Low interest rates and the evolution of Danish fiscal conservatism

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Abstract

Denmark is economically in many ways a paradox.

Like its Scandinavian neighbours, the country has a large public sector (as measured by share of GDP) and significant economic redistribution.

At the same time, however, Denmark is consistently ranked among the freest economies in the world, with relatively light regulation of business and labour markets.

Furthermore, for at least two decades Denmark has been among the world's countries with the lowest levels of public debt and the most sustainable public finances, leading to perceptions that it is well-prepared for future fiscal challenges related to an ageing population.

Since there is a fairly close relationship between the level of interest rates and fiscal prudence, it should come as no surprise that Danish real and nominal interest rates are among the lowest in the world.

In this paper, we examine Denmark's public finances and tax system, trying to identify why the country has been able to spend and redistribute at high levels while maintaining relatively sound public finances.

We will also seek to identify the reasons for Denmark's long-standing fiscal conservativism[2], which would thus provide at least indirect evidence on why Danish interest rates are so low.

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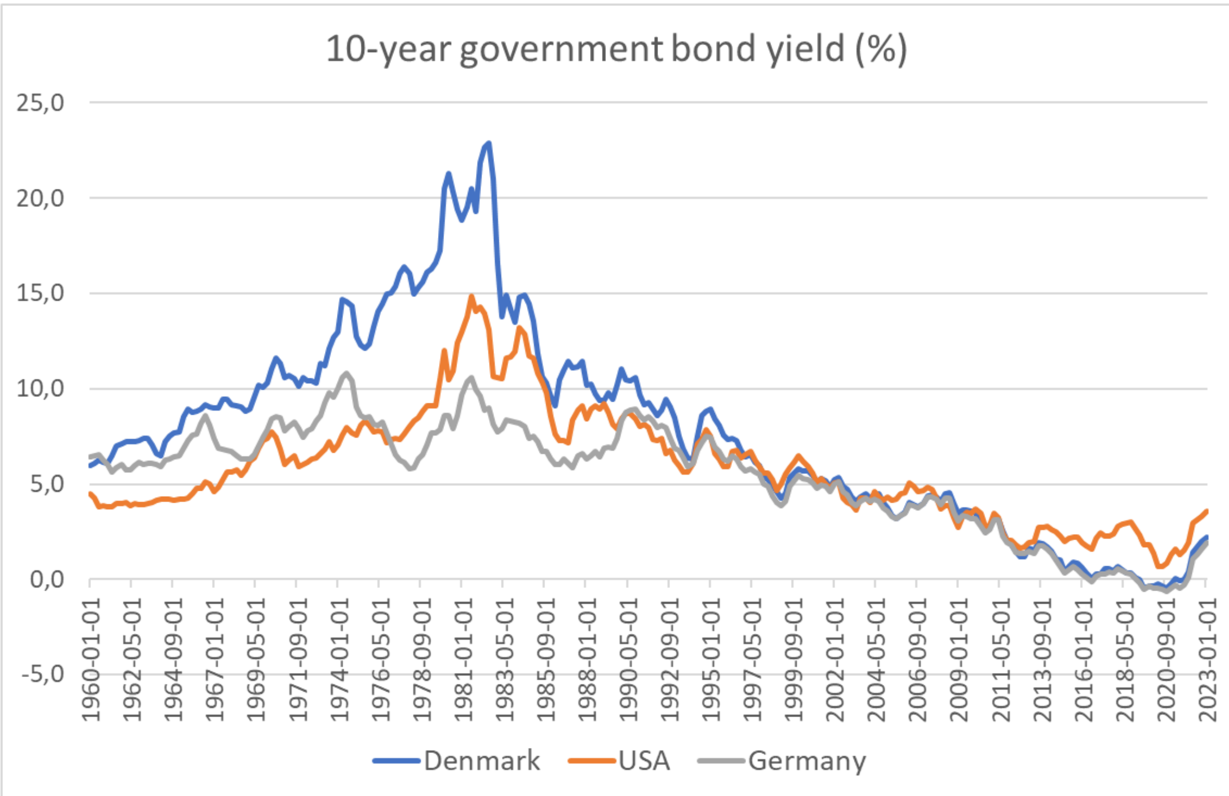
[2] We here define fiscal conservativism as a general fiscal policy stance that favours controlling public spending in order to reduce public debt and ensure public sector debt sustainability for the long run, primarily through public sector reforms and a policy framework focused on medium to long-term (rather than short-term) curbs on demand, as well as through tax reforms designed to reduce distortions produced by the tax system.

Danish interest rates were not always low

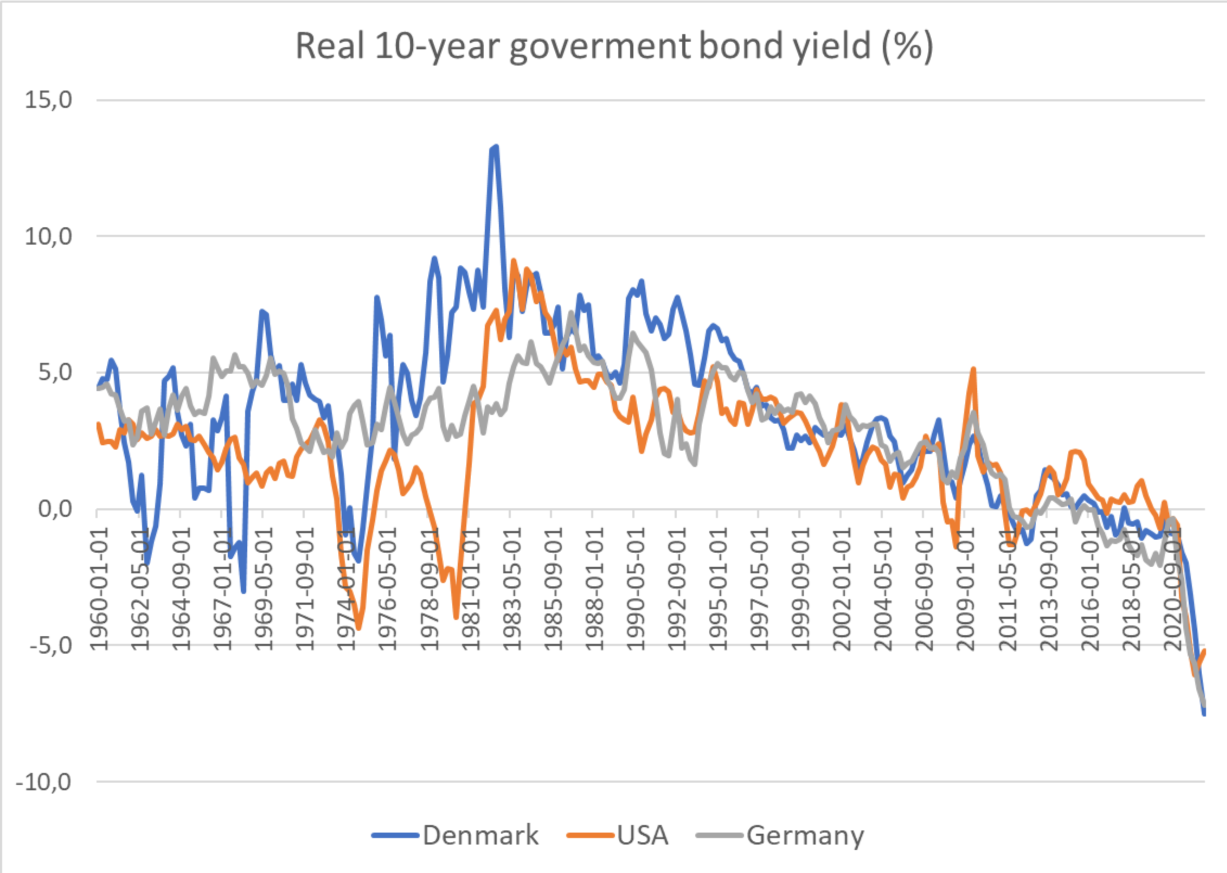
Historically, low interest rates and bond yields have not always been a given in Denmark, particularly during the 1970s and early 1980s, when they rose sharply.

