



Reducing the weight of public spending: lessons from European countries

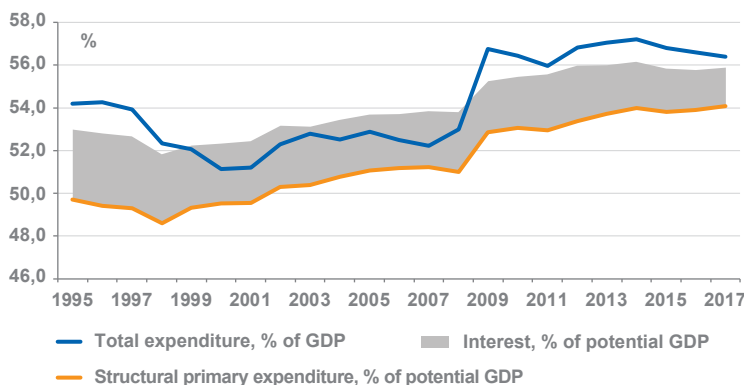
At 56.4% of GDP in 2017, public expenditures in France are the highest in the European Union and 10 percentage points above the European average. A high level of public spending is not a problem in itself, as it can mostly reflect different choices in the socialization of certain types of spending (pensions, healthcare, education, etc.). It can become a problem, however, when high public spending reflects inefficient public policies, when revenues cannot be increased to balance the budget, thereby putting debt sustainability at risk, or when the level of public spending limits the space available to respond to large macroeconomic shocks.

For all of these reasons there is no alternative to France gradually reducing the weight of public expenditures. But it needs a clear objective: assuming the economy grows at its potential rate in the medium term, reducing the structural ratio of public expenditures by 3 percentage points would constitute a reasonable target and would amount to stabilizing the level of public spending in real terms over the period. Meeting this objective would improve debt sustainability and create enough room to improve France's attractiveness by lowering the tax burden. If the ongoing phase of economic expansion persists, the ratio of public expenditures to GDP would be reduced even more sharply - by 5 percentage points in total over the next five years.

Reducing the structural ratio of public expenditures by 3 percentage points over a five-year horizon is not unprecedented: over the past twenty years, almost all European countries - save Belgium, Denmark, France and Italy - have managed to do it at least once, including in periods of moderate growth, and without necessarily having been forced to do so in the midst of a crisis.

These episodes of expenditure consolidation show that there is no single recipe for reducing public spending: different countries make different choices in the composition of adjustment, reflecting inefficiencies and national preferences that are specific to individual countries. There are two interesting observations to be made, however. First, excluding expenditure consolidations that took place against the backdrop of a severe crisis, cuts to the public payroll and social transfers (including tax credits) were particularly large. Second, the largest adjustments (Sweden and Finland) were accompanied by wide-ranging reforms of the public sphere and an overhaul of budgetary processes.

Decomposition of the expenditure ratio for France (1995-2017)



Note: In 2009, public expenditures stood at 56.8% of GDP. This ratio can be broken down into a structural component (excluding one-off measures and interest payments), which stood at 52.9% of potential GDP, and interest payments, which stood at 2.4% of GDP. The residual 1.5% is the cyclical component, comprising additional cyclical spending from the 2009 recession and a denominator effect due to GDP being below its potential. Between 1998 and 2017, structural expenditures rose almost continuously.

Source: European Commission (AMECO), France Stratégie calculations.

