pandemics will play a role pushing spending up, but it will be a relatively minor one. By far the most important factor over the long haul will be the impact on spending of the expanding technological capabilities of medicine — that is, of the cost of new and better medical treatments. Long the main driver of increasing health expenditure, technology will play an even bigger role in coming decades because of the impact on medicine of the bioscience revolution which is currently underway. The intrinsically high cost of the precision and customised medical treatments which will increasingly become mainstays of medical practice will, in particular, have a huge impact on government budgets. It is the impact of technology which is the principal reason why healthcare spending is set to grow greatly over the long term – conservatively, by at least 4% of GDP in all countries by the middle of the century.

Demographics will also play a role in pushing health spending up. However, the expenditure impact of population ageing is widely exaggerated, and will be significantly less than the impact of technology. It has been a mistake for certain governments to view long-term health spending pressures primarily as a problem of ageing.

Long-term care will be another area of substantial spending pressure. Expenditure on long-term care is more sensitive to population ageing than health expenditure, mainly as a consequence of the impact of age-related dementia. The projected large increases in the elderly and very elderly part of the population in coming decades therefore imply frighteningly large projected increases in the prevalence of dementia. (This now looks likely to be aggravated by the longer-term impact of COVID-19 in accelerating the rate of decline of cognitive capacity of a certain portion of those affected (Liu et al., 2022[13])). Many governments already face substantial political pressure to provide more and better support for elderly people who require extended periods of care due to dementia or other serious disability. Major expansions of the role of government in long-term age care have already occurred in certain countries, such as Japan and the Netherlands, and are being actively mooted by governments in other countries, including France and the United Kingdom.

Governments will, of course, need to spend substantially for at least three decades in order to address the problem of climate change. The additional spending concerned will increasingly be a political imperative, because voter opinion in most countries is shifting to demand a more aggressive policy stance. At a minimum, governments will need to spend considerable amounts on abatement and adaptation measures pertaining to public infrastructure and assets, together with lesser amounts in other areas such as adjustment assistance. Public transport will need to be expanded and public buildings insulated and de-carbonised. Roads, bridges and other infrastructure will have to be reinforced to cope with higher temperatures. Coastal defences will require reinforcement, as will the capacity to deal with forest fires and

other climate-related natural disasters. Government assistance will be needed to smooth the pain of the decline of the fossil fuel industry, and for other adjustment measures such as the repurchase by government of properties which can no longer be protected from flooding and fires. Finally, notwithstanding that the costs of de-carbonising energy systems should not in general be shouldered by government budgets, significant budgetary support will also be unavoidable if we are to greatly speed up the adoption of crucial nuclear technologies, such as the EPR and small modular reactors.

Available estimates suggest that the additional climate-related spending required will, at a minimum, amount to something less than 1% of GDP per annum over the next three decades (Robinson, 2020[12]). It is, however, likely that governments will end up spending significantly more than this in response to global warming. This is because voter resistance to high carbon taxes increases the reliance which many governments place on costly subsidies to induce businesses and households to make the green energy transition. The increased use of subsidies will also reflect the reality that greater reliance on regulatory interventions can only make up part of the policy gap created by unduly low carbon taxes.

In the wake of the Russian aggression against Ukraine, there is today a much more widespread recognition of the need for many OECD countries to spend significantly more on defence. For quite a few European countries, spending will need to increase by *at least* 1% of GDP per annum. Spending will also need to be boosted by many countries in the Asia-Pacific region, where the security risks are palpable and a number of countries have chronically underfunded their militaries.

To all of this may be added the significant pressure that has built up, in some OECD countries, to spend to address accumulated infrastructure deficits – that is, major shortfalls in public infrastructure due to inadequate investment and maintenance expenditure.

To the extent that it is not possible to finance all this additional spending via tax increases, it will be necessary to do so by creating fiscal space by reducing spending in other areas. There are two *appropriate* ways of doing this. One is to make policy-driven expenditure cuts, and the other is measures to improve efficiency. Governments have, to varying degrees, done both of these things over recent decades. However, they have also in many cases responded in a less appropriate way, by *unsustainable underfunding* in important areas of government services. Inadequate maintenance and underinvestment in public infrastructure in some countries is one example of this. So is the underfunding of defence. Another example is the way in which some countries have unsustainably "saved" money is by squeezing the remuneration of major categories of public employees such as nurses, doctors and public university staff – to the extent that, in the worst cases, pay has actually fallen significantly in real terms. Public hospitals have been squeezed badly in some countries, forcing them to operate well over capacity, and leading to serious shortages of crucial supplies, drugs and materials. In certain countries, the fiscal impact of this unsustainable underfunding has been in part hidden from view by the off-budget accumulation of debt by public and quasi-public hospitals. These are all problems which it is important to frankly acknowledge.

Budgetary "savings" achieved by these means are unsustainable in the sense that they end up, sooner or later, being reversed. For example, in countries which have particularly severe infrastructure deficits, the pressure for action – much of which will involve significant government spending – has become strong in recent years. What this suggests is that the use of unsustainable underfunding as a means of coping with structural spending pressures has reached a dead end in many countries. Like a wound spring bouncing back, the accumulated problems which this strategy has created will actually aggravate the pressure on budgets in coming years.

The implications of this are clear: Even if one takes the "dovish" view — that fiscal consolidation should happen only very gradually, and that the reduction of aggregate expenditure is not generally an appropriate objective — it remains the case that managing the expenditure side of government budgets will be very challenging. Irrespective of the magnitude of budget adjustments required by fiscal consolidation, there will be powerful pressure to make cuts to baseline expenditure in other areas so as to provide the fiscal

space required for additional spending on healthcare, long-term care, global warming and other areas. *Reallocation* will, in other word, have an essential role to play.

1.3. Reallocation

In the search for ways of reallocating funds from baseline expenditure in order to increase fiscal space and support fiscal consolidation, a large part of the focus will need to be on *policy-driven* expenditure cuts. The reason for this is that the only real alternative means of cutting baseline expenditure is *efficiency savings*, and it is unrealistic to believe that efficiency savings alone can deliver anything like the additional fiscal space which will be needed.

The term “efficiency savings” is used here to refer to savings made by measures which enable government to deliver the same services or benefits, or achieve the same outcomes, at lower cost. As such, efficiency savings need to be clearly distinguished from expenditure reductions achieved by scaling back or eliminating services or benefits. Unless offset by improved service quality, the latter constitute policy-driven expenditure cuts, even if the services or benefits concerned are considered to be low priority or inappropriate from a policy perspective.

The pursuit of efficiency savings will continue to be an important component of public financial management. Budgetary and management mechanisms – including performance budgeting – designed to promote improved efficiency will need to be further strengthened. But it is important to be realistic about the magnitude of potential efficiency savings, and the timeframe required for achieving them.

Extravagant claims about the potential efficiency savings available governments are often made. For example, a recent Spanish think tank report claims that potential efficiency savings in that country mount to as much as 41% of government expenditure (IEE, 2020[14]). On this basis, it declares that Spain could achieve the fiscal consolidation that it will need in coming years entirely through efficiency measures, without either tax increases or reductions in public service provision. The think tank is not alone in its sunny optimism about the scope for efficiency savings. The analytic techniques that underpin its claims have been used by economists in other countries to make similar claims about the scope for huge, essentially painless, expenditure reductions.

It would be wonderful if there were such enormous scope for painless spending cuts and easy fiscal consolidation. This is, however, an illusion. As discussed in Annex 1.A, the literature which produces these types of estimates of potential savings cannot be treated seriously because the methodologies employed lack credibility.

Experience and common sense suggest that it is an illusion to believe that there is, in most OECD countries, a huge stock of “low hanging fruit” of potential efficiency savings which could be quickly realised by any government sufficiently determined to achieve them. Even the most determined efforts to find efficiency savings through spending review have yielded savings well below 1% of GDP (Robinson, 2020[12]). There have, of course, been comprehensive spending reviews in some countries that have achieved considerably larger expenditure reductions than this, but these have primarily taken the form of policy-driven expenditure cuts.

We also need to bear in mind that many OECD governments have over past decades already made major long-term efforts to realise efficiency savings, using a range of tools apart from, and in addition to, spending review. There are, of course, some countries which have lagged behind in this respect, and where there is no doubt correspondingly greater potential for future efficiency savings. But those who believe that the scope for efficiency savings is enormous everywhere are drawing on ideological preconceptions rather than evidence.

The potential future contribution of efficiency savings also needs to be seen in the context of the long-term cost problem which faces significant areas of government services. This is the problem of the so-called *cost disease*, famously identified by William Baumol. Baumol pointed out that, as long-term growth in economy-wide average labour productivity raises living standards, wages are pushed up in every sector of the economy, including government. In most sectors of the economy, this is not a problem because these wage increases are offset, and more than offset, by rising productivity. However, in some service sectors where there is limited scope to increase labour productivity through automation or other means, these long-term increases in wages cannot be offset through rising productivity. The consequence is that in such sectors the cost of the services concerned rises over the long term. School education and long-term care are classic examples of the problem, but it also affects some other areas of labour-intensive government services — although health is fortunately not (despite what many people think) one of these (Robinson, 2020[12]).

The cost disease imparts a certain upward bias to aggregate public spending. Government has to work exceedingly hard to increase productivity across its operations as a whole in order to be able even to offset the impact of the cost disease. It has, in other words, to run hard even to remain on the same spot. In this context, the most realistic way of viewing the potential role of efficiency savings over the long haul in government may be as a means of offsetting, at least in part, cost increases in those areas particularly affected by the cost disease. When looking for fiscal space to finance new spending, governments must, in the main, look elsewhere.

Realism about the scope for efficiency savings therefore suggests that, in the long-run, it will prove impossible to find substantial fiscal space to cope with increased spending on healthcare, climate change, long-term care and other areas without either increasing taxes or making significant policy-driven expenditure cuts in other areas of government services and benefits. Exactly what mix of tax increases and expenditure cuts will be chosen by governments will vary between countries. But even in countries with the greatest scope to increase taxes, it is very difficult to see how significant policy-driven expenditure cuts can be avoided.

While it may be inappropriate, in most countries, to talk about cuts to *aggregate* expenditure, significant policy-driven expenditure cuts in *specific areas* of government services and transfers are absolutely essential as a key means of providing fiscal space.

1.3.1. Where can policy-driven cuts be made?

Over past decades, many OECD governments have already made significant policy-driven expenditure cuts in a number of areas of public services and benefits. To the extent that this is the case, it imposes certain limits on where future cuts might be made.

Notwithstanding this, no area of government expenditure can be exempted in the future search for options for policy-driven expenditure reductions. Focusing primarily on discretionary expenditure rather than mandatory spending will not work (noting that the terms discretionary and mandatory do not fit with the budgetary systems of all OECD member nations – see Box 2). The search for potential cuts must therefore apply to all expenditure which is classified statistically as general government, all of which impacts ultimately on the government's fiscal position.

Box 2. Mandatory and entitlements expenditure

Although discussion of the problems of budgeting for social protection and health often makes use of the concepts of "mandatory" expenditure and "entitlements" expenditure, these essentially American terms are not necessarily appropriate in other countries. Although both these labels may be widely applied to social protection expenditure, this is not the case with respect to healthcare expenditure.

Mandatory expenditure in US terminology is expenditure which is required by legislation other than the budget law (appropriation act). Entitlements expenditure, again in US terminology, is that component of mandatory expenditure where the recipient has a statutory right to receive a specific benefit or service. Defined in this manner, these terms accurately describe Medicare and Medicaid benefits payment expenditure in the United States. They also describe much health expenditure in some other OECD countries. But not everywhere. In a number of countries, most government health expenditure is funded through the ordinary budget, or by other means which do not meet the mandatory expenditure definition. There are, moreover, some countries where citizens do not have a statutory right to treatment but, rather, a generally understood de facto right.

It is more useful in discussing the issues of managing healthcare and social protection expenditure from an international perspective to use the concept of *demand-driven expenditure*, underpinned by a broader concept of entitlement expenditure. Demand-driven expenditure is government spending on benefits or services for which: 1) citizens have a legal *or de facto* entitlement; and 2) the level of expenditure is, given prevailing eligibility policies (laws or policies on eligibility for the benefit or service), determined in large measure by the level of demand.