In the 40 years since, however, domestic borrowing costs have been on a significant downtrend in both nominal and real terms.

We can observe both trends in the graph below, which shows Danish bond yields rising substantially during the 1970s (much faster, in fact, than in the US and Germany) and then declining both absolutely and relative to most other nations in the world from the early 1980s.



The same clear tendencies are seen in the development of real interest rates, as the following graph shows.



Both graphs highlight that 1982 marked a turning point for real and nominal Danish yields and interest rates. As we shall see from the discussion below, that year coincided with the start of a nearly four-decade-long transformation of economic policy conduct in Denmark, signalling a shift towards the quite pronounced fiscally conservative policy regime that continues to this day.

The rest of this paper examines the reasons behind this policy shift and how it has developed.

Economic freedom and public finances

Denmark is a small and very open economy with a history of extreme dependence on trade with the outside world. Consequently, support for free trade has traditionally been broad-based. The most striking difference with other countries has been the overwhelming support for free trade within the Danish labour movement and farm sector.

Furthermore, while the public sector has played a significant role in providing 'welfare' services and redistributing personal incomes since the 1970s, Denmark's private sector has always been relatively lightly regulated – at least in an international comparison. There is little tradition of state ownership or subsidies to private industry, in contrast to the norm in southern Europe or even Germany.

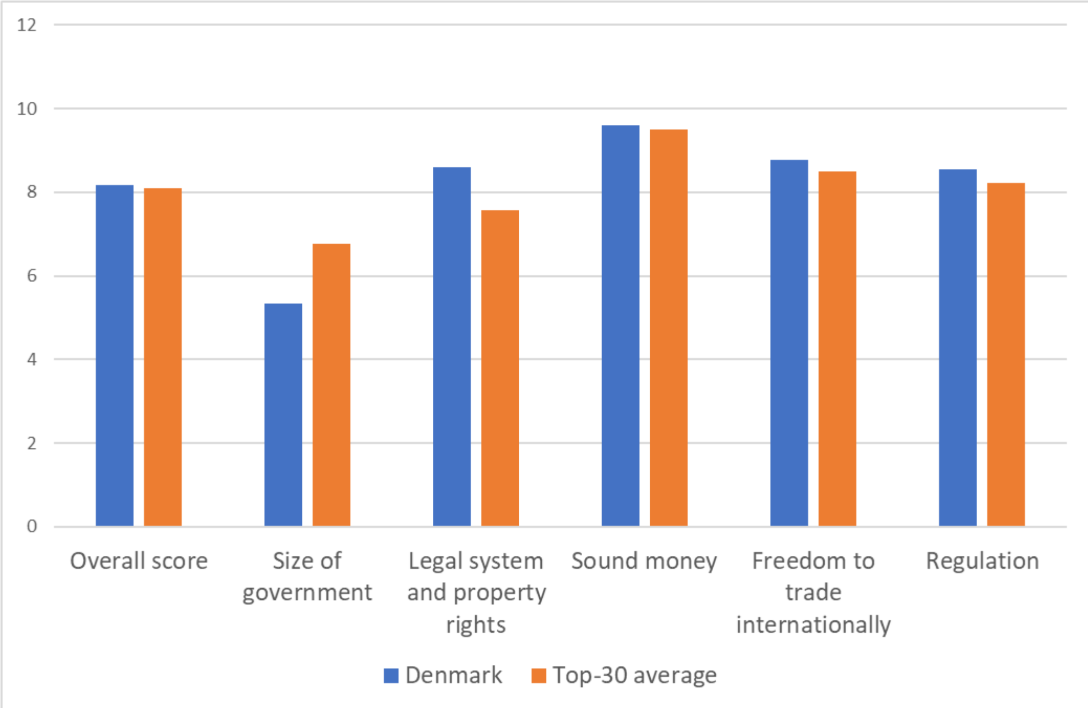
Thus, it should come as no surprise that Denmark is often ranked among the freest economies in the world.

Every year, the *Fraser Institute* and *Cato Institute* rank countries in their annual '[Economic Freedom of the World]' report. For years, Denmark has placed near the top, placing 10th in the 2021 edition, ahead of free market paragons like the United Kingdom and Canada.[3]

It is equally notable that Denmark ranks significantly higher than the other Nordic countries, as Finland came in 21st, Iceland 23rd, and Sweden and Norway tied for 37th.

However, if we examine the economic freedom sub-indices, it becomes clear that Denmark's performance is not uniformly high. The graph below shows how the country scores compared with other Top-30 ranked peers.

[3] Denmark also does well in similar rankings, such as Heritage Foundation's "Index of Economic Freedom" and the World Bank's "Ease of doing business index" (until it was discontinued in 2021).



We see that Denmark generally scores higher (is freer) than the (simple) average of the other Top-30 ranked counties on all sub-indices, except for 'Size of government'. This exception significantly lowers Denmark's overall ranking. In fact, if its score on this subindex had matched the average of the other Top-30 countries, Denmark would be the second freest economy in the world.