Vincent Aussilloux
Christophe Guardo

Economics Department

Fabrice Lengart

Deputy Commissioner-General

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INTRODUCTION

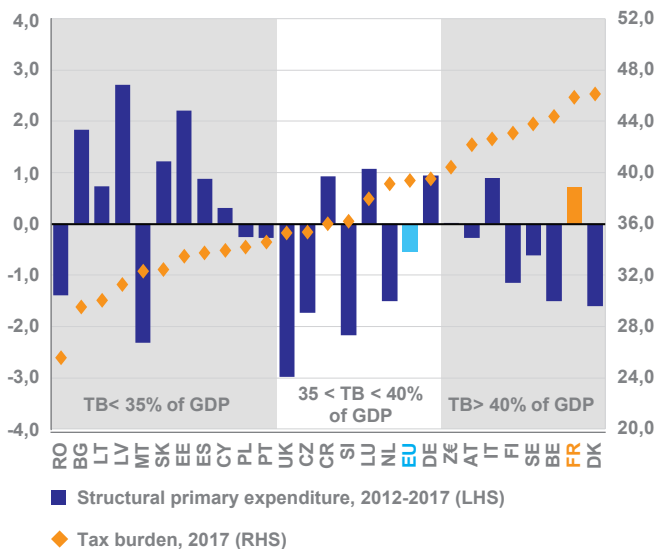
Public expenditures stood at 56.4% of GDP in France in 2017. The weight of public expenditures expressed as a percentage of GDP is the highest in the European Union and 10 percentage points above the average. France also has one of the highest tax burdens (45.3% of GDP in 2017), second only to Denmark.^{1,2}

France's high level of public expenditures compared to the European average is not a problem or an anomaly in and of itself. It mostly reflects different choices in the socialization of certain types of spending, such as healthcare or education: whereas in other countries the share of private spending is higher, France has chosen for these services to be financed mostly with public resources. The high level of spending also reflects national preferences that are not directly driven by economic or social considerations, such as defense, where public spending in France amounts to 2% of GDP, double the European average. Lastly, differences in the level of public spending can also be explained by structural factors (such as population dynamics) or cyclical divergences.

The level of public expenditures should, however, be called into question when it reflects inefficiencies in the public sphere or leads to a persistent public deficit. Inefficiencies arise when public spending produces poor outcomes, leading to large opportunity costs and potentially negative effects on growth; in the second case, when revenue cannot be increased to cover the desired level of expenditures, high public spending may lead to an excessive accumulation of public debt and potentially endanger long-term sustainability.

In the case of France, the existing evidence shows that the higher level of public expenditures does not automatically translate into better outcomes in many policy areas compared to other countries.³ In some areas, results are even worse than those obtained by lower-spending peers. This suggests that it should be possible to produce the same outcomes with a lower level of public spending, or achieve better results for the same level of expenditure. In some policy areas, public spending seems to be used as a remedy to problems that would be better solved by structural reform.

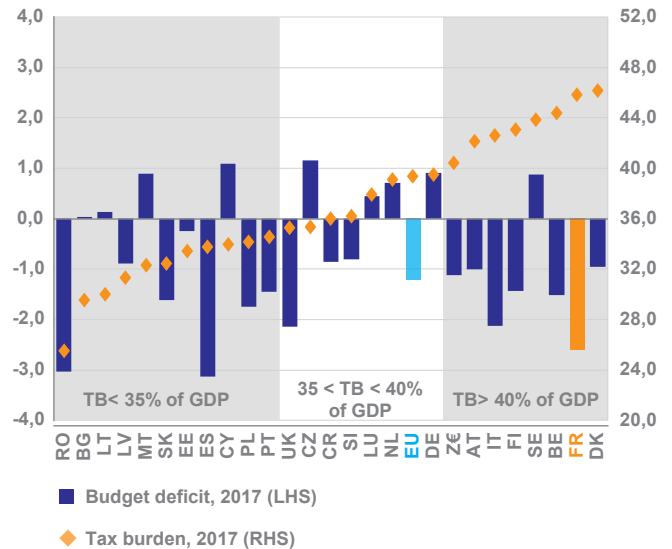
Figure 1 – Structural primary expenditure (2012-2017) vs. tax burden in 2017, pp. of potential GDP



Note: Countries are ranked by their tax burden.

Source: European Commission (AMECO), France Stratégie calculations.

Figure 2 – Budget deficit (2017) vs. tax burden in 2017, pp. of GDP



Note: Countries are ranked by their tax burden.

Source: European Commission (AMECO), France Stratégie calculations.