Source: Author

The importance of maintaining a focus on the entirety of government expenditure is increasingly apparent in countries where major categories of welfare benefit – and in some cases also much healthcare expenditure – are handled by social insurance funds which are separate institutionally, and as accounting entities, from the budget. Historically, the rationale for this independence was that these funds were intended to be self-funding, based on contributions (e.g. worker and employer contributions to unemployment insurance) and/or earmarked taxes. Over time, however, this rationale has diverged from reality. In a number of major OECD countries with social insurance funds, the principle of self-financing has been replaced by confusing arrangements in which transfers from the government budget play a major role in keeping fund finances afloat. In other countries, where self-financing has so far been preserved, social insurance funds are facing certain "bankruptcy" at some point in the future, at which time they will undoubtedly receive major budgetary transfers.

The credibility of the concept of independent social insurance funds has been further thrown into question by the impact of the pandemic, during which the finances of many of these funds have deteriorated dramatically in ways which it is hard to see being rectified without further major budget transfers. Governments have in some cases responded to this situation with elaborate arrangements "extending" the time periods over which these funds will supposedly be required to restore their financial positions. It nevertheless remains clear that, ultimately, the expenditure policies which govern welfare benefits and health expenditure covered by "independent" social insurance funds have just as much impact on the government's fiscal position as expenditure which is formally classified as within the budget. It is untenable to believe that future expenditure policy in these areas could be treated more indulgently because it is institutionally separated or because policy in this area is formally the responsibility of the social partners.

Particularly in countries with the most expansive welfare states, it is a stark reality that the broad spending pressures of the coming era will lead governments to further review and prune welfare benefits. This should

be done in a manner which preserves, and even strengthens in some areas, the social safety net. Sickness and disability benefits are, however, a problem area in certain countries. In others, there remains a need to shorten somewhat the period for which the unemployment benefits are, in normal times, paid at very high levels of income replacement (e.g. 80% and above). Retirements benefits reform, in the light of increased longevity, remains work in progress in many countries.

The scale of the challenge of making policy-driven cuts sufficient to provide future fiscal space also means that tax expenditures need to be targeted as part of the search. Although the magnitude of tax expenditures differs significantly between countries, their cost to the public purse is large virtually everywhere.

Politics is by far the biggest obstacle to making major policy-driven expenditure cuts. Whether they target age pensions, unemployment benefits which remain too high for too long, inappropriate subsidies to industries, free university education, or other areas, the political resistance to cuts is usually considerable. The political resolve of governments is therefore always going to be the most important factor in the capacity to make the cuts which will be required in future to help find essential fiscal space and contribute to fiscal consolidation.

Notwithstanding this, budgeting mechanisms and processes have an important supporting role to play. They have a particularly important role to play in making sure that governments always have at their fingertips a full menu of well-designed savings options.

1.3.2. Spending review

Spending review has a crucial role to play in helping governments manage the enormous budgetary challenges of the post-pandemic era. What will be needed in the coming years is spending review in the classic sense – that is, the systematic review of baseline expenditure with the primary objective of developing savings measures. This means spending review focused squarely on identifying reductions to fund new priorities (reallocation) and to control total expenditures.

Spending review has enjoyed growing popularity in recent years. There is, however, a problem with the way the term has come to be used. In the years immediately following the GFC, spending review was widely understood internationally to mean review focused on developing savings measures. In more recent times, however, the term has increasingly been used in a different sense. The emphasis on the search for savings measures has faded, and "spending review" is now often used to refer to any type of expenditure analysis aimed at improving the quality of public expenditure, even when this has nothing to do with the budget.

Some governments which purport to have established systems of spending review in recent years have in fact created what are better described as *performance review* systems. These are systems which review agencies, programmes or processes with the aim of identifying *performance improvement measures* – i.e. measures which can be taken to improve effectiveness and efficiency. There is in these systems little or no focus on identifying potential savings measures.

It is a good thing that there are today more countries with government-wide performance review systems. However, these are not systems that are designed to serve the needs of budgetary resource-allocation decision making. While reviews carried under these systems occasionally suggest savings measures, this is not usually the case. For the most part, the performance improvement measures which they recommend relate to policy redesign and changes in business processes or organisational structures. Because this type of review does not typically provide ministers and ministries of finance with many of actionable savings measures, it is of limited value in the search for increased fiscal space and better control over aggregate expenditure.

Given the magnitude of the fiscal challenge in the coming era, governments will need to rediscover spending review in the classic sense, and build systems which are specifically designed to deliver savings options that governments can consider as part of the budget process.

There is nevertheless value in having broad performance review *as well as* more narrowly-focused savings-oriented spending review. Recognising this, some argue for combining the two by making the search for savings options a component of a broader performance review mechanism. However, experience suggests that if the search for savings options is merely part of a broader performance improvement mandate, it will tend to get lost. There is also no surer way of overloading spending review working groups – which are in most cases required to complete their work in periods of several months – than by asking them not only to identify savings options, but also to search for other possible ways of improving policy, management and the quality of spending generally.

Closely related to this is the question of institutional responsibility for spending review. There are strong reasons to believe that the only way of ensuring that spending review remains primarily focused on the search for savings options is to place the spending review system under the direct control of the ministry of finance – like the successful Danish spending review system. The MOF's primary role in the budget process and its closeness to the key political decision makers helps to ensure that the spending review system is tailored to the needs of budget preparation. In countries with a powerful office or ministry of the president or prime minister, that body also needs to work closely with the MOF in managing the spending review process.

At odds with this conception of spending review as a process managed directly by the MOF is the approach that has been adopted in certain countries where spending review has been made the responsibility of an independent body outside executive government (see Box 3). This is a model which *may* be appropriate for broad performance review, but is arguably not appropriate for savings-focused spending review.

Box 3. Spending review in Spain

Spain has introduced an arrangement under which the principal responsibility for spending review lies outside executive government, having been assigned to the independent fiscal institution, the *Autoridad Independiente de Responsibilidad Fiscal* (AIReF). AIReF has produced a succession of high-quality expenditure analysis reports. This expenditure analysis is not, however, aimed for the most part at the development of savings options. It remains to be seen whether this particular administrative arrangement will work effectively to deliver on what is arguably the core function of spending review. In addition, the question arises as to whether assigning this type of function to an independent fiscal institution may impact adversely on its effectiveness in its primary role as a guardian of fiscal sustainability.

Source: Author

Spending review needs to be a recurring process, whether conducted annually or at multi-annual intervals. It needs to be closely integrated into the overall budget preparation process. Beyond this, there are a range of options for the design of spending review processes, the choice of which depends on national political, budgeting and administrative processes. For example, whereas in many countries a "joint" review model is most appropriate, in others a "bottom-up" model is more suitable. What is true everywhere is that, given the fiscal challenges of the coming era, considerable thought needs to be given to improving the design of spending review processes so as to sharpen their focus on delivering substantial, actionable savings measures. The OECD *Best Practices for Spending Review* are an important contribution in this regard.

How much of a contribution can spending review make in the coming years? In asking this question, it is important to distinguish between the technical and political functions of spending review. The main technical role is to precisely define savings options, to provide robust estimates of their financial impact, and to identify savings options of which budget decision makers are not already aware. The political role of spending review, on the other hand, is to help in making the implementation of savings options politically feasible, both by communicating the narrative about why savings are needed, and by persuading citizens of the merits of specific savings measures.

The role of spending review in presenting political leaders with savings options of which they were previously unaware needs to be seen in perspective. Typically, many of the major savings options available to government are already well-known – at least in broad terms – to the MOF and to many politicians. The problem is not identifying these options. It is the political difficulty of implementing them. To the extent that this is the case, the political role of spending review becomes particularly important.

Given the challenges of the post-pandemic era – and the important role that reallocations from baseline expenditure will need to play – spending review will have a role to play which is at least as important as during the period of consolidation subsequent to the GFC. Governments may, in this context, wish to design spending review processes which are able to provide maximum assistance with the difficult politics of policy-driven expenditure cuts. There are a range of ways of doing this, all of which require that spending review is not simply internal bureaucratic exercise which provides advice to political leaders behind closed doors. Spending review must, instead, become at least in part an exercise in political persuasion.

One option is the Dutch approach, in which the savings options identified by regular multi-annual spending reviews are made public and become part of the political debate in the run-up to national elections.

Another option which may appeal to some governments is that of convening, at some point over the next few years when the recovery process is well-established, major one-off semi-independent public spending reviews with a mandate to present bold savings options to help meet the challenges of post-pandemic budgetary policy. These would be wide-ranging reviews which would present public reports outlining the context and rationale for savings – i.e. the nature of the fiscal challenge facing governments in the post-pandemic era – and laying savings options explicitly on the table for public debate. They would be presided over by spending review commissions *partly* comprised of respected figures who are not serving officials or politicians. The intention would be that they help with the political framing of cuts, both through their reports and because of the credibility of the membership.

Such spending reviews would not constitute external reviews in the sense of reviews conducted by outsiders independently of government. Experience tells us that external reviews of that type do not work well because they lack the necessary insider knowledge of government (Robinson, 2014[15]). They would, rather, be *semi-independent* in that the civil service would remain closely involved. The MOF and other relevant central agencies would provide the main technical support to the spending review commission and actively present it with savings options. Serving or former senior government officials would also constitute part of the membership of the commission.

The challenge which such commissions would be tasked with addressing would need to be carefully framed, so as to reflect the way in which the relevant government views the fiscal challenge of the coming era. Some governments may wish to place primary emphasis on the need to find fiscal space: in other words, on the positive requirement to spend more on health, climate change and other areas and the consequent need to make savings elsewhere to help with the financing of this additional spending. Other governments may wish to focus more on the imperative of fiscal consolidation – i.e. the dangers posed by high debt and the need to reduce it. These two messages are, of course, not mutually exclusive, and may be combined. What is crucial that it is the government which frames the narrative? There can be no question of simply appointing a commission and leaving it to develop its own view of the nature of the fiscal challenge *de novo*. Government guidance on the framing of the challenge needs to be provided both through careful drafting of the terms of reference, and through the selection of appropriate members of the

commission. At the same time, part of what the government would be looking for from such an external spending review would be a report which helps explain to the public the nature of the fiscal challenge and the rationale for making significant expenditure cuts to baseline expenditure.

The scope of any such external spending review should be broad – covering all government expenditure, as well as tax expenditures. In certain countries, where tax increases should play a significant role in meeting the fiscal challenges of the future, consideration might be given to broadening the mandate of such a commission to also address the broad question of the need for tax increases, although probably not to the extent of tasking the commission with developing detailed proposals for tax increases. In most countries, however, it would be appropriate to keep the focus strictly on the expenditure side.

Major semi-independent public spending reviews of this type would be essentially one-off exercises, with spending review subsequently reverting to the default model of recurring review in the country concerned.

1.3.3. The political economy of reallocation

The politics of budgeting are unquestionably going to be particularly difficult in the post-pandemic era. Policy-driven expenditure cuts are, generally speaking, politically more sensitive than efficiency savings. Some policy-driven expenditure cuts are particularly difficult – pension reform being an obvious example – but none are easy electorally. If, moreover, it turns out that the coming era is one of slower economic growth, the politics of budgeting will be even more challenging.

There are no guarantees that rational fiscal policy will prevail in this context. To the contrary, there will be considerable temptation for governments to have recourse to fiscally unsustainable deficits to minimise or avoid political pain.

Fiscal outcomes in specific countries will depend upon three key variables – political institutions, the political culture, and the persuasiveness of the narratives deployed by governments to justify necessary expenditure-side measures.

Political institutions will play a vital role in determining outcomes. In general, strong governments in parliamentary systems will be best placed to take the measures required – following the usual political rule of acting quickly after elections. By contrast, countries where executive and legislative power is in different and often competing hands will find it much harder to do what is needed. More generally, it will be the extent of what political scientist refer to as “veto points” in the political system – in other words, features of the political and institutional system which enable opponents to block reforms – which will crucial. Veto points can take many forms – including not only the separation of legislative and executive power, but other features such as the possibility of overruling the government via referendum, and the tradition that reforms must be agreed by the social partners. There is no magic solution to these problems.

All this makes the framing of expenditure-side measures enormously important. As mentioned above in the discussion of spending review, there are two obvious narratives that might be deployed. One is the fiscal consolidation narrative – i.e. the need to bring down debt to avoid a future fiscal crisis. The other is the fiscal space narrative – the need to make cuts to shift resources to finance high-priority new spending.