The reason Denmark scores relatively badly on this measure is its high level of government spending, and therefore also taxation, as a share of the economy. It is also notable that government expenditures are heavily weighted towards consumption (education, health, culture etc.) and income transfers, while public investment is relatively low, as is state ownership of assets[4].

Broadly speaking, the role of the government sector in the 'Danish economic model' can be described as 'Welfarist' rather than 'Socialist', in the sense that socialism is normally defined as an economic system in which the state owns and controls the means of production.

Of the latter there is very little in Denmark, placing the country closer to a *laissez faire* model than to socialism.

[4] Cf. "Economic Freedom of the World 2020 annual report", chapter 2.

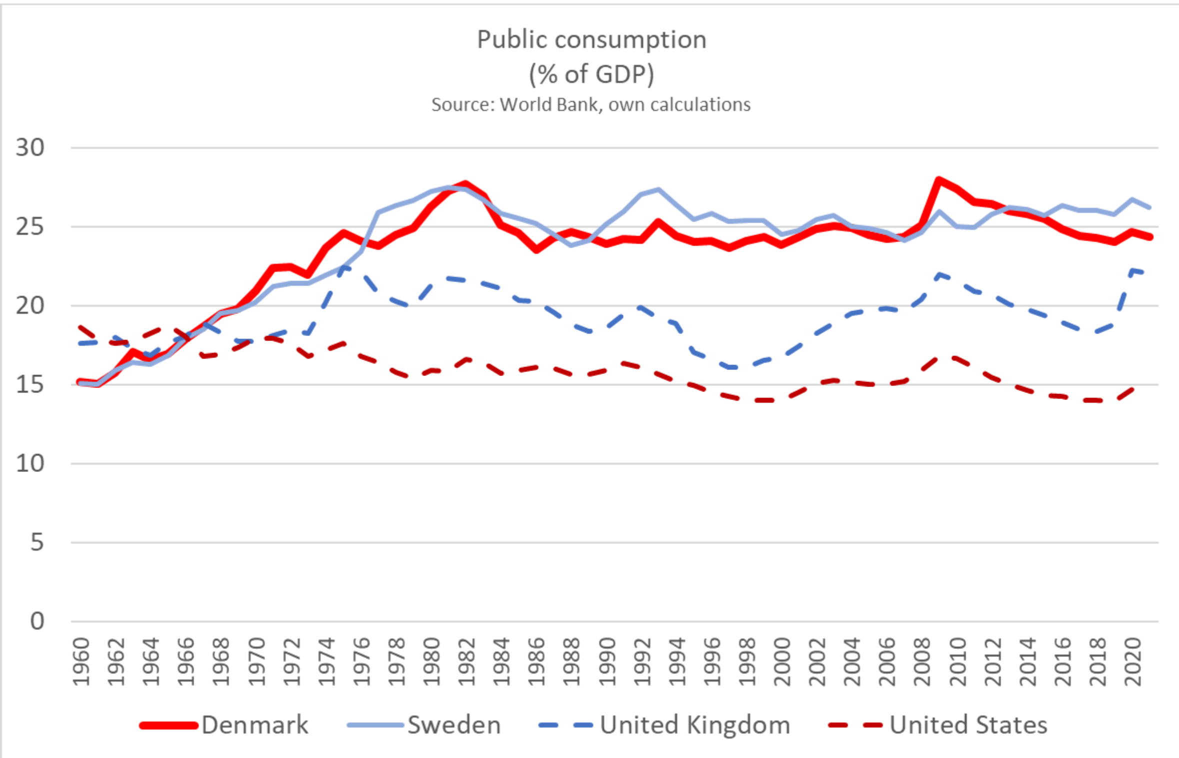
Below we take a deeper dive into the Danish government's economic role, the composition of public spending, and the structure of tax system. We then consider why Denmark, despite high levels of government expenditure, is one of the most fiscally conservative countries in the world.

Public spending: From small to large

There is a widespread perception that public spending in the Scandinavian countries has always been quite large. A different picture emerges, however, if we examine the historical trends.

Back in the early 1960s, for example, government spending in all Scandinavian countries closely matched that in Anglo-Saxon countries, including the United States.

This starting point and the subsequent trend are illustrated by the graph below.



The graph shows that public consumption (outlays on health, education, childcare, culture etc.) were indeed smaller in Denmark and Sweden in the early 1960s than they were in the US and the United Kingdom, only to undergo a very significant expansion later in the decade and in the 1970s.

The growth in public consumption in Denmark during this period is closely linked with a drastic increase in the supply of ‘welfare goods’ provided by the government, most at no charge or for heavily discounted prices.

Denmark’s municipally operated kindergartens, for example, offer their services at well below cost, while most other education – even university studies – is ‘free’. The same goes for healthcare, which is mostly also taxpayer funded.

Access to and provision of these services were both significantly expanded through the 1960s and 1970s. Around 1982, however, as the graph also shows, public consumption (not to be confused with total government spending) has been kept more or less constant as a share of GDP.

Economic historian Sven Aage Hansen (Hansen, 1983) has argued that a key reason for the sharp surge in public expenditures during the 1960s was very fast growth in tax revenue due to an unexpected acceleration in inflation (also known as *fiscal drag)*.

Higher inflation and (nominal) wage growth pushed many taxpayers into higher tax backets, producing an initial improvement in public finances. Because there were no strong institutional constrains on public spending at the time, this development prompted Danish politicians to go on a spending spree.

What we cannot see from the graph is a change in the *way* these services were provided. Starting in the early 1990s, more consumer choice was introduced in the form of voucher schemes for education and health services, introducing to these sectors at least an element of competition. In healthcare, it encouraged the emergence of a number of private providers, allowing patients to choose, for example, whether to have an operation done in a public or private hospital. In primary education, Denmark has an even longer tradition of private and so-called free schools (“friskoler"), now mostly supported through taxpayer-funded school vouchers.

The fiscal effect of these changes was to tighten budget constraints, especially in conjunction with the quasi-constitutional limitations placed on Danish municipalities – the main providers of childcare and primary education.

The 1990s also saw the start of a long-term push to increase the productivity of public welfare goods providers through outsourcing to the private sector. This trend in Denmark has not reached the levels observed in Sweden, where government-funded nursing homes are often run by private service providers, who also dominate K-12 education.