1. Source: Eurostat/INSEE (national accounts). Figures refer to general government, i.e. including central government, local government, social security, and other institutional units in government.
2. The tax burden (prélèvements obligatoires) excludes imputed social contributions, as calculated by INSEE. Total public revenue stood around 54% of GDP in 2017.
3. See Sode A. (2016), "Dettes, déficits et dépenses publiques: quelles orientations?", Note Enjeux 17-27, France Stratégie; Agacinski D., Harfil M. and Ly T. (2016), "Quelles priorités éducatives?", Note Enjeux 17-27, France Stratégie; Dutu R. and Sicari P. (2016), "Public spending efficiency in the OECD: benchmarking health care, education and general administration", OECD Economics Department Working Papers No.1278; Hallaert J.-J. and Queyranne M. (2016), "From Containment to Rationalization: Increasing Public Expenditure Efficiency in France", IMF Working Paper WP/16/7; Cour des Comptes (2017), "La Situation et les perspectives des finances publiques", report by the French Court of Auditors.



Inefficiencies are not the only concern. The acceptability of France's high tax burden is slowly eroding, especially when it is contrasted with the situation in other European countries. Those that have carried out large budgetary adjustments in the past years now have room to further lower the tax burden and improve their attractiveness, while also reducing the economic distortions brought on by high taxation. Lastly, among the group of countries with high tax burdens, France is one of those that has reduced public spending the least since 2012 (Figure 1), while also having one of the highest public deficits in 2017 (Figure 2). As a result, France has limited space to respond to large macroeconomic shocks should one occur in the near future.

There is no alternative in the current situation to reducing the level of public expenditures. The historical decline in interest rates, that brought them to an all-time low in recent years, is coming to an end. Stabilizing the budget balance will require spending cuts to offset the coming rise in interest rates. The stakes are quite high: between 2008 and 2016, lower interest rates reduced the interest burden by 1.8% of GDP compared to what would have happened had they remained stable.

The purpose of this paper is to draw lessons from the experience of other European countries that have successfully carried out adjustments of the same magnitude as the one France should implement over the medium term, independently of the institutional constraints arising from the Stability and Growth Pact.

Box 1: The evolution of the public expenditure ratio

International comparisons of the weight of public expenditures often focus on the ratio of total public expenditure (numerator) to GDP (denominator). Unlike public revenues, which on aggregate tend to follow the evolutions of GDP and therefore remain relatively stable as a share of GDP throughout the economic cycle, public expenditures are relatively inert and inelastic to GDP, save for certain types of public spending that react to cyclical evolutions (such as unemployment-related benefits or social transfers indexed on household income). For this reason, the expenditure ratio is, at all times, impacted by the economic cycle; it tends to mechanically decrease in economic expansions (GDP increases more than expenditure) and increase in recession. This is why it is preferable to isolate the part of the public expenditure ratio that is properly attributable to a structural effort on public expenditures, i.e. the gap between the growth rate of structural public expenditures (total expenditure excluding cyclical spending, interest payments and one-off expenditure items) and of potential GDP (the level of GDP once cyclical fluctuations are accounted for; the gap between effective GDP and potential GDP is referred to as the output gap).

Analytically, the evolution of the ratio of public expenditures to GDP can be broken down as follows:

$$\Delta \frac{D_t}{PIB_t} \approx \underbrace{\left\{ \frac{D_{t-1}^s}{PIB_{t-1}} d_t^s - \frac{D_{t-1}}{PIB_{t-1}} g_t^* \right\}}_{\text{Structural effort}} + \underbrace{\frac{\Delta r_t}{PIB_{t-1}}}_{\text{Interest burden}} + \underbrace{\frac{\Delta Q_t^F}{PIB_{t-1}}}_{\text{One-off items}} - \underbrace{\left[\alpha \frac{D_{t-1}^s}{PIB_{t-1}} + \frac{D_{t-1}}{PIB_{t-1}} \right]}_{\text{Cyclical effect}} [g_t - g_t^*]$$