A number of OECD countries successfully deployed the fiscal consolidation narrative after the GFC in order to convince electorates to accept expenditure cuts. The political effectiveness of this narrative varies greatly between countries, depending on their political cultures. Whereas in some OECD countries a large section of the electorate attaches considerable importance to fiscal responsibility, there are other countries where this is much less the case – in particular, countries where there is very widespread acceptance of the alternative narrative which holds that any concern about deficits and debt is an “ultra-liberal” obsession and that any cut to expenditure in any area represents “austerity.” Setting this aside, however, there are questions about the potential effectiveness of the fiscal consolidation narrative in a context where interest rates are low and where huge recent increases in debt levels have had no immediate adverse

consequences. In this context, the success of governments in downplaying concerns about debt increases during the pandemic may come back to haunt them in the coming years. It may be that the re-emergence of inflation changes the politics of fiscal responsibility to some extent, but this remains to be seen. Overall, it would seem that the fiscal consolidation narrative alone is unlikely to be sufficient politically.

This points to the important role that the fiscal space narrative will need to play. Governments will, hopefully, experience success in persuading voters that reallocation must play a major role in funding high-priority new spending. However, this narrative has its own political strengths and weaknesses. It remains the case that the benefits of such new spending will be widely diffused across electorates, and to an important degree will only accrue to future generations, while the pain of policy-driven expenditure cuts will be felt by specific groups which will have a strong incentive to mobilise to fight the cuts. Whatever approach is adopted, governments will need considerable political courage to do what needs to be done.

1.4. Expenditure discipline

Given the intensity of expenditure-side pressures in the post-pandemic era, it will be essential to reinforce the budgetary and expenditure policy instruments for controlling aggregate expenditure. The challenge will be how to be responsive to legitimate demands for additional spending in high-priority areas without losing control over aggregate spending. This raises a number of important issues. One is the importance of effective decision-making processes on new spending. Another is that of controlling demand-driven spending. Closely related to this is the issue of the future role of expenditure ceilings.

1.4.1. New spending decisions

With respect to new spending proposals, the intensity of the pressure for additional spending creates a risk that large amounts of money will be wasted. In responding to the challenge of global warming, for example, it would be all too easy to lavish money on certain types of extensions to public transport systems for which there is limited passenger demand, or on excessive subsidies to households and businesses for abatement investments. With respect to long-term age care, governments could easily go too far in shouldering the cost burden. In this as in any other area of social protection expenditure, it is crucial that careful policy decisions are made concerning the way in which costs and risks are shared between individuals and the state.

While nothing can ultimately prevent political leaders from making poor decisions about new spending if they are determined to do so, good budgetary processes can potentially mitigate the danger significantly. Such processes should be designed in such a way as to ensure, as far as possible, that no proposal is decided by the political leadership without high-quality advice, close scrutiny and reliable costing. The types of administrative rules and processes necessary to ensure this are clear, and are practiced to varying degrees by most OECD member nations. They include:

- Clear requirements concerning the information which spending ministries must submit with any new spending proposal.
- Well-established routines in the central agencies (particularly the MOF) for the review of all major new spending proposals.
- Robust methodologies and processes for the medium-term and longer-term costing all new spending and tax expenditure proposals, and transparency about these costs.
- The circulation of new spending proposals to all relevant spending ministries for their review and comment prior to political consideration.
- The enforcement of rules requiring minimum advance notice prior to the consideration by the political leadership (e.g. council of ministers/cabinet) of any proposal, and

- Rules strictly limiting the scope for the presentation of new spending proposals outside the budget preparation process.
- Additional information and procedural requirements specific to major capital projects.

In the minority of OECD countries where budgetary power is highly fragmented between executive government and the legislature, with the legislature exercising substantial power over the level and composition of expenditure, there is in certain cases also a compelling need for additional reforms to the legislative budget process to instil greater discipline in new spending decisions. In the United States, for example, there is a need to create an integrated "serious annual appropriation process," capable of delivering a unified budget "enacted on time, without a long series of continuing [budget] resolutions until well after the beginning of the fiscal year" (Peterson and Murray Esposito, 2021[16]). In a context where new spending initiatives often originate from the legislature rather than from executive government, the independent costing of such new initiatives by an independent fiscal institution – following the example of the US Congressional Budget Office – is also essential.

1.4.2. Demand-driven expenditure

Demand-driven expenditure (see Box 4) has always posed a particular problem for the management of aggregate expenditure. The two types of demand-driven expenditure which create the most headaches for budgeters are, of course, healthcare and social protection. Part of the problem is that healthcare and major components of social protection – including age pensions, disability benefits and age care – have a powerful long-term upward momentum.

The other problem is that for both categories of spending there is significant uncertainty about the level of demand and, consequently, the level of expenditure. This uncertainty exists both within any given financial year and, to an even greater degree, over the medium term. In the case of social protection benefits, the uncertainty pertains mainly to the numbers of people eligible. In the case of healthcare, there is considerable uncertainty in relation to both the volume and unit cost components of demand – i.e. the number of cases which health providers will handle, and the case costs (average cost per treatment).

It is impossible to limit uncertain demand-driven expenditure by budget execution ceilings – that is, by setting an expenditure allocation in the budget and insisting that it not be breached during the financial year concerned. Managing this type of expenditure is a challenge which must be faced in large measure through the use of tools which lie outside budgeting – starting with eligibility policies. For social protection benefits, eligibility policy is all-important: expenditure is controlled *mainly* by setting policies on what benefits will be provided and who is entitled to receive those benefits. For healthcare, things are more complicated. Eligibility policies – which in this case means policies on what types of conditions and treatments government will pay for, and who is eligible to receive government-financed treatment – remain very important. But it is not possible to control health spending by means only of eligibility policy. One reason for this is that healthcare expenditure is bedevilled by a principal-agent problem which does not generally arise with respect to social protection benefits. The problem is that healthcare service providers have considerable discretionary control over both volume and cost, and (depending on the way in which funding systems are designed) often have incentives to unnecessarily increase either or both. The principal-agent problem is compounded by the fact that case costs can legitimately vary considerably between patients for the treatment of the same condition due to so-called "heterogeneity" — such as differences in the underlying health status of patients that mean that some patients require more care than others.

The fact that citizens have a legal or de facto right to social protection benefits and healthcare means that it is impossible to limit spending in any financial year by saying that, once the budget for the year has been spent, anybody applying for benefits or seeking treatment will simply be refused. This is particularly obvious when the government is paying for citizens to receive treatment by physicians or other healthcare providers in private practice who are remunerated on a fee-for-service or case payment basis.

It might be thought that, by contrast, governments should at least be able to impose strict budget execution ceilings on government healthcare providers such as public hospitals. In a hypothetical system in which public hospitals are funded exclusively by taxes – with no charges imposed on patients – one might assume that if the government gives a hospital a USD 120 million budgetary allocation for the next financial year, the hospital could reasonably be required to strictly limit its spending to USD 120 million. Unfortunately, things are not as simple as this. Patients are referred to hospitals, or simply turn up, and they expect treatment. For many of the conditions or injuries concerned, treatment must be provided either immediately or within a relatively short time frame. Hospitals will then be expected to treat those concerned irrespective of whether they will breach their budgets in doing so. This has been particularly graphically illustrated during the pandemic, but is also true in normal times.

Faced with this reality, governments do not, generally speaking, demand that public hospitals never exceed their budget allocations. They grant hospitals considerable operational autonomy, one aspect of which is a capacity to run deficits or surpluses. When confronted with levels of patient demand which cannot be met within their budget allocations, public hospitals can and do exceed those allocations, running deficits.[1] This provides an essential degree of flexibility in the face of uncertain demand. But it can also mean that if public hospitals are chronically underfunded, they will tend to accumulate *increasing* debt – debt which governments find themselves obliged, sooner or later, to pay off.

The lack of firm budget execution ceilings on hospitals or on government health expenditure generally is what is referred to in the literature as the problem of the "soft" budget constraint (Schwierz, 2016, pp. 36-37[17]). The lack of hard budget execution ceilings does not, of course, mean that healthcare expenditure is totally uncontrolled. It is not the case that spending is determined exclusively by the exogenously-determined level of patient demand. Public hospitals do not just ignore the budgets they have been given. To a certain extent, demand can be managed by means such as measures to limit over-servicing and measures to contain input costs (e.g. pharmaceutical price controls or negotiated prices, preventing inefficient duplication of expensive equipment). But the scope for managing expenditure through measures which do not impact adversely on citizens' entitlement to timely and appropriate healthcare treatment is inherently limited. It is problematic if, in order to limit healthcare spending, governments make decisions which lead to unacceptably long waiting lists, reduced quality of treatment and excessive patient co-payments.

Ceilings on healthcare expenditure?

Faced with the problem of rising and uncertain healthcare expenditure, a number of governments have sought to control spending through the use healthcare expenditure ceilings – that is, dollar limits on expenditure in specific years which apply either to total healthcare expenditure, or total expenditure with certain limited exclusions. One of the first countries with a health insurance scheme to do this was Germany, where ceilings have been applied since the early 1990s. France followed shortly after with the system with a system of medium-term "targets" (ODNAM) (Moretti and Kraan, 2018[18]; OECD, 2015[19]). Outside Europe, another example is the Medicaid "global cap" introduced in New York State in 2011. This sets annual ceiling for the State's Medicaid expenditure – basically payments to independent physicians and hospitals under the Medicaid system – calculated so as to ensure that annual growth in total spending does not exceed a ten-year rolling average of the medical price index. This makes the New York ceiling unique in that the ceilings are based upon an expenditure rule (see Annex 1.B for the distinction between expenditure ceilings and expenditure rules).

Setting a ceiling for healthcare expenditure is one thing. Making it work – particularly over the medium-term – is a different matter entirely. Enforcing the ceiling is far from easy given the soft budget constraint, the uncertainty about demand, the power which providers exercise over volume and case costs, and the risk of rationing. Just how tough this challenge is underlined by the fact that governments which have set healthcare expenditure ceilings have more often than not failed to make them work. Whether it is the

Netherlands throughout the entire period 1994-2012 (Brändle and Colombier, 2020[20]), France through much of the history of ONDAM, or any of a number of other examples, the fact is that healthcare expenditure ceilings have been often exceeded. Moreover, in many cases where they have been enforced, it has been through measures which have eroded citizen entitlements to timely and appropriate treatment.

But not everywhere. Germany has been quite successful in making healthcare expenditure ceilings work as an anchor for growth of healthcare expenditure (Brändle and Colombier, 2020[20]; Busse and Blümel, 2014[21]; Busse et al., 2017[22]). The Netherlands also has succeeded in more recent years in enforcing ceilings, essentially by adopting a corporatist approach to reach agreements between government, insurance funds and patient organisations on the growth on healthcare costs (Kroneman et al., 2016[23]; Brändle and Colombier, 2020[20]). The United Kingdom has also had a good track record in applying ceilings (under its "departmental expenditure limits" system) although, as discussed below, its circumstances are somewhat special.

The experience of Germany shows that making healthcare expenditure ceilings work requires a complex monitoring and enforcement mechanism. The first prerequisite for success is that the overall sector ceiling for healthcare is decomposed into detailed sub-ceilings in order to clearly specify the role which every player in the health sector must play in meeting the overall ceiling. A sub-ceiling must, for example, be set for the hospital sector and the budgets allocated to each public hospital must be clearly specified within that sub-ceiling. It is insufficient to set sub-ceilings only for public sector health providers. Ceilings must also be set for private sector health providers who deliver government-financed health services. This includes a ceiling for independent physicians. But not even this is sufficient. As German experience shows, to make a ceiling for the expenditure of independent physicians effective, it is necessary to disaggregate this into ceilings for *each physician practice*. In this context, a key element is the continuous adjustment of the pay schemes of service providers.

This means that *no* branch of the health sector can be funded on an open-ended fee-for-service or case payment basis – i.e. by means of a system where they are reimbursed without limit, at standard rates, for whatever services are provided or cases which are treated. The most usual approach which is used is to combine the ceilings with remuneration on a case payment or fee-for-service, but to drastically reduce remuneration rates for treatments or services provided beyond the ceiling.

Ensuring that healthcare expenditure ceilings and sub-ceilings are realistic requires detailed technical work and mechanisms which protect against the tendency of government to unilaterally set funding too low for purely budgetary reasons. It is equally important that the fee or case payment rates which operate alongside the ceilings are realistic. In Germany, the system is designed in such a manner as to provide relatively clearly-defined mechanisms for the routine adjustment of the ceiling and reimbursement rates in line with key cost factors including the impact of technology. Ensuring that ceilings and reimbursement rates are set at realistic levels requires either or both formalised and meaningful consultation with the health service providers concerned, and independent price-setting mechanisms. Government cannot exercise this type of control in a unilateral top-down fashion.