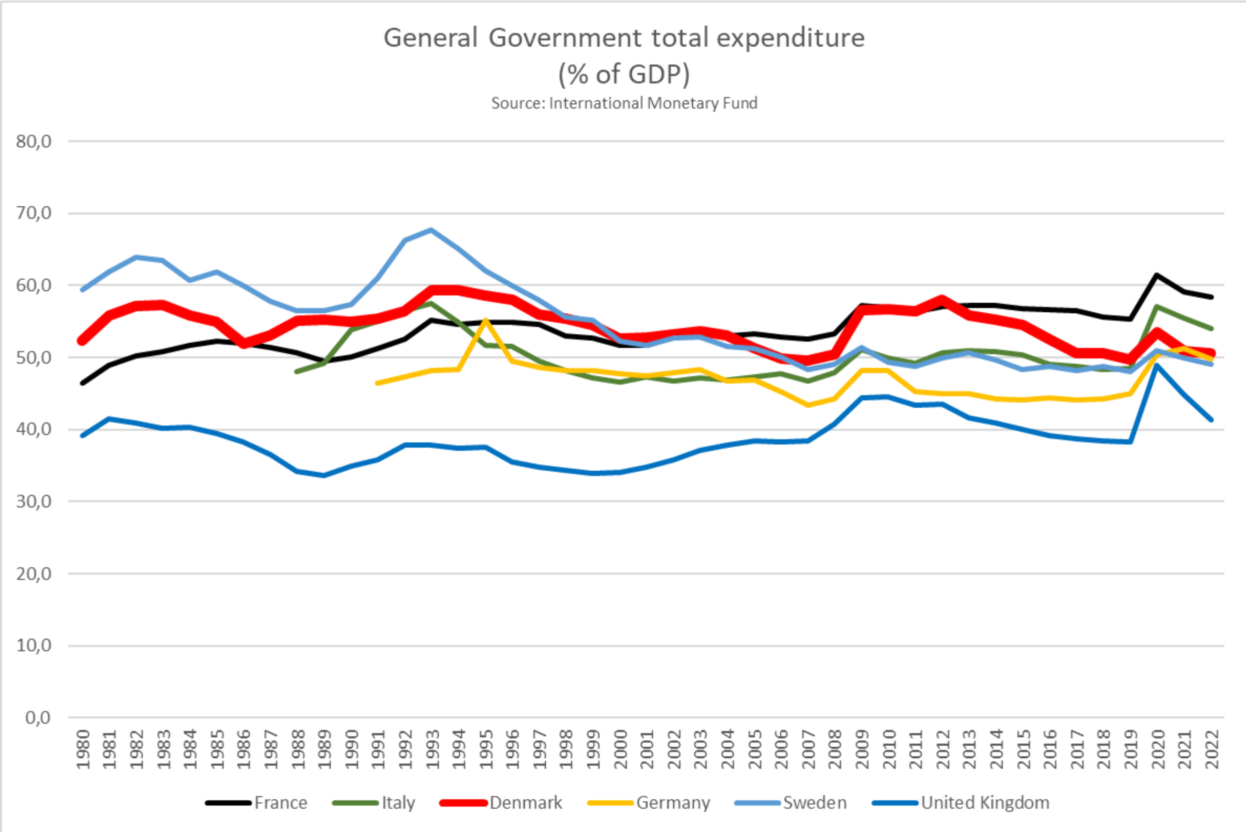
Another point worth noting is that public spending trends in Denmark since 1960 have been largely independent of whatever political parties happened to be in power. Public consumption grew steadily in 1960-1968, a period of Centre-Left governments. But when a Centre-Right majority took over in 1968-1971, there was no visible slowdown in public consumption growth; if anything, the range of available 'welfare goods' expanded.

This trend continued under alternating Centre-Left and Centre-Right cabinets (mostly coalitions) throughout the 1970s.

In the post-1982 period, by contrast, both Centre-Left and Centre-Right governments tried to curb public spending and reform welfare schemes.

The graph below illustrates that since the early 1980s, Danish public spending as a share of GDP has remained fairly stable, with a moderate downward trend. We have seen a similar pattern in Sweden. Both countries were at the absolute top of world rankings of public sector spending as a percentage of GDP in 1980, but since that time, they have been overtaken by peers in continental Europe such as France and Italy.

When we compare Danish and Swedish public sector spending with levels in Western Europe, we find it pretty much in the middle. This, however, is mostly the result of fiscal expansion in other Western European countries rather than any major change in public sector spending in Denmark and Sweden, even with the moderate downward trend factored in.



'The Power to Tax'

In their seminal work *The Power to Tax: Analytical Foundations of a Fiscal Constitution*, Geoffrey Brennan and James M. Buchanan (1980) argue that there is a positive relationship between a tax system's efficiency and the size of government.

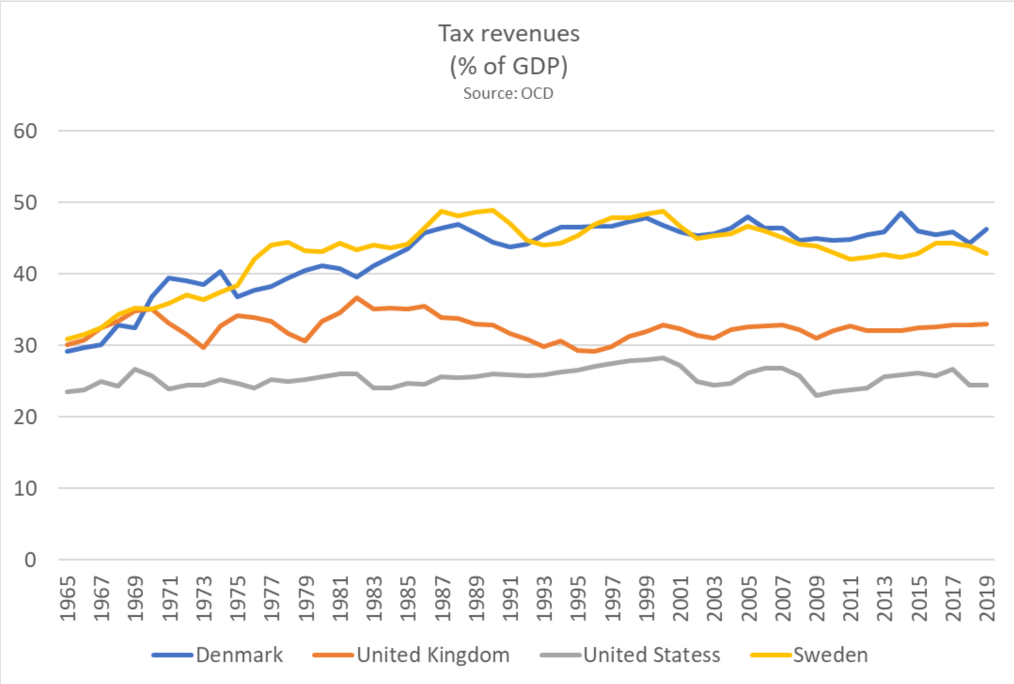
This implies that countries where the tax system is less distortional also have larger public sectors.