With GDP_t effective GDP in euros, D_t the level of total public spending, D_t^s the level of structural expenditure, r_t the level of interest expenditures, OF_t the level of one-off expenditure items, α the elasticity of expenditures to the output gap, d_t^s the growth rate of structural expenditures, g_t the growth rate of GDP and g_t^ the growth rate of potential GDP.*

The « structural effort » is captured in the first term of the formula, and measures the change in the structural expenditure ratio as a percentage of potential GDP. The structural effort is thus approximately equal to the gap between the growth rate of structural expenditures and the growth rate of potential GDP, multiplied by the share of expenditures in GDP.

The evolution of the expenditure to potential GDP ratios in Table 5 can be broken down as follows:

$$\Delta \frac{D_t}{PIB_t^*} \approx \frac{\sum_{i=1}^n \Delta d_{i,t-1}}{PIB_{t-1}^*} - \frac{\sum_{i=1}^n d_{i,t-1}}{PIB_{t-1}^*} g_t^*$$

and

$$\frac{D_t}{PIB_t} \approx \frac{D_t}{PIB_t^*} - \frac{D_t}{PIB_t^*} OG_t$$

With, $d_{i,t}$ the level of expenditures for each of the n spending categories de , GDP_t^ the level of potential GDP, and OG_t the output gap as a percentage of potential GDP.*

FRENCH PUBLIC EXPENDITURES ARE MORE RIGID THAN IN THE REST OF EUROPE

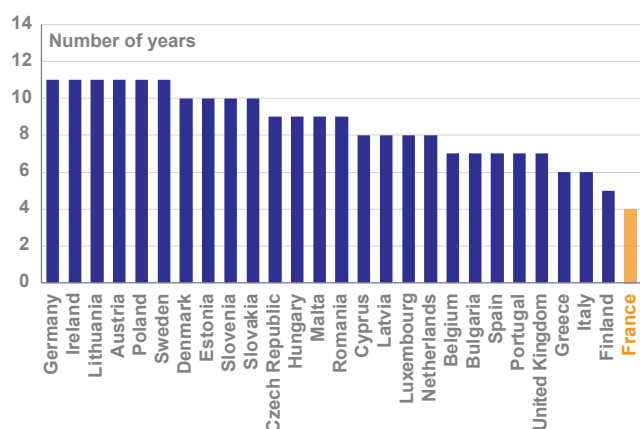
In the past, France has tended to rely on revenue-increasing measures rather expenditure cuts to reduce the public deficit. Over the past twenty years, the ratio of structural expenditures, i.e. structural expenditures over potential GDP (see Box 1), fell only one in every four years compared to one in every two in the rest of the European Union (Figure 3) - and only to a limited extent compared to the average size of expenditure adjustments in other countries (Figure 4). Although the ratio of total public expenditures to GDP fell every other year since between 1999 and 2016, the decrease was most of the time driven by lower interest spending and cyclical upturns.

Although the improvement is still only modest, France has successfully put a stop to this upward trend in recent years. The structural expenditure ratio increased on average by 0.3 percentage points per year between 1999 and 2012, but has stabilized since then; it has even slightly decreased since 2013 if the CICE, a tax credit for companies based on the size of their wage bill, is excluded from public spending (Figure 6).⁴

WHAT LEVEL OF PUBLIC SPENDING SHOULD FRANCE TARGET?

There is broad agreement on the fact that France should bring down public expenditure rather than increase

Figure 3 – Years where the ratio of structural expenditure declined, 1999-2016



Note: Public expenditures here refers to structural primary expenditures, i.e. excluding the cyclical component, interest expenditure, spending on capital transfers and on acquisitions less disposals of non-financial non-produced assets (see Box 2).

Source: European Commission (AMECO), France Stratégie calculations.