The detailed work required within government to set ceilings and reimbursement rates is not something which can be done by the MOF. Only the health ministry and other specialist entities have the sectoral expertise required. It is therefore essential that the health ministry is fully on board with the objective of expenditure restraint.

The successful application of this type of system ultimately requires a highly interventionist and corporatist approach to controlling health expenditure. This is something which does not sit well with beliefs about the role of government vis-à-vis the private sector in all OECD countries. It is, for example, totally unimaginable in the United States.

This calls into question the very notion of setting ceilings for total healthcare expenditure in any country where government is unable or unwilling to intervene to this extent. If the enforcement mechanisms for any supposed sub-ceilings set for private sector healthcare providers are weak or non-existent, how can the government claim to be setting ceilings for total health expenditure? Under these circumstances, it is arguably better for government to confine itself to setting ceilings for total expenditure by government (or quasi-public) healthcare providers – although even then it must be prepared to work hard to make these operate effectively.

Annex 1.C provides further detail on the technical challenges which arise in the implementation of ceilings on healthcare expenditure, and the experience of selected countries in this respect.

Ceilings for social protection expenditure?

Is it perhaps less difficult to impose ceilings on welfare benefit expenditure? The most notable recent attempt to apply meaningful ceilings to welfare expenditure has been the British "welfare cap", introduced in 2014. The welfare cap is a system under which multi-year fixed planning ceilings are applied to total spending on a large group of UK welfare benefits – with certain exclusions, the most important of which is unemployment benefits.[2]

The welfare cap comes, at least on paper, with an enforcement mechanism of sorts. This is a statutory requirement that, if projections for outer years show the cap being breached, the government is (subject to an escape mechanism) required to take measures – such as changing benefit entitlements – to bring projected spending back within the cap (Keep, 2020[24]). There is, however, no sanction for actual breaches of the cap – i.e. for actual spending exceeding the cap in any given year.

Experience with the UK welfare cap makes it clear that, as with any healthcare expenditure ceiling, it is essential that the ceiling is set in a way which realistically takes account of baseline expenditure trends. High-quality forecasting is therefore a prerequisite. While not easy, this is significantly less difficult than in the case of healthcare spending.

Another crucial point underlined by UK experience is that the effectiveness of this mechanism is dependent upon the existence of a credible commitment on the part of the government to respond to prospective breaches of the ceiling by making advance changes to entitlement policy, even when these may be politically difficult or inconvenient.

The welfare cap has not worked well in the United Kingdom. The UK Office of Budget Responsibility concluded that "it is not clear that the welfare cap has any meaningful impact on spending plans and outcomes" (OBR, 2019[25]). The main problem seems to have been precisely the lack of a credible commitment to make the cap work as intended. In practice, it appears never have had its intended effect of inducing the government to make entitlement policy changes in order to avoid prospective breaches of the cap. The Government has instead repeatedly invoked the escape mechanism. Thus when, in 2015 and 2016, prospective breaches of the ceiling were identified, the government's response was, firstly, to make use of an escape clause (a motion in the House of Commons declaring the breach to be justified) and, secondly, to modify the design of the welfare cap in 2016 so as to make it less stringent.

This casts doubt on the value of setting ceilings for welfare expenditure. It may be more realistic to settle, in a medium-term budgeting framework, for projections for this important category of spending. If unemployment benefits are excluded, projections will at least tend to be more reliable than for healthcare expenditure. Nevertheless, even with the exclusion of unemployment benefits, the problem of uncertainty remains – particularly for outer-year projections. As discussed elsewhere (Robinson, 2016[26]), there remains a non-trivial degree of uncertainty about expenditure on a number of other types of welfare benefits (e.g. housing benefits, sickness benefits) over the medium-term.

The future challenge of demand-driven expenditure

Given the scale of the fiscal challenge facing governments in the post-pandemic era, managing demand-driven expenditure will be more important than ever. With respect to social protection expenditure, the problem is principally political. Expenditure is almost entirely determined by prevailing entitlement policies, and can be managed effectively only by changing those policies. Moreover, the biggest long-term pressure in this area – the growth of age pension spending – is due to a demographic phenomenon which will not endure forever. (For most OECD countries, age pension spending pressure is projected to subside within the next couple of decades.)

Health is much more problematic, for two reasons. The first is that, as discussed, health spending cannot be managed by entitlements policy alone. The significant element of provider control over the volume and cost also needs to be reckoned with. The second problem is that the long-term trend of rising spending is, unlike age pensions, not principally demographically-driven, and cannot be expected to subside when demographic ageing slows down. Because the main force driving health spending is the expansion of the technological capabilities of medicine, there is no end in sight to the upward movement of spending.

In this context, government's objective cannot be to prevent health expenditure-to-GDP from rising. Rising spending is not only inevitable, but is in large measure desirable because of the benefits it will offer citizens. Government's objective should be to contain the rate of increase and to ensure that extra health spending is limited to what is required for their populations to benefit from technological progress, and does not translate into increasing levels of over-servicing, inefficiency and excessive provider remuneration.

This poses a major ongoing challenge for public budgeting. Broadly, governments would appear to have two main choices. The first is to take a highly interventionist approach to the management of health expenditure – including exerting tough controls over the levels of spending of independent physicians and other non-government healthcare providers. The second is to "wash their hands" of the problem and limit the increase in government spending by transferring an increasing portion of the burden of healthcare spending directly to patients.

1.4.3. Expenditure ceilings and fiscal consolidation

The challenges of managing uncertain demand-driven expenditure have important implications for the use of expenditure ceilings generally as a budgeting and fiscal policy instrument. In particular, they have implications for the use of medium-term aggregate expenditure ceilings as instrument for achieving fiscal consolidation and ensuring the continuing maintenance of fiscal sustainability – that is, as a means of either progressively reducing debt to safe levels, or preventing it from rising.

The use of aggregate expenditure ceilings for this purpose has great advantages, and has attracted growing support internationally. In Europe, there is a wide "consensus among policy economists" on the need "to focus on aggregate expenditure ceilings set to slowly reduce the debt ratios of over-indebted countries" (Bénassy-Quéré et al., 2019[27]). This conception of the use of aggregate expenditure ceilings to achieve debt objectives has, in fact, been part of the European Union fiscal framework since 2011, in the form of the so-called "expenditure benchmark". Now the push is on to extend their role so as to replace budget balance rules. Aggregate ceilings have also been used to achieve fiscal sustainability objectives in a number of other OECD countries. With the further jump in debt levels due to the pandemic, interest in the use of aggregate ceilings as an instrument for post-pandemic fiscal consolidation has intensified (Commission pour l'avenir des finances publiques, 2021[28]; Francová et al., 2021[29]; Martin, Pisani-Ferry and Ragot, 2021[6]).

Where aggregate ceilings are to reduce or constrain debt levels, the coverage of the ceilings must be essentially comprehensive. Because it is the debt of the government as a whole which matters, the aggregate ceilings must cover all, or almost all, government expenditure (with only the most narrow

exclusions, such as interest and unemployment benefits). Expenditure ceilings which cover only budget expenditure are not sufficient for this purpose.

Experience in recent decades has, however, taught us that the successful implementation of aggregate ceilings is not a simple or straightforward matter. As with any fiscal rules or targets, there is the issue of political commitment. But there are also a number of major technical issues which must be faced when implementing aggregate ceilings. To work, the ceilings need to be translated into limitations on specific categories of spending. The question arises as to the best to operationalise the aggregate ceiling.

The dominant doctrine today is that the appropriate way of giving effect to medium-term aggregate ceilings is through medium-term sector or ministry ceilings ("sector" ceilings for short), i.e. specific ceilings for education expenditure, defence expenditure, social protection expenditure, health expenditure and other sector expenditure. Like the aggregate ceilings, these sector ceilings are set for the coming financial year and 2-3 outer years. The principle is that, together with a reserve, these sector ceilings should sum to the aggregate ceiling, i.e. they represent a sectoral allocation of the entire aggregate ceiling. As mentioned, when the intention is to use the aggregate ceiling as a tool to achieve fiscal consolidation, virtually every area of government expenditure must be covered by one or other of the sectoral ceilings. This view of the manner in which aggregate ceilings should be implemented is referred to in what follows as the medium-term sector ceilings model.

In the application of the medium-term sector ceilings model, the outer-year sector ceilings may in principle either be *hard* (unable to be changed after they have been set), or *indicative* (open to change when it comes time to prepare the budget for the year concerned). In the majority of countries which set medium-term sector ceilings they are indicative. The concept of an indicative ceiling is not, however, one of an amount which can be changed at whim. To be considered to be a ceiling, the indicative sector ceiling must provide a meaningful indication of the level of funding which the sector or ministry is likely to receive when the outer year concerned arrives. This means that the indicative outer-year ceiling should only be changed for limited and clearly-defined reasons. If, by contrast, so-called indicative ceilings have little or no influence on the ultimate budget allocations to the sectors concerned, they cannot truly be considered to be ceilings. They are simply numbers on paper.

This is the problem. Generally speaking, the medium-term sector ceilings doctrine has not been working very well, even in advanced countries with highly sophisticated budgeting systems. In many countries which purport to specify medium-term sector ceilings in their medium-term budget plans, the outer-year ceilings appear to have little practical impact on budget allocations or actual spending. If they have any impact on the preparation of the budget for the year concerned, it is only to serve as *de facto* starting points from which ministries try to bargain for more resources – in other words as floors rather than ceilings for sectoral expenditure.[3]

Is setting sector ceilings the best way of giving effect to medium-term aggregate ceilings?

Experience has made it clear that medium-term sector ceilings for health expenditure and social protection expenditure are particularly prone to being revised upwards and breached (again, setting aside the extreme circumstances of the pandemic). An example is Ireland during the post-GFC years, where the government adopted a system of aggregate expenditure ceilings and then decomposed the aggregate ceiling into sector ceilings. In practice, outer-year sector ceilings were repeatedly revised upwards, to the extent that the Irish Fiscal Council has commented that "the MTEF is not working in practice" and that "pro-cyclical increases in the expenditure ceilings risk repeating the mistakes of the past" (IFAC, 2019[30]).

These problems in making the model work are unsurprising given the inability of many countries to set meaningful ceilings for health spending and social protection expenditure. As discussed, when enforcement mechanisms are weak or non-existent, ceilings in these sectors will necessarily be ceilings only in name.

This has direct implications for ceilings in other sectors, such as defence and education, in a system which is constrained by aggregate expenditure ceilings. Because such a system is intrinsically zero-sum, the medium-term ceilings which are set for these other sectors depend on how much of the aggregate ceilings is taken up by health and social protection. When one sets, in year X, outer-year ceilings for these other sectors for years X+1. X+2 and X+3, these ceilings will be conditioned by expectations of what will be spent in those outer years on health and social protection. If, as time passes, it becomes clear that more will be spent on health and/or social protection than had been anticipated, it will be necessary to cut the ceilings for other sectors commensurately.

The only way of avoiding such offsetting cuts in other sector ceilings is to have built into the medium-term budget planning reserves (unallocated amounts) which are so large as to be able to absorb any overruns which might occur in health and/or social protection. This potentially requires very large planning reserves, as highlighted by experience in Sweden (even though in that country the reserves are required only to deal with welfare expenditure overruns, not those pertaining to health expenditure) (Robinson, 2016[26]). Setting very large planning reserves would, however, require that all other sector ceilings be scaled back at the stage of medium-term planning, and is likely to create a tendency for the ceilings of those other sectors to be increased at a later stage through the allocation of the unused planning reserves.

In short, when the medium-term sector ceilings model is used to implement aggregate expenditure ceilings, uncertainty and limited control over health and social protection expenditure risk undermining the credibility of sector ceilings not only for those two sectors, but also for the other sectors.

Where does this leave governments which have been struggling to make systems of across-the-board medium-term sector ceilings work because of the level of uncertainty they face with respect to health and social protection expenditure? There would appear to be only two choices.

The first is to abandon the medium-term sectoral ceilings model. In other words, rather than trying to set outer-year "ceilings" for education, defence and other sectors which end up having little credibility, the government simply stops setting such outer-year sector ceilings.

Abandoning medium-term *sector* ceilings does not mean abandoning medium-term *aggregate* ceilings. The medium-term sectoral ceilings doctrine is not the only model of medium-term budgeting. The alternative approach is the medium-term estimates model, of which Australia is a good example. In this model, budgeting is framed around medium-term estimates of baseline expenditure, without medium-term sector ceilings being set. In other words, while the budget documents show estimates of what each ministry would spend in outer years assuming the continuation of existing policies, these outer-year estimates do not constitute ceilings – even indicative ceilings. While they reduce the degree of line ministry uncertainty about their future budget allocations, they provide absolutely no guarantees whatsoever.