If we disregard the causality of Brennan's and Buchanan's argument, Denmark in many ways is a prime example of their hypothesis, in the sense that the Danish tax system is relatively close to what a textbook would call 'optimal' for a given level of public spending.

Since the early 1980s, Denmark has tended to reduce the most distortionary taxes, lower the progression of income tax rates, and cut corporate taxes while at the same time increasing its reliance on consumption taxes.

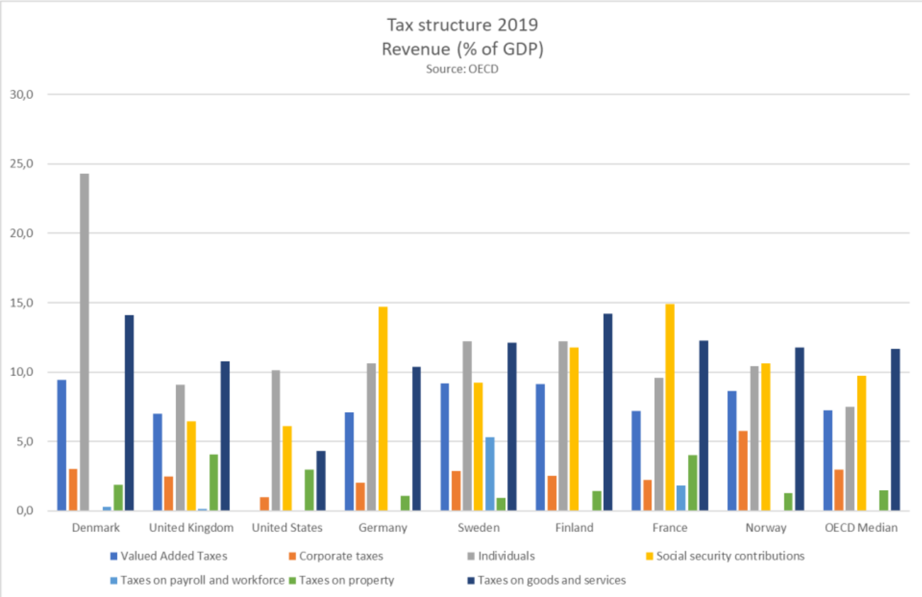
For example, Denmark has a nearly uniform VAT rate of 25 percent, with very few exceptions, while taxes have been raised on goods with perceived negative externalities.

However, it should also be remembered that Danish taxes have not always been high. As with public spending, they were on a level comparable with those in the Anglo-Saxon countries in the early 1960s.



It was not until the late 1960s and 1970s that tax revenues (and rates) began to grow fast. Since the late 1980s, tax revenues have been stable at a very high level close to 50 percent of GDP.

If we look at the structure of taxation in an international comparison, it becomes clear that Denmark is quite unique in several ways.



As the graph above shows, Denmark's direct taxation of individuals is particularly high.

Personal income taxes (here termed taxation of individuals) account for almost half of total Danish tax revenue, or nearly 25 percent of GDP. This is roughly double the share of tax revenue from that source in the other Nordic countries.

Furthermore, revenues from Value Added Tax (VAT) add the equivalent of another 10 percent of GDP to the Danish government's total income, or 20 percent of tax revenue.

Meanwhile, Denmark essentially receives no revenue from social security contributions or payroll taxes.

Finally, it is notable that Denmark's corporate tax revenues are somewhat higher than in the US, despite a minimal difference in the tax rate (22 percent on corporate income in Denmark versus 21 percent in the US).

The main takeaway here is that personal income taxes and VAT account for a very large portion of Denmark's tax revenues, giving it one of the developed world's simpler tax systems.

In terms of income tax rates, Denmark clearly is among the OECD leaders, especially in the highest income brackets. This accounts for a natural tendency to highlight the extreme progression of the Danish tax system. However, the system's significant feature is not the degree of progression but rather the high average tax rate on income. Hence, a single adult with no children pays 35.6 percent (2021) in Denmark, a rate exceeded by only Belgium, Germany, and Lithuania among the OECD countries.

If we look at top rates, Denmark ranks even higher, with its maximum income tax of nearly 56% exceeded only by Japan in the OECD.

By contrast, the degree of progression in Denmark's tax system, as measured by the difference between top and the average tax rates, is nearly identical with the OECD average.

That said, Denmark's top tax rate kicks in quite early, on incomes only about 30 percent above the average, which is a significantly lower level than the OECD average.

Hence, the absolute level of income tax rates in Denmark is high and the top rate is paid by even high-middle income households.

1982 – the year that changed everything

To understand economic policymaking in Denmark and how it is perceived by politicians, economists, and civil servants, it is hard to avoid mentioning 1982.

That year marks a watershed in the country's economic policy.

As in many other Western democracies, Denmark experienced the 1970s as a period of economic and political uncertainty, accelerating inflation, and very serious balance-of-payments and public finance problems.

Danish economic thinking during that period was largely dominated by a Keynesian belief that the macroeconomy could be 'managed' through activist fiscal policies and wage and price controls.

As macroeconomic imbalances grew, the Danish currency – the krone – was repeatedly devalued, further accelerating inflation without achieving the goals of spurring economic growth and curbing unemployment.

By the early 1980s, inflation had risen above 10 percent and Danish government bonds were yielding more than 20 percent, while the twin fiscal and payments deficits were ballooning.

This situation prompted Finance Minister Knud Heinesen, on handing in his resignation in 1979, to famously remark that Denmark's economy was on the 'brink of the abyss' (Heinesen 2008).

The comment was seen as symbolic of the Danish economy's state in the late 1970s and early 1980s and of the failures of activist Keynesian macroeconomic policies.

In 1982, the Social Democratic cabinet of Prime Minister Anker Jørgensen collapsed and a new Centre-Right coalition government was formed under Conservative Party leader Poul Schlüter.

Unlike his Conservative counterparts in the US and UK – Ronald Reagan and Margaret Thatcher – Schlüter did not have an ideological agenda and his government's approach to economic policy can be seen as highly pragmatic.