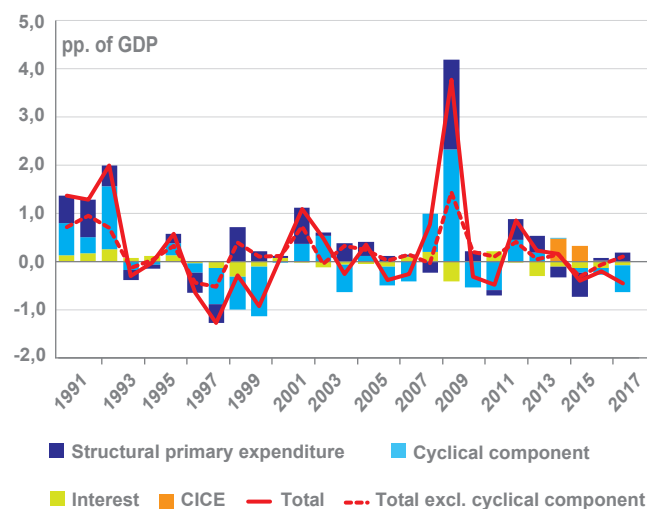
or merely stabilize spending, but more specific targets are needed to define an adjustment strategy.

The two main parameters are the pace of adjustment, and the medium-term target for the public expenditure ratio. **The ideal pace of adjustment depends on the economy's cyclical position**, as the short-term impact of spending cuts on GDP is typically negative. The size of this effect (i.e. the multiplier of public spending) may also depend on the cyclical position of the economy and the ability of monetary policy to offset the effects of spending cuts: economic research has shown that the recessionary impact of spending cuts is stronger when the economy is in a downturn, or when interest rates are already near zero therefore leaving little room for further monetary support.⁵ The corollary of this is that spending cuts have less impact on economic activity when they are undertaken during economic expansions and can make a stronger contribution to deficit reduction, as the loss of revenue due to fiscal tightening and the subsequent economic slowdown is attenuated.

Setting a target for public expenditures - and therefore implicitly also the amount of savings to be found - is a more complicated exercise.

The Stability and Growth Pact doesn't say anything about the desirable level of spending or revenue, leaving it to Member States to choose the appropriate mix based on national preferences: the reference levels and thresholds only apply to the size of the public deficit and/or the annual adjustment

Figure 4 – Evolution of public expenditure in France, excl. one-off items (y-o-y change, % of GDP)



Source: European Commission (AMECO), France Stratégie calculations.

4. The "Crédit d'Impôt Compétitivité Emploi" (CICE), created in 2013, is a tax credit for companies based on the size of the previous year's payroll. Although it is conceptually equivalent in its intentions and potential effects to a reduction of the labour tax-wedge through lower social contributions (and thus lower revenues from social contributions), it is recorded as a tax expenditure in national accounts and therefore shows up in public spending (close to 1 percentage point of GDP in 2017).

5. For a review of the literature, see Creel J., Heyer E. and Plane M. (2011), "Petit précis de politique budgétaire par tous les temps: les multiplicateurs budgétaires au cours du cycle", Revue de l'OFCE, Presses de Sciences Po, vol. 0(1), pp. 61-88.



of the structural balance and the level of public debt. Changes in the level of spending are limited by the so-called “expenditure benchmark” which sets a ceiling based on a reference growth rate (the medium-term potential growth rate), but this doesn’t say what the desirable *level* of public spending should be in the medium-term. Additionally, the expenditure benchmark makes an allowance for higher rates of growth as long as growth in excess of the benchmark is compensated by measures on the revenue side.