Such a system provides at least as effective a means of implementing medium-term aggregate expenditure ceilings as the medium-term sector ceilings model – because in such a context discipline is provided by the simple requirement that the scope for new expenditure and tax measures is strictly limited to whatever fiscal space is available within the aggregate ceilings.

The other choice is to set sector ceilings only for the relatively controllable areas of government expenditure, with no ceilings (only estimates) for healthcare and social protection expenditure. If this were done, uncertainty in healthcare and social protection expenditure would need to be dealt with by some combination of two potential shock absorbers. The first would be the use of planning reserves, as discussed above. The second would be the changes to the aggregate ceilings themselves, underpinned by commensurate changes to revenues.

With respect to the use of planning reserves, it seems unrealistic to believe that these could be set at levels sufficiently large to cope with uncertainty with respect to *both* social protection and health expenditure.

With respect to adjustments to the aggregate ceiling, it might seem that increasing outer-year aggregate ceilings because, say, of health expenditure overruns would undermine the basic idea of medium-term aggregate ceilings. However, if the aggregate ceilings are set in order to implement a revenue-dependent expenditure rule (Annex 1.B) this could be considered acceptable.

All of this calls into question the proposition that setting medium-term sector ceilings for all areas of government expenditure is the best way of implementing aggregate expenditure ceilings.

Proponents of the model often claim that the deployment of medium-term sector ceilings can simultaneously assure compliance with aggregate fiscal policy objectives *and* provide certainty to ministries about future funding levels (World Bank, 2013[31]). In reality, the impact of uncertain demand-driven expenditure means that there is a conflict between these two objectives, and that it is impossible to maximise line ministry budget certainty while at the same time maximising control of aggregate expenditure.

Before leaving this topic, it should be acknowledged that medium-term sectoral expenditure ceilings are not always employed as a mechanism for giving effect to aggregate expenditure ceilings. In certain countries with coalition governments, such as the Netherlands, a main function of medium-term sectoral ceilings is to give effect to agreements between coalition parties about the broad allocation of resources during the life of the government, so as to avoid damaging annual disputes about expenditure priorities. In such a context, the need to minimise uncertainty about future line ministry budget allocations is much more important than in countries with single party governments. Even in this context, however, the increased pressure to adhere to aggregate expenditure ceilings in the coming era may impose growing stress on the medium-term sector ceilings model.

Box 4. Implications for aggregate expenditure ceilings

The considerations outlined in the main text have implications for the design and implementation of aggregate expenditure ceilings. One is that the aggregate ceilings should be regarded as *planning* ceilings rather than as *execution* ceilings. A planning ceiling is a ceiling which is required to be respected during budget preparation – in the sense that all expenditure decisions must be consistent with estimated spending not exceeding the ceiling – but which entities are not absolutely prohibited from breaching during the course of the financial year concerned. An execution ceiling, as mentioned previously, is a limit that actual expenditure must respect.

Any attempt to enforce aggregate ceilings as execution ceilings would require either 1) the maintenance of impracticability large budget reserves; or 2) that any overruns in either or both healthcare spending and social protection be immediately – i.e. within the same financial year – compensated by cuts to other areas of government spending. The practical difficulties of making such offsetting cuts, and the destabilisation which they could create, would be considerable.

The only exceptions to this would be for government which do not have responsibility for both healthcare expenditure and social protection (e.g. national governments in countries where sub-national government has responsibility for either or both).

This bolsters the case which is being made by certain economists in Europe at present for the use of a "compensation account" mechanism to give force to aggregate ceilings (Bénassy-Quéré et al., 2018[32]). This mechanism, inspired by the design of the Swiss and German "debt brakes", is one in which any excess of actual spending over the aggregate ceiling is counted in a notional account, such that when the cumulative amounts in the account exceed a certain threshold government is required to take measures to *prospectively* reduce spending — that is, compensate for the overrun in *future* years.

These considerations also suggest that, even when aggregate expenditure ceilings are treated only as planning ceilings, it is not generally possible to set hard outer-year aggregate ceilings without taking firm control over healthcare expenditure. This, plus the pressure created by uncertainty and social protection expenditure, argues for outer-year aggregate expenditure ceilings to be indicative and to be set on a rolling rather than fixed-term basis. The proposal put forward by the European Fiscal Board (EFB, 2019[33]) for fixed-term aggregate ceilings to be set at three years intervals therefore seems inappropriate. This is particularly true if, within the framework of revenue-dependent expenditure rule like that operating in Europe, it is considered appropriate to permit the adjustment of outer year aggregate ceilings in the light of new revenue measures.

Source: Author

1.5. Fiscal sustainability measures

Underlying much of the argument of this paper has been the proposition that, for a large number of OECD countries, debt is a major problem and a key long-term aim should be to restore fiscal sustainability by significantly reducing debt-to-GDP ratios. There are, however, some in the fiscal policy community who think that it is a mistake to focus on debt — not because they dispute the importance of fiscal sustainability, but because they believe that debt is not the best accounting measure in terms of which to assess and formulate policy for fiscal sustainability. They suggest that the focus should shift to other measures derived from public sector balance sheets – that is, from the statements of government assets and liabilities which are now a feature of government accounting in the many countries that have adopted accrual accounting. In the light of this, this section considers the relevance of balance sheet measures — and net worth in particular — for fiscal sustainability.

1.5.1. Debt and fiscal sustainability

Fiscal sustainability refers to government's capacity to meet its interest and other financial obligations without finding itself forced to implement wrenching budgetary adjustment measures (sudden major tax increases and/or severe cuts to government services or benefits), or finding that it is only able to avoid such measures through economically damaging stratagems such as debt repudiation or large-scale inflationary central bank financing of deficits.

Debt has always been viewed as the crucial fiscal variable of relevance to fiscal sustainability. This is for the obvious reason that the ability to meet interest obligations is at the very heart of sustainability. It has, however, long been recognised that the stock of government debt securities on issue – what is known as *gross* debt – is not the only thing which is important for fiscal sustainability. Fiscal economists have always been aware of the importance of other liabilities and financial assets.

The reason that financial assets matter is that they are, in essence, offsets against debt. For example, a government which owes USD 900 billion but which has USD 100 billion in its bank accounts would find the sustainability of its financial position essentially unchanged if it were to withdraw the USD 100 billion from the bank and use it to pay off debt so as to leave it owing USD 800 billion. On the liabilities side, liabilities such as bills payable to suppliers and pension obligations to government employees matter because they constitute "debt" in a broad sense.

Reflecting this, measures of government debt have historically often been adjusted to take into account some of these other liabilities and financial assets through the use of some variant of the concept of *net debt*. Net debt deducts from gross debt the government holding of cash/deposits and, sometimes, certain other financial assets. In the United States, for example, the net debt measure used by government

deducts the value of the government's portfolio of student loans.[4] Some countries historically, under cash accounting regimes, went further and adjusted net debt on the liabilities side to count certain non-debt liabilities.

Quite a few OECD countries have in the past used some such variant of net debt as their *headline* debt measure – i.e. the measure in terms of which they formulated debt rules or targets. Many governments continue to do so today (Moretti and Youngberry, 2018[34]).

What this makes clear is that the term "debt" has never been generally synonymous with gross debt, but has been widely used to refer to alternative measures, which are, to varying degrees, more comprehensive in their coverage of financial assets and non-debt liabilities. Fiscal policy architects have long wrestled with the thorny issue of which of the range of alternative possible debt measures are best to use for policy purposes. While the trickiest issue has been (and remains) the choice of the headline debt measure, attention has also been given to the question of which other debt measures to use as *ancillary indicators* – i.e. measures which are used for analytic purposes and inclusion in the budget documentation, but not for the formulation of rules and targets.

The advantage of accrual accounting in this context is that it has led to the production of regular balance sheets which cover a particularly wide set of liabilities and financial assets. If we apply the principle that all liabilities worsen the sustainability of public finances, and that all financial assets offset debt and improve sustainability, the difference between total liabilities recorded on the balance sheet and total financial assets may be viewed as a particularly comprehensive measure of debt. This measure (liabilities - financial assets) is referred to as net financial liabilities. It is, however, a concept which is more commonly deployed with its sign reversed (i.e. financial assets - liabilities), in which form it is known as *net financial worth* (NFW).

When viewed as a broad net debt measure, NFW counts as *de facto* debt not only a range of liabilities such as payables, but also even government employee pension liabilities (although the latter is a matter on which accounting practice varies between countries). On the assets side, it treats as offsets against debt not only cash/deposits but many other types of financial assets such as, for example, the value of government holdings of equities. Its comprehensiveness makes NFW a very useful debt measure. Whether it is the best choice as the headline measure is open to debate, but there can be no doubt that it is, at a minimum, a valuable ancillary indicator for fiscal policy analysis.

Reporting NFW is not the only way that accrual accounting supports fiscal sustainability analysis and policy. The regular reporting of government's contingent liabilities is also valuable. But none of this involves a shift in focus away from debt. Paying attention to contingent liabilities is an essential part of debt-focused fiscal risk analysis, for the obvious reason that contingent liabilities add to debt if and when they become actual liabilities (Moretti, Boucher and Giannini, 2021[35]).

1.5.2. Net worth and fiscal sustainability

This brings us to the question of the fiscal policy relevance of *net worth*. There is a school of opinion which holds that the net worth (NW) should replace debt as the headline fiscal policy indicator. NW is equal to total assets minus total liabilities. Total assets comprise both financial assets and *non-financial assets*, which are things such as roads, bridges, land, public buildings and intangible assets like software systems. NW therefore equals NFW plus non-financial assets (or, expressed differently, net financial liabilities minus non-financial assets). What this means is that if we were to shift our focus from debt to NW, we would be using a measure which offsets against debt not only financial assets but also the balance sheet ("book") value of the non-financial assets owned by general government.

Is it appropriate to it treat non-financial assets as offsets against debt?

The reason why *financial* assets can be treated as offsets against debt is that they either generate income to meet interest obligations, or can be used to repay debt. By contrast, most government *non-financial* assets do not generate income. They are acquired for the non-financial benefits they generate for the community, and not for income-generation purposes. Moreover, most non-financial assets cannot in practice be sold — meaning that even if there were willing private buyers, government would never sell them. There are, of course, some non-financial asset holdings that generate income or that it would be politically feasible to sell (e.g. surplus real estate). These are, however, typically not a large portion of the overall portfolio of government non-financial assets.

If, hypothetically, all non-financial assets were recorded in government balance sheets at values based on income-generation or practical sale potential – what might be called their realistic *financial* value – it would arguably be appropriate to treat their book values as offsets against debt. NW would under such circumstances be a very useful fiscal sustainability indicator. Conceptual balance sheets developed by macroeconomists (e.g. Buiter and others), which are based exclusively on present values of financial flows, meet these criteria. However, the real-world public sector balance sheets developed by accountants and fiscal statisticians do not.

Accounting asset valuation practices are complex. However, in broad terms, it may be said that most non-financial assets in government balance sheet are valued on a basis which has little to do with their practical financial value. For a great many, their book value is broadly linked to cost rather than to income-generation or resale value. Some others have a book value which is based on a hypothetical market value, despite the fact that it is unimaginable that government would sell them. These valuation practices mean that the book value of many of the assets on government balance sheets is significantly exceeds any realistic financial value that they might have. This is true, for example, for schools and urban roads, both of which yield little or no revenue and could not conceivably be sold to pay off debt. Another example for which this is true of military assets, which have a large balance sheet value — even though governments would never sell their tanks, missiles and submarines even in the most severe financial crisis.

As a consequence, the total balance-sheet value of government non-financial assets is much larger than those assets' realistic financial value. This makes it inappropriate to treat non-financial assets as offsetting debt for fiscal sustainability purposes.

This problem is not solved by the special treatment accorded to narrowly-defined categories of "heritage" and similar assets in public sector balance sheets. It is true that, in the United States and certain other countries, heritage assets are excluded from the balance sheet. However, this still leaves most other non-financial assets on the balance sheet at book values with little relationship to revenue or resale value.[5]

Box 5. Putting non-financial assets to work in tough times

In a recent short piece, Buiter, Ball and Dett put forward a case for the use of NW as a key fiscal indicator based on the importance of putting public sector assets to work to earn revenue during tough fiscal times (Buiter, Ball and Detter, 2020[36]). They argue that a focus on NW helps government to "sweat" their assets for revenue-raising purposes. As they put it, "insofar as public-sector assets like infrastructure add to the state's 'net worth', they should be put to use generating new revenue flows".