Even so, the new government's course amounted to a major break with the previous decade. Schlüter's macroeconomic approach rested on three pillars (Arzrouni *et al.*, 2007):

1) Significant fiscal consolidation through a combination of tax increases and public expenditure cuts.
2) A 'hard' fixed exchange rate peg against the German mark as opposed to the previous government's numerous devaluations.
3) De-indexation of public expenditures and wages.

At the time, the government's austerity measures were strongly criticised and mainstream economists were sceptical that they would prove successful.

While the underlying reasons can certainly be discussed, what is undisputed is that the Danish economy rebounded strongly, budget finances improved dramatically, inflation came down and bond yields dropped.

These developments were seen as vindicating the economic policies of the Schlüter government, while the success of fiscal consolidation – which ran counter to the Keynesian thinking prevalent at the time – caused a major shift in the economic and political discourse in Denmark. That shift has to a large extent lasted to this day, but it was particularly important in the 1990s, when a Centre-Left coalition led by Social Democrat Poul Nyrup Rasmussen came to power.

The Nyrup Rasmussen government maintained its predecessor's commitment to fiscal consolidation and expanded supply side reforms, further improving the condition of Danish public finances. Many of its structural reforms – notably a comprehensive overhaul of labour market and social welfare legislation introduced from 1993 to 2001 – have continued to ease fiscal pressures to this day.

Thus, the post-1982 period has been marked by continuous and gradual economic reforms aimed at reining in public spending and curbing public debt. At least until recent years, one can say that fiscal consolidation has enjoyed broad support from the left and right of Danish politics, installing a fiscally conservative approach at the centre of economic policy making.

A key reason for this relatively strong political consensus is the Schlüter reforms' obvious success – particularly that the significant fiscal tightening did not, contrary to Keynesian thinking, produce an economic slump. Quite the reverse: Denmark's economy boomed from 1982 to 1986.

This later became known in the economic literature as 'non-Keynesian effects of fiscal contractions', of which Denmark's experience in the 1980s is often highlighted as a prime example (see, for example, Giavazzi and Pagano, 1990).

It became part of the 'accepted consensus' among Danish politicians and the wider public that the failures of Anker Jørgensen's government in the early 1980s resulted from a combination of fiscal chaos and krone devaluations, and that the 'right' economic policy for Denmark was fiscal consolidation combined with structural reforms.

This approach still enjoys very strong support among Danish economists in both the private and government sectors.

That said, there have been signs in recent years that the current generation of politicians has forgotten the lessons of the 1980s, visible in a noticeably weaker commitment to fiscal consolidation over the past decade. That change is less apparent among Danish economists, who continue to warn against fiscal excesses and still largely agree that policy should primarily focus on fiscal consolidation rather than on short-term Keynesian-style 'demand management'.

This consensus might superficially appear to be 'conservative' or even 'libertarian', but it is better viewed as born from necessity.

Danish politicians of the Right and Left retain a strong commitment to the core principles of income redistribution central to the Danish ‘welfare state’, as well as to the conservative fiscal approach which has dominated Danish economic policymaking in recent decades. The two principles should not be seen as contradictory; in fact, it is widely accepted that fiscal responsibility is essential for Denmark to maintain the welfare state. Similarly, there has been a broad political consensus, particularly since the 1990s, that welfare programs should be reformed so as not to undermine the stability of public finances.

From ideas to institutional constraints

As the discussion above indicates, Denmark’s fiscally conservative approach originated from ideas and norms rather than any formal constitutional or institutional constraints on fiscal policy.

However, over time, such constraints have nonetheless been introduced, further supporting fiscal consolidation and limiting the scope for the kind of fiscal activism that produced the ballooning public debt and significant macroeconomic imbalances of the 1970s and early 1980s.

Several institutional reforms gradually implemented since the 1980s undoubtedly have been quite important in curbing public spending and contributing to fiscal consolidation.

Three sets of reforms should be highlighted:

1) Centralisation of the central government budget process
2) The Maastricht Treaty’s rules for the public deficit and public debt
3) The Budget Law of 2012

The glaring need for fiscal consolidation in the 1980s engendered a clear political will to push through reforms aimed at significantly reducing Denmrk’s public debt. These produced many changes in the budgetary process first introduced in the 1980s and continued through the 1990s.

At the core of these reforms was a strengthening of the Ministry of Finance’s role in the budgetary process.

The practice of earlier Danish governments with respect to central government budgeting can be described as bottom-up approach, whereby individual ministries designed their budgets based on a political wish list and the Ministry of Finance basically acted as a 'macro account'.

However, starting from the 1980s, the focus shifted to ensuring macroeconomic stability and fiscal sustainability.

That meant a gradual centralisation of the budget process take place over the years, where the general budget framework was determined by the Ministry of Finance and ministries were allocated funds based on the political preferences of a given government.

These changes were formalised in 1984-85, when several reforms of the central government budget process were introduced.

Their guiding principle was to introduce a 'zero growth' regime as measured against previous government expenditures.

This target was then broken down to individual 'ceilings' for spending at each ministry.

Furthermore, while in the previous system a ministry would not be able to carry over any unspent funds or savings it had achieved in a given fiscal year, the reforms now made it possible for ministries to use a portion in subsequent years (Jensen & Fjord 2010).

These reforms also strengthened the Ministry of Finance's monitoring of other ministries' budget performance.

Studies of the budget process in different developed markets have highlighted the uniqueness of Denmark's centralised approach and its important role in the fiscal consolidation of the 1980s and 1990s (see, for example, Poterba and von Hagen 1999).

There is little doubt that strengthening the Ministry of Finance's hand contributed to curbing public sector spending growth and to the overall consolidation of public finances.

These changes in the budget process should be understood as quite distinct from explicit legal constraints on spending, taxation and issuance of public debt.

In Denmark, such constraints where relatively few until the 1990s, when the situation slowly began to change.

When the so-called Maastricht Treaty was signed in 1992, the EU countries agreed to establish a common EU currency – the euro.

The Maastricht Treaty laid out so-called ‘convergence criteria’ which countries should fulfil before being allowed to join the euro area.

In an 1992 referendum, the Danish population rejected the Maastricht Treaty. Denmark later chose to join parts of the Treaty, but it was agreed between the Danish government and its EU partners that Denmark would opt out of the single currency.

Thus, Denmark has retained its own currency – the krone.

However, since 1992 Danish governments have committed to nonetheless fulfilling the convergence criteria – often also referred to as the Maastricht criteria – even as Denmark remains outside the euro area.