Given the diversity of preferences between countries, setting a medium-term target based on the expenditure ratios observed in other countries wouldn’t make much sense. Empirical studies have shown that a high level of public spending is compatible with above-average economic performance as long as the underlying policies and institutions are efficient.⁶ The Scandinavian countries are a good illustration of this.⁷ Moreover, international comparisons of the level of public spending are prone to distortions due to national accounting conventions and the architecture of the tax/benefits system.⁸

One way of setting an expenditure target could be to start from a “macroeconomic budget constraint”, based on other economic objectives (see Box 3). The desirable level of public expenditure in the medium term can for example be derived from *i*) a debt sustainability objective, given by a target for the debt ratio; *ii*) a revenue target based on the underlying tax burden.⁹ For a given macroeconomic scenario these two parameters are sufficient to determine a trajectory for public expenditure that would allow these objectives to be met.¹⁰ The economic rationale for setting a revenue target is twofold: reducing the economic distortions created by taxation when they are detrimental to economic growth and enhancing the attractiveness and competitiveness of the French economy.¹¹ Attractiveness is a relative notion, meaning that it only makes sense when compared to other countries and in dynamic terms. It is therefore natural to set the revenue target in reference to the expected tax burden in neighboring countries over a given time horizon.

Table 1 – Revenue-to-GDP ratio in 2022 (excluding imputed social contributions)

Country	Ratio
Finland	50,6
Sweden	49,4
Austria	48,8
Denmark	48,5
Belgium	48,2
Italy	46,0
Germany	44,3
Average	48,0

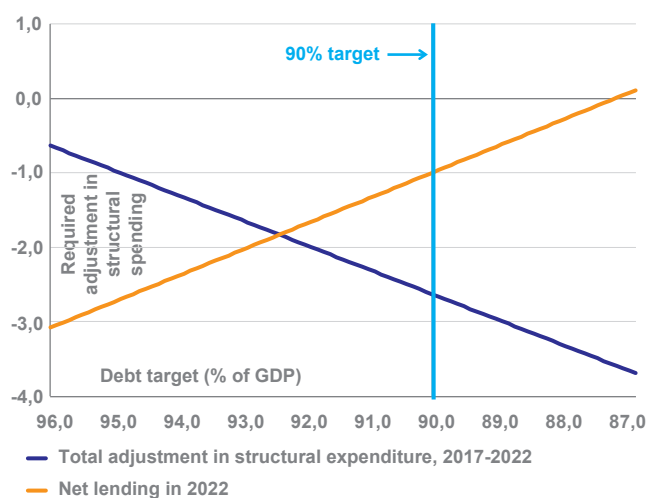
Source: Stability or Convergence Programmes for 2017, France Stratégie calculations. The Stability or Convergence programmes provide expected revenue ratios for 2022 or 2021, depending on the countries. Expected ratios for 2022 are projected using the average annual change over 2017-2020/21. For reasons related to availability and comparability of the data, the target (a 2 percentage point reduction in the revenue ratio) is given in reference to total government revenues (and not in reference to the tax burden), excluding social contributions but including tax credits (as per national accounting conventions).

The ratios of public revenues to GDP projected in 2022 for the first quartile of European countries are presented in Table 1. In France, the revenue ratio (excluding imputed social contributions) in 2017 stood near 52% of GDP, 4 percentage points more than the level expected in this group of countries in 2022.

If France were to halve the gap between its 2017 revenue ratio and the expected level of public revenues in the first quartile of European countries in 2022 (i.e. a 2 percentage point reduction in the revenue ratio/tax burden), while also bringing debt back down to its 2012 level (approximately 90% of GDP), the ratio of structural expenditures would need to be reduced by 3 percentage points.¹² The sensitivity of the required adjustment in the structural expenditure ratio to the debt target (for the same 2 pp. adjustment in the revenue ratio) in a baseline macroeconomic scenario is illustrated in Figure 6: for example, reducing the debt adjustment target by half would require an adjustment in the structural expenditure ratio of only 1.7 pp. The required adjustment is also sensitive to the macroeconomic scenario: if potential growth were 0.2 pp. higher, the required adjustment in the structural expenditure ratio would be half a percentage point lower.