The desirability of making greater use of non-financial assets to raise additional revenue, where possible and appropriate, is something with which few would disagree. The problem with the Buiter, Ball and Dett argument is, however, that the extent to which non-financial assets "add" to NW – i.e. the value at which they are recorded in actual balance sheets – has in most cases little to do with revenue that they actually raise, let alone with the revenue that they might potentially raise. It is therefore not

obvious that balance sheets help governments to identify opportunities to increase the revenue flows from their non-financial assets. What are useful for this purpose are asset registers, which simply identify non-financial assets without valuing them.

Source: Author

It follows that, in the public sector context, NW is a fundamentally different concept from NFW, and cannot be viewed simply as a more comprehensive sustainability measure. It is a serious error to treat NW as a broad net debt concept (Network of Independent Fiscal Institutions, 2021, pp. 20-23[37]).

Any decision to ditch debt rules and targets and replace them with rules or targets for NW would therefore constitute a significant step back for fiscal policy. It would make it possible for a government to take fiscal measures which, while they maintain or even increase NW, weaken fiscal sustainability. This is what would happen if a government were to embark upon a massive debt-financed capital expenditure programme which was primarily focused on physical assets that generate no income for government, and the resale value of which was much less than the cost of acquisition. Fiscal sustainability would suffer even if the assets concerned were of genuine benefit to the community.

The reasons why NW cannot take the place of debt as the focus of fiscal sustainability policy are precisely the same as the reasons, discussed in Section 2, why the golden rule cannot replace debt target or limits.

This analysis points, in summary, to three conclusions:

- Net worth – which is not a type of net debt measure — is not a good measure of fiscal sustainability.
- Debt remains the variable of the greatest importance to fiscal sustainability.
- Balance sheets do indeed provide an enhanced perspective on fiscal sustainability, but not because they offer a fiscal variable which is superior to debt. Rather, it is because, by providing broader measures of liabilities and financial assets, they offer more comprehensive measures of net debt.

None of this means that it is necessarily wrong for governments to set objectives for net worth. It simply means that net worth objectives only potentially make sense as instruments for achieving other fiscal policy objectives (such as intergenerational equity). If, moreover, governments do set objectives for net worth, this should be in addition to — not instead of — rules/targets for debt. It is unsurprising that most countries with net worth objectives do in fact combine them with ceilings or targets for debt.

Box 6. Empirical evidence for Net Worth (NW) as a sustainability indicator?

Certain proponents of the NW focus present what they consider to be empirical evidence for the pertinence of NW as a sustainability indicator. This is econometric analysis which they claim shows that that countries with a stronger NW position pay lower interest rates on their debt – from which they conclude that financial markets regard NW as a useful measure of the sustainability of government finances. However, correlation is not necessarily causation. The fact that countries with a stronger NW position pay low interest rates does not prove that financial markets pay attention to NW, or that the reason why they demand low interest rates is the fact that NW is higher. A plausible alternative hypothesis is that high NW is correlated with other factors (e.g. good governance and stable politics) to which the markets do pay attention.[1] Moreover, even if it were true that financial markets were paying significant attention to NW, the most that this would indicate is that NW has merit as an ancillary sustainability indicator. It would remain inappropriate to replace headline debt indicators with NW.

Another empirically-based argument which is been made for NW is that it provides a measure of the extent to which countries have fiscal flexibility when faced with a recession, and that countries with a "stronger balance sheet position" are consequently able to make a faster recovery from recessions. This claim was originally advanced by the IMF (IMF, 2018[38]) and has since been cited approvingly by others (Buiter, Ball and Detter, 2020[36]). Again, however, there is a problem of econometric methodology which supposedly buttresses these claims. This is regression analysis which examines the correlation between NW strength and fiscal flexibility. However, the question which should be asked is not whether NW is positively correlated with such "fiscal flexibility", but whether it is more strongly correlated with fiscal flexibility than is NFW or some other measure of debt. Equivalently, the question is whether there is much correlation between the balance sheet value of non-financial assets and fiscal flexibility.

1. In econometric terminology, the potential problem with this analysis is what is referred to as "omitted-variable bias" – i.e. what looks like a link between NW and interest rates is in fact a causal link between interest rates and some other variables, not included in the analysis, which are correlated with NW.
Source: Author

1.6. Concluding comment

In the immediate wake of the pandemic, it has been easy to get the impression that the era of tight budgets lies in the past. There has, in many countries, been wide political and public support for significant increases in spending in a range of areas. On the fringes of the public debate, but exercising significant influence, are also those who denounce any preoccupation with fiscal sustainability as misguided ultra-liberalism.

The reality is very different. It is that, once the crisis is over, there will be a compelling need to exert even greater discipline over expenditure than in the past. Maintaining control over deficits will be particularly challenging given the magnitude of prospective spending pressures. Inherited structural deficits and the high levels of debt of many countries also make fiscal consolidation essential. Under these circumstances, it will be imperative to strengthen control over aggregate spending. It will also be necessary to strengthen mechanisms – including spending review – capable of identifying and implementing major reallocations from baseline expenditure to create fiscal space for new spending and to support fiscal consolidation.

References

Afonso, A. and M. Kazemi (2016), "Assessing Public Sector Efficiency in 20 OECD Countries", *Working Papers Department of Economics*, No. 12, ISEG - Lisbon School of Economics and Management, Department of Economics, Universidade de Lisboa, Lisbon. [39]

Afonso, A., L. Schuknecht and V. Tanzi (2005), "Public sector efficiency: An international comparison", *Public Choice*, Vol. 123/3-4, pp. 321-347, https://doi.org/10.1007/s11127-005-7165-2. [40]

Arestis, P. and M. Sawyer (2006), "The Case for Fiscal Policy", in *Financial Developments in National and International Markets*, Palgrave Macmillan UK, London, https://doi.org/10.1057/9780230522374_6. [4]

Bénassy-Quéré, A. et al. (2019), "Euro area architecture: What reforms are still needed and why?", *VoxEU*. [27]

Bénassy-Quéré, A. et al. (2018), "Reconciling risk sharing in market discipline: a constructive approach to Euro area reform", *CEPR Policy Insight*, Vol. 91. [32]

Blanchard, O. (2019), "Public debt and low interest rates", *American Economic Review*, Vol. 109/4, pp. 197-229, https://doi.org/10.1257/aer.109.4.1197. [1]

Blanchard, O. (2019), "Public debt: Fiscal andwelfare costs in a time of low interest rates", *Policy Brief* 19-2. [2]

Blanchard, O. and L. Summers (2017), *Rethinking Stabilization Policy: Evolution or Revolution?*, National Bureau of Economic Research, Cambridge, MA, https://doi.org/10.3386/w24179. [5]

Brändle, T. and C. Colombier (2020), *Budgetary targets as cost-containment measures in the Swiss healthcare system? Lessons from abroad*, Health Policy. [20]

Buiter, W., I. Ball and D. Detter (2020), "A stronger recovery through better acounting", *Project Syndicate*, 26 June 2020. [36]

Busse, R. and M. Blümel (2014), "Germany: Health System Review", *Health Systems in Transition*, Vol. 16/2. [21]

Busse, R. et al. (2017), "Statutory health insurance in Germany: a health system shaped by 135 years of solidarity, self-governance, and competition", *The Lancet*, Vol. 390/10097, pp. 882-897, https://doi.org/10.1016/s0140-6736(17)31280-1. [22]

Commission pour l'avenir des finances publiques (2021), *Nos finances publiques post-Covid-19 : pour de nouvelles règles du jeu*, Commission pour l'avenir des finances publiques, Paris. [28]

Creel, J. and X. Ragot (2022), "Le cadre budgétaire européen: règles versus capacité budgétaire permanent, ou les deux à la fois?", *L'Economie Européenne*, OFCE, Paris. [7]

Darvas, Z., P. Martin and X. Ragot (2018), *European fiscal rules require a major overhaul*, Brueghel Policy Contribution. [43]

Darvas, Z. and G. Wolff (2021), "A Green Fiscal Pact: Climate Investment in Times of Budget Consolidation", *Policy Contribution*, No. 18/2021, Bruegel, Brussels. [8]

EFB (2019), *Assessment of EU fiscal rules*, European Fiscal Board, European Commission, Brussels. [33]

Francová, O. et al. (2021), "EU Fiscal Rules: Reform Considerations", *Discussion Paper Series*, European Stabilisation Mechanism, Luxembourg. [29]

Gale, W. (2021), "The Economic and Fiscal Road Ahead", in *America's Fiscal and Economic Outlook: Where Do We Go from Here?*, Peterson Foundation, Washington DC. [10]

IEE (2020), "Eficiencia del Gasto Público: Medición y Propuestas de Mejora"*, Informe de Opinión*, Instituto de Estudios Económicos, Madrid. [14]

IFAC (2019), *Fiscal Assessment Report*, Irish Fiscal Advisry Council. [30]

IMF (2018), *Fiscal Monitor: Managing Public Wealth*, Fiscal Affairs Department, International Monetary Fund, Washington D.C. [38]

Keep, M. (2020), *The welfare cap*, House of Commons Library. [24]

Kroneman, M. et al. (2016), "Netherlands: Health System Review", *Health Systems in Transition*, Vol. 18/2. [23]

Liu, Y. et al. (2022), "One-Year Trajectory of Cognitive Changes in Older Survivors of COVID-19 in Wuhan, China", *JAMA Neurology*, https://doi.org/10.1001/jamaneurol.2022.0461. [13]

Maresso, A. et al. (eds.) (2015), *The impact of the crisis on the health system and health in the Netherlands*, World Health Organization, Regional Office for Europe, European Observatory on Health Systems and Policies. [46]

Martin, P., J. Pisani-Ferry and X. Ragot (2021), "Pour une refonte du cadre budgétaire européen", *Notes du conseil d'analyse économique*, Vol. n° 63/9, pp. 1-12, https://doi.org/10.3917/ncae.063.0001. [6]

Mauro, P. et al. (2015), "A modern history of fiscal prudence and profligacy", *Journal of Monetary Economics*, Vol. 76, pp. 55-70, https://doi.org/10.1016/j.jmoneco.2015.07.003. [3]

McKinsey Global Institute (2017), *Government Productivity: Unlocking the $3.5 Trillion Opportunity*, McKinsey & Company, New York. [41]

McWilliams, B., S. Tagliapietra and G. Zachmann (2020), *Greening the recovery by greening thefiscal consolidation*, Bruegel. [11]

Moretti, D., D. Boucher and F. Giannini (2021), "Managing fiscal risks: Lessons from case studies of selected OECD countries", *OECD Journal on Budgeting*, Vol. 21/1, https://doi.org/10.1787/7db1d712-en. [35]

Moretti, D. and D. Kraan (2018), "Budgeting in France", *OECD Journal on Budgeting*, Vol. 18/2, https://doi.org/10.1787/budget-18-5j8jt0pt4c0q. [18]

Moretti, D. and T. Youngberry (2018), "Getting added value out of accruals reforms", *OECD Journal on Budgeting*, Vol. 18/1, https://doi.org/10.1787/budget-18-5j8l804hpvmt. [34]

Network of Independent Fiscal Institutions (2021), "The Public Debt Outlook in the EMU post-COVID", Contribution to the European Fiscal Board Annual Conference, https://www.euifis.eu/. [37]

OBR (2019), *Fiscal Risk Report*, Office of Budget Responsibility, London. [25]

OECD (2015), "Health care budgeting in France", in *Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives*, OECD Publishing, Paris, https://doi.org/10.1787/9789264233386-12-en. [19]

Peterson, D. and L. Murray Esposito (2021), "Debt Matters", in *America's Fiscal and Economic Outlook: Where Do We Go from Here?*, Peterson Foundation, Washington DC. [16]

Robinson, M. (2020), *Bigger government: The future of goverment expenditure in advanced economies*, Arolla Press. [12]

Robinson, M. (2016), "The coverage of aggregate expenditure ceilings", *OECD Journal on Budgeting*, Vol. 15/1, https://doi.org/10.1787/budget-15-5jm3rx2qbr28. [26]

Robinson, M. (2014), "Spending reviews", *OECD Journal on Budgeting*, Vol. 13/2, https://doi.org/10.1787/budget-13-5jz14bz8p2hd. [15]

Robinson, M. (2013), "Aggregate expenditure ceilings and allocative flexibility", *OECD Journal on Budgeting*, Vol. 12/3, https://doi.org/10.1787/budget-12-5k468nqj1f7g. [42]

Robinson, M. (2009), "Accrual budgeting and fiscal policy", *OECD Journal on Budgeting*, Vol. 9/1, https://doi.org/10.1787/budget-v9-art4-en. [44]

Sarin, N., L. Summers and J. Kupferberg (2020), "Tax Reform for Progressivity: a Pragmatic Approach", in Moss, E., R. Nunn and J. Shambaugh (eds.), *Tackling the Tax Code: Efficient and Equitable Ways to Raise Revenue*, the Brookings Institution, Washington DC. [9]

Schwierz, C. (2016), "Cost-containment policies in hospital expenditure in the European Union", *European Economy Discussion Papers*, Vol. 2015/037. [17]

Sénat (2019), "Rapport d'Information: l'objectif national de dépenses d'assurance maladie". [45]

World Bank (2013), *Beyond the annual budget: Review of global expereince with medium-term expenditure frameworks*. [31]

Annex 1.A. The Scope for Efficiency Savings

There is an influential body of economic literature which produces very large estimates of potential public sector efficiency savings. A representative example is a recent paper by Alfonso and Kazemi (2016[39]) that claimed that the average OECD country could "have reduced the level of public expenditure by 26.8% and still achieved the same level of public performance." The main analytic tool employed in this literature is what might be called *outcome-based data envelopment analysis* (DEA). Amongst the many other examples of this literature are Alfonso, Schuknecht and Tanzi (2005[40]) and McKinsey Global Institute (2017[41]).