The criteria set important limits on the general government budget deficit and gross public debt:

Government budget deficit:

The ratio of the annual general government deficit relative to gross domestic product (GDP) at market prices must not exceed 3 percent at the end of the preceding fiscal year (based on notified measured data) and or any of the two subsequent years.

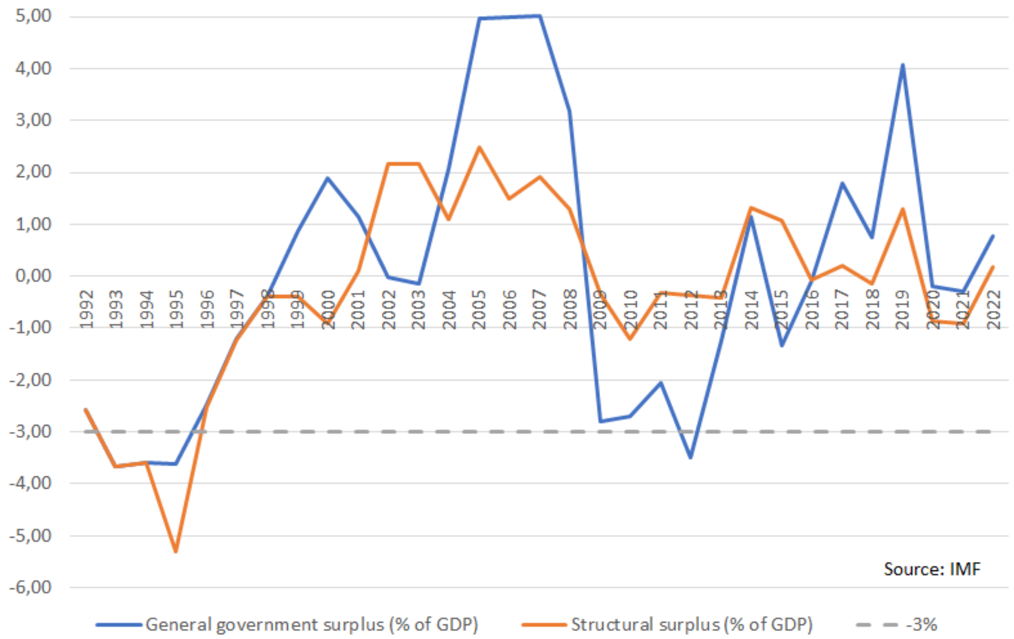
Government debt-to-GDP ratio:

The ratio of gross government debt (measured at its nominal value outstanding at the end of the year, and consolidated between and within the sectors of general government) relative to GDP at market prices must not exceed 60 percent at the end of the preceding fiscal year.

On paper, these are quite strict constraints on public finances. In practice, a number of EU countries have flouted the fiscal rules more or less since their introduction. Countries like Italy and Greece have consistently violated the criteria without any serious sanctions or fines from the EU.

Paradoxically, Denmark treats the Maastricht criteria as much more binding than many members of the euro area – precisely because it chose to opt out of the currency but not the rules.

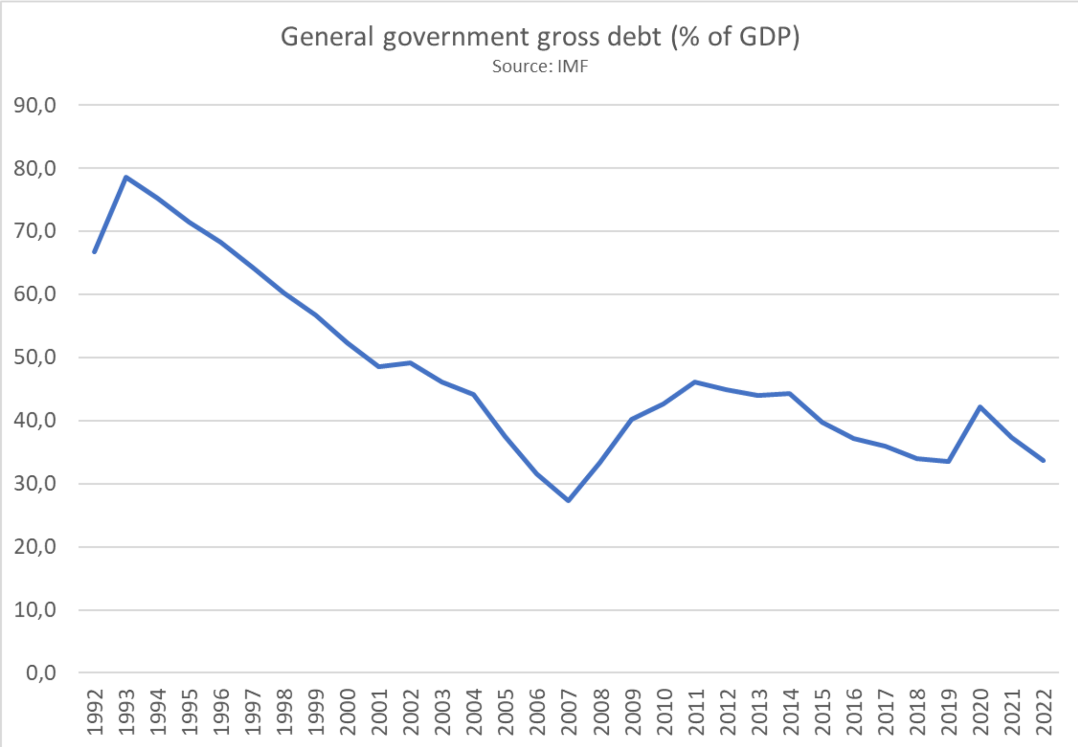
The graph below shows the trend in Denmark's general government budget balance since 1992.



We see that since 1992, Denmark has consistently kept the budget deficit within the 3 percent limit given by the Maastricht criteria. The only exceptions were the early 1990s and 2012, in the midst of the euro crisis.

Furthermore, if we look at the *structural government balance*, we see that the budget remained in balance since the late 1990s – even during the 'Lehman shock' of 2008-9, the euro crisis of 2011-12 and the Covid-19 pandemic of 2020-21.

Denmark's success in keeping its budget structurally balanced for nearly three decades also meant that government debt shrank significantly during this period, as illustrated in the graph below.