6. See Fournier J.-M. and Johansson A. (2016), “The effect of the size and mix of public spending on growth and inequality”, OECD Economics Department Working Papers No.1344.
7. Despite the fact that most of these countries, while still maintaining a high level of public expenditure, also made adjustments to public spending.
8. For example, in France the partial financing of pensioner’s incomes through the “additional solidarity contribution” (*Contribution Additionnelle de Solidarité pour l’Autonomie*), which is levied on all incomes including those of pensioners, increases both public expenditures and revenues; both would be lower, however, if the additional contribution were abolished and pensions reduced by an equivalent amount, without any impact on pensioners’ net incomes.
9. The tax burden refers to a subset of government revenues (the remaining sources of revenue, in France, stand at about 7% of GDP). Revenue items included in this aggregate are characterized by their compulsory nature and the absence of a direct counterpart.
10. The average annual growth rates over 2018-2022 in our underlying macroeconomic scenario are +1.6% for GDP, +1.3% for potential GDP, +1.6% for the GDP deflator. The interest rate on public debt is expected to rise gradually. This scenario is consistent with a gradual closing of the output gap. It must be noted that the model does not account for the potential impact of spending cuts on growth.
11. Taxation-induced distortions can negatively impact GDP when they drive a wedge between supply and demand curves (for both factors of production, labour and capital, or for products), unless these taxes or social contributions are perceived by economic agents as a resource (the counterpart to public healthcare of education, or deferred income as with pension contributions), or if its function is to make agents internalize negative externalities related to consumption or production. In other terms, wanting to lower the tax burden does not constitute a strategy in itself. The potentially beneficial effects crucially depend on the way the reduction is distributed.
12. The calculations are based on a standard model of debt dynamics with an exogenous macroeconomic scenario. By construction, the adjustment in the structural component of public spending that is required to meet the debt target can be deduced from the evolution of revenue (an objective variable in the model, therefore also exogenous) and the macroeconomic scenario.

Figure 5 – Required adjustment of structural expenditure depending on the debt target, pp. of potential GDP



Note: The required adjustment is based on a 2 pp. decline in the tax burden.

Source: European Commission (AMECO), France Stratégie calculations.

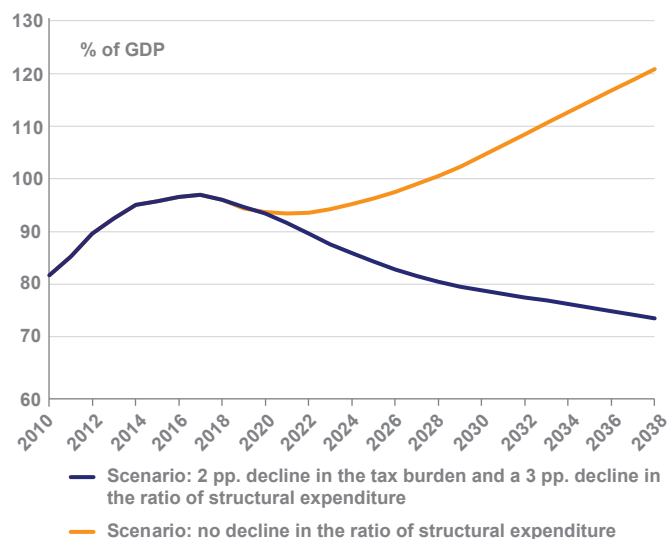
A 3 percentage point reduction in the structural expenditure ratio, combined with a 2 percentage point reduction in the tax burden, would put French public debt on a clear downward path over the medium-term (between 75 and 70% of GDP by 2040).

The targets for the revenue ratio/tax burden and the public debt ratio are, of course, somewhat arbitrary, but this approach shows that the proposed reduction in the structural expenditure ratio - around 3 percentage points over five years - makes sense from an economic perspective. A decline in public expenditures of this size would allow France to reduce the tax burden and converge towards the levels observed in comparable EU countries, while supporting a reduction in the public debt ratio that would return to its pre-crisis level by 2040.