Outcome-based DEA analysis bases its estimates of potential efficiency savings on international benchmarking of the outcomes (often erroneously referred to as "outputs") achieved by governments for the money they spend. The reasoning can be illustrated by taking the example of school education. Suppose that Country A and Country B each spend the same amount per student on school education. However, Country B's educational outcomes are twice those obtained in Country A – meaning, in concrete terms, that Country B's school students obtain PISA scores for literacy, mathematical competence etc. that are double those of Country A. This is interpreted by proponents of outcome-based DEA analysis as showing that Country A's school education system suffers from an "efficiency gap" of 50% relative to Country B – a gap which Country A's government could close by taking appropriate efficiency measures. (Analysts in this tradition also use terms other than "efficiency gap," but the concept is the same irrespective of the terminology used.) It would then supposedly be open to Country A to reap the benefits of such efficiency measures in either of two ways. The first option would be to dramatically improve educational outcomes while leaving expenditure unchanged. The second option would be to cut spending drastically — by 50% in this case — while leaving educational outcomes unchanged. The assumption is, in other words, that the so-called efficiency gap is a direct measure of the potential for painless savings.

There is, however, a logical flaw in this reasoning. This stems from the fact that the "efficiency gap" is a measure of comparative *cost-effectiveness*, and measures of comparative cost-effectiveness cannot be used to estimate the savings which could be achieved without sacrificing outcomes.

To see this, we need to go back to basic concepts. The distinction between efficiency and effectiveness is fundamental to all analysis of public performance. In this context, *efficiency* pertains to *outputs* per dollar spent. *Effectiveness*, on the other hand, concerns *outcomes* achieved per output. Because the so-called "efficiency gap" is a comparative measure of outcomes achieved per dollar, it is a composite measure which measures both relative efficiency *and* relative effectiveness. This is where cost-effectiveness enters the picture. Cost-effectiveness, in standard terminology, refers to outcomes achieved per dollar spent. This is why it can be said that, in precise terminology, the "efficiency gap" is a measure of comparative cost-effectiveness.

Cost-effectiveness can be increased either by improving efficiency or by increasing effectiveness. Improving efficiency means cutting the costs of delivering outputs (holding output quality constant), whereas improving effectiveness means improving output quality (i.e. improving the services government delivers so they achieve better outcomes). These are, in other words, the two channels by which any measured "efficiency gap" might be reduced.

To the extent that a so-called efficiency gap is due to inefficiency, it unambiguously provides a measure of potential savings. However – and this is the crucial point – to the extent that the efficiency gap reflects a deficiency of output quality – i.e. effectiveness – it cannot serve as a yardstick to measure the magnitude of savings available to government.

To illustrate why this is the case, let's assume that the school education efficiency gap of 50% between Country A and Country B is entirely due to shortfalls in the effectiveness of education in the former, and has nothing to do with efficiency properly defined. We are, in other words, assuming that the reasons why Country A's school kids achieve at only half the level of Country B's kids on PISA tests are to be found exclusively in output quality problems – such as badly-designed curricula, pedagogical methods far removed from best practice, and poor teaching – which result in Country A's students learning less for any given amount of classroom exposure. If this were the case, the measured efficiency gap would tell us that the country could, with appropriate measures to raise output quality, double average educational outcomes without increasing expenditure.

Under these circumstances it would, however, be an error in logic to interpret the 50% efficiency gap as meaning that, if Country A's government raised output quality to the extent required to close the efficiency gap completely, it would be able to reduce spending by 50% without sacrificing educational outcomes. There is absolutely no reason to assume that, even with such a dramatic improvement in the quality of teaching, it would be possible to cut the school day in half (e.g. with students only attending school in the morning) while maintaining the same (mediocre) educational outcomes as before. The output quality/quantity trade-off — in other words, the degree to which an improvement in output quality makes it possible to reduce output quantity without sacrificing outcomes — might be much less than that. It might conceivably be the case that, even with this improvement in quality, it would be impossible to cut the school day by more than, say, an hour without an appreciable deterioration in PISA scores.

The magnitude of the output quality/quantity trade-off is a purely empirical matter, and varies between different types of services. For some public services, there is no trade-off at all — in other words, improving output quality creates *zero* scope for reducing output quantity. This is true of some medical treatments. When a patient is rushed to hospital after experiencing heart failure, urgent treatment is imperative. The treatment they receive constitutes a single indivisible unit of output. The fact that the hospital concerned may have recently implemented changes in its treatment protocols which have doubled survival rates for this extremely serious condition does not mean that the patient can now be given only half a treatment. In this case, improving patient outcomes does not create any additional opportunities for efficiency savings.

In technical terms, the proponents of outcome-based DEA are making the entirely unwarranted assumption that the marginal rate of substitution between output quality and output quantity always has a value of one – i.e. that the two are perfect substitutes.

This is why it can be said that, to the extent that a so-called efficiency gap is due to failures on the effectiveness side, it cannot be used as a measure of the potential for savings. This is, as noted, not the case if the efficiency gap is the consequence exclusively of problems on the efficiency side. In other words, if the efficiency gap were entirely due to inefficiencies such as unduly low teaching loads, widespread teacher absenteeism (leading to the need to spend too much on substitute teachers), and poor procurement practices (resulting in the government paying too much for school infrastructure, equipment and textbooks), the gap would indeed directly measure potential savings.

There is no way of knowing the extent to which any measured "efficiency gap" between countries reflects differences in the effectiveness of their public services, and the extent to which it reflects differences in the efficiency with which those services are produced. It follows that the efficiency gap cannot be considered to be a measure of savings potential.[6]

As serious as this problem is, it is not the only major flaw in outcome-based DEA analysis. The other is the failure of efficiency gap measures to adequately take into account what are known as *external factors* – factors outside the control of government which affect the outcomes achieved by public services (Robinson, 2020[12]).

The problem may be illustrated by taking the example of health. Here, the efficiency gap is calculated using international comparisons of health outcomes relative to government expenditure. To measure health outcomes, it typically uses variables such as average life expectancy. Simplifying, this means that if two countries spend the same on health, but average life expectancy is 20% less in country A than in country B, country A is deemed to suffer from an efficiency gap of 20%. Once again, this is interpreted as meaning that country A could either: 1) improve health outcomes by 25% for the same level of spending; or 2) cut spending by 20% while leaving outcomes untouched.

The problem is that average life expectancy in any country is affected by a range of things other than the health system. This includes external factors such as national lifestyle patterns (exercise, diet, etc.), the prevalence of smoking, alcohol consumption levels, and the rate of poverty. Devotees of outcome-based DEA are not entirely unaware of this problem, and much of the analytic work makes certain efforts to adjust for external factors. However, it is methodologically very difficult to adjust efficiency gap estimates to take external factors into account, and in practice this is – at best – done only to a very limited degree and in a very crude manner. The consequence is that estimated efficiency gaps are in general so heavily contaminated by external factors that they cannot be considered to be measures of the relative cost-effectiveness of government services. More often than not, the result will be to make efficiency gaps appear larger than they actually are. In health, for example, countries with the worst sets of external factors impacting on health outcomes will tend to be those showing the biggest efficiency gaps.

This is a major problem with all outcome-based DEA analysis. However, the problem is most extreme when this technique is applied to extremely "high level" outcomes which are particularly affected by external factors. For example, Alfonso and Kazemi (2016[39]) purport to estimate efficiency gaps partly by comparing total government expenditure with comparative indicators of the outcomes *economic stability* and *economic performance* (using composite indicators based on measures of inflation, GDP growth, unemployment, etc.). Here, the proposition is that if there are two countries with the same levels of a government expenditure, one of which scores only half as well as the other on these indicators of economic stability and performance, that country would have the option of cutting its total government expenditure by 50% without adversely affecting economic stability and performance. This is transparently absurd given the extent to which economic stability and performance are influenced by factors outside the control of government.

The fundamental cause of these problems is the inappropriate application of data envelopment analysis to outcomes. This is an analytic technique which should only be applied to outputs. As mentioned at the outset, many of the analysts in this tradition fail even to make the distinction, and erroneously use the term "output" to refer to outcomes such as student learning achievements and improvements in patient health status.

This type of analysis is unfortunate because outlandishly exaggerated estimates of potential efficiency savings do not help in the struggle to improve public sector performance. To the contrary, they have the potential to seriously misdirect debate about the options available to governments to achieve fiscal consolidation in the post-pandemic era.

Annex 1.B. Aggregate expenditure ceilings, fiscal rules and targets

There is, as discussed in the main text, a widespread contemporary enthusiasm for aggregate expenditure ceilings as an instrument for fiscal consolidation and sustainability. The most straightforward model of this approach is one in which medium-term aggregate expenditure ceilings are set to achieve medium-targets for debt reduction, that is, the ceiling-setting is "anchored" by a debt reduction target.

Aggregate expenditure ceilings are not only used to achieve medium-term fiscal targets such as debt reduction targets. They may also be used to give effect to expenditure rules, which may be intended to keep debt at manageable levels, or to prevent government getting "too" big. Annex Box 1.B.1 outlines the distinction between expenditure ceilings and expenditure rules.

Annex Box 1.B.1. Expenditure ceilings versus expenditure rules

An expenditure ceiling is a numerical limit set for certain components of government expenditure in a specific year (aggregate expenditure, budget expenditure, sector expenditure, etc.). An example is the of medium-term expenditure ceilings which were set for budgetary expenditure in France's medium-term budget plan for 2018-2022, which stipulated that total budgetary expenditure (with certain exclusions) was not to exceed EUR 257.9 billion in 2018, EUR 259.5 billion in 2019, EUR 260.5 billion in 2020, EUR 262.5 billion in 2021 and EUR 264.5 billion in 2022. The ceilings imply a 1% real reduction in budgetary expenditure over the four-year period.

An expenditure rule is different, in that it is a constraint on expenditure formulated in general terms (usually as a formula) in such a manner as to be applicable to any year. The simplest example is a rule that government expenditure should never exceed 35% of GDP. To be implemented, expenditure rules need to be translated into concrete expenditure ceilings for specific years. Expenditure rules therefore require expenditure ceilings, but it is not necessary to have an expenditure rule in order to deploy expenditure ceilings.

Sources: (Robinson, 2013[42]) and *Loi de Programmation des Finances Publiques 2018-22,* article 9.

The EU "expenditure benchmark" embodies both approaches – that is, it both uses ceilings to achieve debt-reduction targets, and also uses them to implement expenditure rules. The way this works is that, in the case of EU countries where debt is too high relative to the Maastricht criteria defined in the Stability and Growth pact (these days, most EU countries), the aggregate expenditure ceilings are intended to be anchored by medium-term debt reduction targets. By contrast, for EU countries where debt is already at safe levels and debt reduction is consequently not required, aggregate expenditure ceilings are intended to be set in conformity with an expenditure rule designed to prevent a debt problem from emerging (see Annex Box 1.B.2).