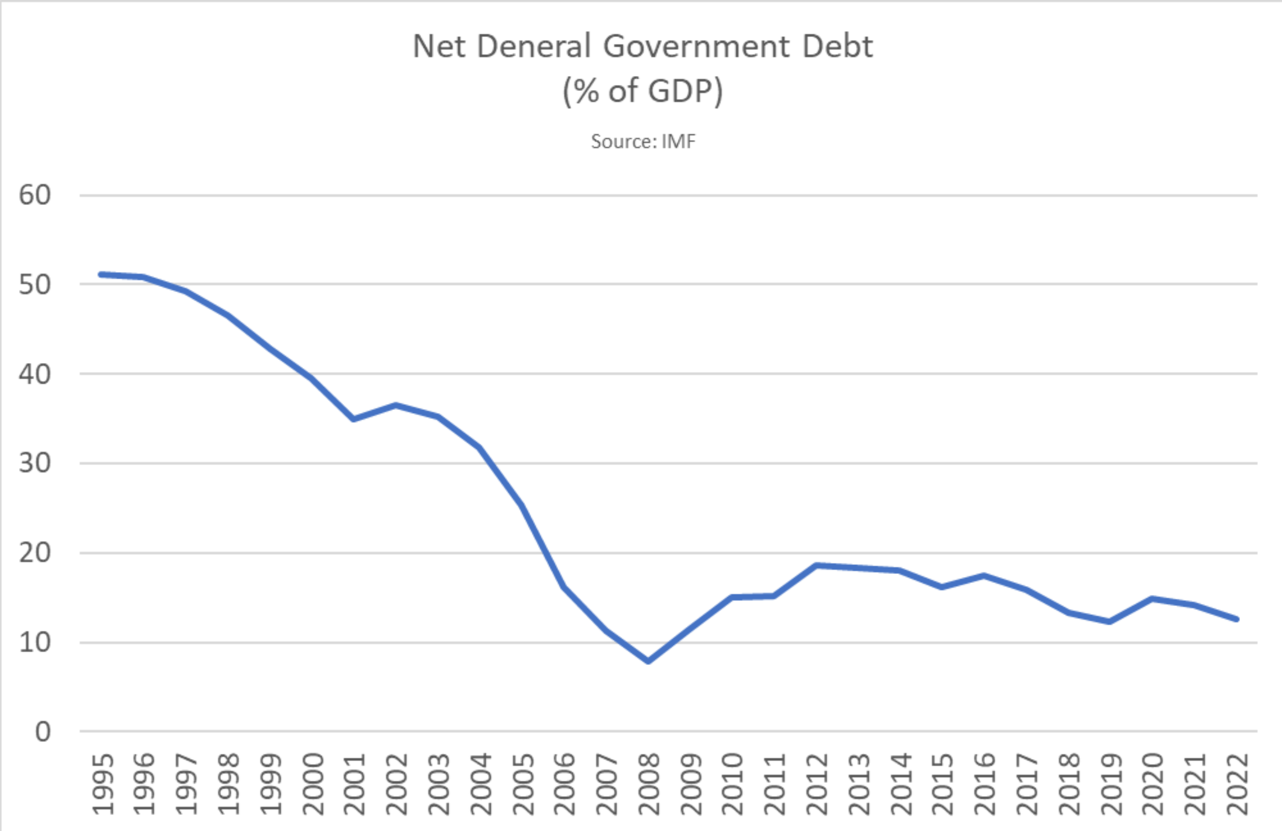


Again, we see that since the late 1990s, government gross debt has stayed below the 60 percent limit set by the Maastricht criteria.

Even so, Denmark has not be able to sustain the declining trend in public debt, despite a significant drop in debt servicing costs over this period, when Danish government bond yields were among the world's lowest.

This could indicate some slippage in the political commitment to debt reduction, which probably should not be surprising given the overall strength of Danish public finances.

Indeed, one might argue that Denmark simply doesn't have much more room to cut public debt. If we look at net rather than gross debt, we see that Denmark's public debt is at historically low levels seen in very few other developed economies.



The Budget Law of 2012

In 2012, the centre-left government coalition under Social Democratic Prime Minister Helle Thorning-Schmidt passed the co-called Budget Law, which implemented the EU's *Fiscal Compact*.

The Fiscal Compact's core features included fiscal consolidation and strengthening the fiscally conservative elements in the Maastricht criteria.

First, it proposed a ***balanced budget rule*** which stated that general government budgets shall be 'balanced' or in surplus.

The fiscal compact defines a balanced budget as one in which the general budget deficit does not exceed 3 percent of gross domestic product (GDP) and the structural deficit meets a country-specific Medium-Term budgetary Objective (MTO), which can be set at a maximum 0.5 percent of GDP for states with a debt-to-GDP ratio exceeding 60 percent or 1 percent for states under the 60 percent limit.

Second, the compact introduced a ***debt brake rule*** which states that member states whose government debt-to-GDP ratio exceeds the 60 percent reference level in the latest recorded fiscal year shall reduce the excess percentage by at least one-twentieth (5 percent) each year, where the calculated average period shall be either the 3-year period covering the latest fiscal year and forecasts for the current and next year, or the latest three fiscal years.

Rising debt levels for both of the rolling 3-year periods are allowed as long as the member state's debt-to-GDP ratio does not exceed 60 percent in the latest recorded fiscal year.

Third, the compact contains an ***automatic correction mechanism*** to be triggered when fiscal reality does not comply with the 'balanced budget rule' – for example, when a 'significant deviation' is observed from the MTO or the adjustment path towards it. The mechanism's exact implementation will be defined individually by each member state, which nevertheless must comply with the basic principles outlined in a European Commission directive.

All these elements were incorporated into the Danish Budget Law of 2012. Equally important, the law continued a four-decade trend of centralising Denmark's budget process.

Hence, the Budget Law sets explicit limits on spending growth in Denmark's municipal and regional governments. It also provides clear sanctions for municipalities and regions that do not fulfil the budget and spending rules.

If, for example, a municipality overspends in a given year, it will see an automatic reduction in grants from central government. This provides a very strong incentive for local governments to obey spending limits.

This marks a major departure from previous Danish fiscal practice because it places legally binding constraints on municipal spending.

This had earlier been a problem, especially since municipalities tended to spend any windfall gains in tax revenues. The Budget Law significantly reduces incentives to do so.

In that sense, the legislation of 2012 marked the culmination of process whereby fiscal conservatism and fiscal consolidation became integral to economic policymaking in Denmark.

This occurred out of necessity in the early 1980s, when Denmark stood on the brink of a fiscal 'abyss', but over subsequent decades fiscal conservatism has become more and more the norm due to the introduction of quasi-constitutional fiscal rules.

Of course, one can question whether these rules are robust. It should be noted, however, that the policy framework has proved remarkably sturdy, weathering the 'Lehman shock' in 2009-10, the euro crisis of 2011-12, and the Covid-19 pandemic of 2020-21.

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