Annex Box 1.B.2. The EU approach to aggregate expenditure ceilings

Simplifying somewhat, the approach embodied in the EU "expenditure benchmark", introduced with the so-called six-pack reforms of 2011 is as follows. Firstly, there is an expenditure rule, which should, at a minimum, be respected when setting aggregate expenditure ceilings. The rule is that aggregate expenditure (more precisely, "net primary expenditure" – see below) must not grow faster than ten-year average GDP growth. The assumption behind this rule is that revenue grows over the long-term at the same rate as GDP, so that the rule will prevent spending growing faster than revenue and thereby ensure that the structural budget balance does not deteriorate. In the case of countries which have debt levels which are considered to be safe (below 60% of GDP), this is the requirement which matters.

However, for countries, which have excessive debt levels, this rule is overridden by a tougher requirement derived from an obligation to set and achieve medium-term targets for debt reduction. This means that aggregate expenditure ceilings must be set somewhat lower than would be required by the rule, at levels which are sufficient to achieve the targets for reducing debt over each medium-term period. Where this is the case, it may be said that the aggregate ceilings are based on fiscal targets rather than fiscal rules.

The expenditure benchmark represents what could be called a revenue-dependent expenditure rule. This is because it provides that, if government increases taxes in such a way as to permanently raise tax revenues by, say, 2% of GDP, expenditure may be increased by the same amount. (Symmetrically, if structural revenues are reduced, the rule requires an equivalent reduction in aggregate expenditure.) By making the expenditure rule revenue-dependent in this manner, and excluding cyclical expenditure and interest from the aggregate expenditure measure and accounting for smoothed public investment, the European expenditure rule is conceptually equivalent to a structural primary budget balance rule. The idea is that it is more practical to achieve the objective for the budget balance through an expenditure rule than by directly targeting the structural budget balance, which is difficult to measure reliably. Making the expenditure rule revenue-dependent also allows nations to make their own choices about how big government should be, and should not be obstructed from decisions to expand or shrink the size of government – as long as such decisions do not sacrifice fiscal sustainability.

Source: Author.

Where aggregate ceilings are used as a tool for reducing debt levels or preventing them from rising, the coverage of the ceilings must be comprehensive. Expenditure ceilings which, for example, cover only budget expenditure are not sufficient for this purpose.

There are, however, two exceptions to this. One is purely cyclical expenditure – the key element of which is cyclically-induced fluctuations in unemployment benefits. Cyclical fluctuations in expenditure even out over time, and therefore do not affect the longer-term trajectory of debt. Moreover, nobody wishes to prevent this important expenditure-side automatic stabiliser from operating. The other exception is interest expenditure, which is largely uncontrollable and the exclusion of which enables a clearer focus on what can be controlled.

It is, by contrast, unacceptable to exclude capital expenditure from aggregate ceilings when these are being used to achieve fiscal consolidation or to maintain fiscal sustainability. To exclude capital expenditure would permit governments to run up any amounts of additional debt so long as it was used for investment purposes. But if capital expenditure is not excluded from the aggregate expenditure ceiling, we are left with the familiar problem of how to handle the irregularity of capital expenditure within ceilings. The best means of dealing with this is, however, to adopt the EU approach, which is to use a multi-year smoothed measure of capital expenditure for the purposes of the aggregate expenditure measure.

An alternative approach to tackling the problem of the irregularity of capital expenditure is to apply the aggregate expenditure ceiling in accrual terms – i.e. to count depreciation rather than capital expenditure (Darvas, Martin and Ragot, 2018[43]). Such an approach would, however, be is misguided. This is because it is not possible to limit debt accumulation by limiting the depreciation expense, as depreciation is an accounting charge which arises only after the capital expenditure has already been undertaken (Robinson, 2009[44]).

A final point concerns the way in which changes in revenue policy impact on aggregate expenditure ceilings. If aggregate expenditure ceilings are set to implement an expenditure rule which is entirely independent of revenue settings (such as a requirement that spending not exceed 35% of GDP), or to achieve a medium-term expenditure target (e.g. reduce spending by 1% in real terms), then any decisions to increase or lower taxes will have no impact on the ceilings. However, things are different if the aggregate expenditure ceilings are set to give effect to an expenditure rule which is *revenue-dependent*, like the EU expenditure benchmark. In the latter case, it should logically be possible to adjust aggregate expenditure ceilings if and when governments implement permanent increases or reductions in tax levels. For example, if in 2018 a government set an aggregate expenditure ceiling for 2020 at USD 20 trillion, but in 2019 implemented permanent tax increases which raised revenue by USD 1 trillion, it would be appropriate that the aggregate expenditure ceiling for 2020 be raised to USD 21 trillion.

Annex 1.C. Expenditure ceilings for healthcare

This annex provides more detail on the design and application of expenditure ceiling in the healthcare sector.

In relation to government expenditure for public hospitals, the most successful approach to implementing ceilings is by combining what the health finance literature refers to "global budgets" and case payments. What this means, in simplified terms, is that a hospital will be, on the one hand, given a budget allocation (global budget) of, say, USD 300 million. On the other hand, it will be reimbursed for the treatments it provides on a case payment basis (Annex Box 1.C.1). Once the hospital has delivered sufficient treatments to have "earned" the USD 300 million, any treatments it provides in excess of its budget will be remunerated at a drastically reduced rate. This gives the hospital a strong disincentive to breach its budget, while not banning it from doing so.

Annex Box 1.C.1. Case payment funding in healthcare

Case payment systems (often referred to as activity-based funding) are output-based payment systems under which hospitals or other treatment providers are reimbursed for the cases which they treat (so that the payment covers all services provided in the course of treating the case). It involves paying appropriately differentiated "prices" for each of the large range of case-types provided by the hospital. Simplifying, it means that when a hospital treats a patient who has suffered, say, non-ST segment elevation myocardial infarction, the hospital will be paid a single amount (e.g. EUR 4 000) to cover all of the services provided to the patient as part of the treatment. A different payment will be made for, say, the treatment of a stroke or an acute asthma attack. This may be contrasted with fee-for-service, under which each service provided in the course of the treatment of the patient is billed separately.

Source: Author

The combination of ceilings and case payments is widely used for the funding of public hospitals in OECD countries (Schwierz, 2016[17]). However, to make an expenditure ceiling for the entire healthcare sector work, this is not sufficient. It is, as mentioned, necessary also to limit the expenditure of independent physicians and all other healthcare providers. Thus in Germany broadly the same mechanism is applied to individual independent physicians – if they exceed their practice ceiling, any further services which they provide are remunerated at a drastically reduced rate. In fact, the discipline is stronger than that: physician practices which significantly exceed their ceilings may be subjected to detailed audits to ascertain whether they have engaged in over-servicing, and such audits may bring reputation costs for the physicians concerned.

This sheds light on the problems which France and certain other countries have faced in implementing healthcare sector expenditure ceilings. The French system, like that in Germany, breaks the overall ceiling into a number of sub-ceilings for the major branches of the health system – approximately speaking, one for independent physicians, one for hospitals, and one for long-term care centres. The problem is that while the ceiling for hospitals is enforced by something broadly like the type of sanction referred to above, there is only a weak enforcement mechanism for the ceiling for independent physicians, who are remunerated on an open-ended fee-for-service basis without practice-specific ceilings. This makes the sub-ceiling for

independent physicians of limited effectiveness, and undermines the credibility of the ceiling for healthcare expenditure as a whole. This is a key reason why historically the ONDAM ceiling was frequently exceeded.

In more recent years, in an attempt to enforce the ONDAM ceiling more vigorously in a context of weak control over private provider healthcare expenditure, the government has made the public hospitals bear the burden of expenditure overruns elsewhere in the system. What it has done is to compensate for overruns in the sub-ceiling for physicians by making ad hoc cuts during the course of the financial year to the hospital sub-ceiling (Sénat, 2019[45]). This has aggravated the acute financial pressure on public hospitals.

The legislation which introduced the "global cap" in New York State made provision for an enforcement mechanism whereby remuneration to private hospitals and physicians could be reduced, by discretionary decision of the Governor, in the event of the ceiling being exceeded. In practice, however, this power has never been invoked. Instead, the sole mechanism which New York has used to address prospective breaches of the ceilings has been efficiency measures. The way this works is that, if it is projected that the global cap will be breached in a future financial year, there is a statutory obligation to develop and put in place reform measures which will prevent this from happening. The development of these reform measures is the responsibility of the standing "Medicaid Redesign Team", which has over the years developed a number of significant initiatives which have helped reduce expenditure growth. As useful as this mechanism has proven to be, it does not deal with the fundamental dilemma of controlling expenditure on the reimbursement of private healthcare providers in a system based on unconstrained fee-for-service or case payments.

The UK has had success in giving effect to medium-term ceilings on healthcare expenditure. But a key reason that healthcare expenditure has been much more amenable to control in the United Kingdom is that independent physicians are in that country remunerated primarily via a "capitation" payment system. Simplifying, this is a system under which the National Health Service funds physicians based on the number of patients in their practices, rather than for services provided or cases handled. This greatly reduces expenditure uncertainty, and drastically reduces the scope for physicians to increase their incomes by over-servicing.

A further lesson provided by international experience is that, in order for healthcare expenditure ceilings to work over the long haul, is also essential that the ceilings which are set are realistic. This means that the ceilings are based on a realistic estimate of the cost of delivering the health services to which citizens have a legal or de facto entitlement. To be realistic, healthcare expenditure ceilings have to take full account of trends in medical costs and demand, including the cost impact of the expanding technological "capabilities of medicine" and of an ageing society. This is essential, but no easy matter.

What happens when ceilings – whether for healthcare spending as a whole, or for specific branches such as public hospitals – are too low is a matter of public record in a number of countries. Under such circumstances, citizens are increasingly denied the services to which they are entitled and/or employee remuneration is squeezed in a manner which is ultimately unsustainable. Waiting lists grow, patients fill the hospital corridors, there are shortages of vital supplies and equipment, and doctors and nurses leave public employment. Patients may also be asked to bear an increasing portion of the cost of treatment, and may find that certain types of conditions for treatments are no longer covered (Battenburg, Kroneman and Sagan, 2015[46]). There is, in this context, a difference between meeting healthcare expenditure ceilings in a strictly financial sense, and meeting them while sustainably delivering citizen timely, adequate and quality care.

The New York global cap provides an interesting case study in the setting unrealistic healthcare expenditure ceilings. As mentioned, the New York ceilings are set on the basis of a rule which limits the increase in expenditure to a rate reflecting past growth in treatment costs. Experience since the introduction of the rule shows that it does not work to limit spending in such a way as to take into account cost movements only, and to disregard the evolution of treatment volume. Greater-than-anticipated growth of

treatment volume has been the main factor behind repeated breaches of the New York ceiling in recent years. Even a programme of vigorous efficiency measures has been insufficient to keep spending within the ceilings. New York has, as a consequence, had recourse to egregious accounting-based manipulation in order to avoid formally reaching the ceiling. In several recent years, when expenditure has got close to exceeding the ceiling towards the end of the financial year, the State has simply deferred sufficient payments to the next financial year to ensure that the ceiling is not formally breached (taking advantage of a cash accounting measure of expenditure).

Experience thus suggests that it is impossible, over the long haul, to set healthcare expenditure ceilings which are arbitrarily low simply to pursue spending objectives which bear little relationship to the growth of demand.

1.7. Notes

[1] Conversely, if they spend less than their budget allocations, they run surpluses which they are typically permitted to retain for use in future years.

[2] Unemployment benefits are excluded not only because expenditure is particularly uncertain, but also because it is important for macroeconomic policy reasons to allow the unfettered play of this important expenditure-side automatic stabiliser.

[3] In making these observations, we are of course not referring to the exceptional years of the pandemic, but to the experience of “normal” times in the years preceding the pandemic.

[4] The amounts concerned are so large that the financial assets deducted from gross debt — “debt held by the public" in US terminology — have in recent years amounted to approximately 10% of the value of gross debt.

[5] There are, moreover, many countries that do not exclude heritage assets from the balance sheet. The United Kingdom, for example, records them — approximately speaking — at historic cost.

[6] It should also be noted that the term “efficiency savings” used in the main paper is also a hybrid, and actually refers to the potential for savings both from improving efficiency and from improving effectiveness. Although imprecise, this has the merit of aiding analytic clarity. In this terminology, therefore, what we are saying is that measured efficiency gaps are not necessarily measures of potential efficiency savings.

From:
OECD Journal on Budgeting

Access the journal at:
https://doi.org/10.1787/16812336

Please cite this article as:

Robinson, Marc (2022), "Public finances after the COVID-19 pandemic", *OECD Journal on Budgeting*, Vol. 22/3.

DOI: https://doi.org/10.1787/f26b2a3b-en