A 2 TO 3 PERCENTAGE POINT REDUCTION IN STRUCTURAL EXPENDITURES: HISTORICAL PRECEDENTS

Reducing the ratio of structural expenditures by 2 to 3 percentage points over five years is not unprecedented (see Table 2). A large number of EU countries have successfully implemented adjustments of these magnitudes since 1995, especially in the immediate aftermath

Figure 6 – Public debt ratio, based on a 2 pp. decline in the tax burden and a 3 pp. decline in the ratio of structural expenditure



Source: European Commission (AMECO), France Stratégie calculations.

of the 2008/2009 financial crisis. A significant fraction of these adjustments, however, occurred in the more distant past (Nordic countries in the 1990s, Germany in the middle of the 2000s, etc.). Focusing on the structural expenditure ratio (i.e. structural expenditure over potential GDP, and not total expenditure over GDP which also reflects the effects of the economic cycle), almost all European countries have managed adjustments of this size, save for France, Italy, Belgium and Denmark (see Box 1).

To draw lessons from international experience, we focus in this section on episodes where countries have managed over a period of five years to reduce the ratio of structural expenditure by at least 2 percentage points of GDP (see Box 3). The beginning and end dates are set to cover the full adjustment period (and not just the five years where the cumulative adjustment reaches 2 percentage points).¹³ For reasons related to data availability, Croatia is excluded from the sample.¹⁴

Most of the large adjustments were implemented in crisis countries

Two groups of countries stand out because of the size of their adjustments: the countries of Central and Eastern Europe on the one hand, and the countries most impacted by the Eurozone debt crisis (mostly Southern European economies) on the other.

13. In some countries, the public expenditure ratio continued to decline after the end of the adjustment episode but only for cyclical reasons.

14. A group of countries is left out of the analysis, namely the adjustments that occurred in Latvia, Lithuania, Slovakia, Poland and Ireland in the late 1990s and early 2000s. In all of these transition economies, the adjustment takes place during periods of very strong potential GDP growth leading to a quasi-automatic drop in structural expenditure due to the denominator effect. These situations are of little relevance for the present.



Box 2: Comparison with the 2018 Stability Programme objectives

The 2018 Stability Programme foresees a 5 percentage point reduction in the ratio of primary expenditure over 2017-2022, and a 2 percentage point reduction in the ratio of total revenues (of which 1 percentage point related to taxes and social contributions, excluding tax credits). Public debt is expected to reach 89% of GDP in 2022.

The gap between the foreseen reduction in the ratio of public expenditure in the Stability Programme and the target set out in this paper (a 3 percentage point reduction in the structural expenditure ratio) is mostly explained by the underlying macroeconomic scenario: whereas the Stability Programme foresees a continuation of the current economic expansion, with GDP growth above potential for the entire duration of the forecast horizon, our macroeconomic scenario is based on a gradual closing of the output gap and GDP growing at potential thereafter (+1.3% per year on average).

Many of the largest adjustments in the sample occurred in Central and Eastern Europe (Table 3), but they are in many ways a special case. First, potential growth was particularly high at the end of the 1990s and the beginning of the 2000s (potential GDP increased on average by more than 6% per annum) due to a catching-up process and the anticipation of their EU membership, which led to a quasi-automatic decline in the structural expenditure ratio. Growth was buoyant at the beginning of the 2000s

as well, owing to more cyclical factors, leading to overheating especially in the Baltic states (with rapid improvements in standards of living and large current account deficits). The economic and financial crisis of 2008/2009 led to a strong correction in the form of severe balance-of-payments crises and EU/IMF financial assistance programmes in some cases.

A second group of countries comprises the Eurozone economies that were most severely impacted by the sovereign debt crisis and were forced, either under the pressure of markets or because of their financial assistance programmes, to implement very large spending adjustments.

The cases of Greece (where the adjustment in the structural expenditure ratio reached more than 9 percentage points between 2010 and 2013, despite an only 2.7 percentage point reduction in the total spending ratio) and of **Spain** (a 5 percentage point adjustment in the structural expenditure ratio and an 0.7 percentage point decline in the total expenditure ratio) are particularly illustrative: confronted with a crisis of confidence over the sustainability of their public debts, these countries implemented pro-cyclical spending cuts to offset the increase in expenditure ratios caused by the cyclical downturn and the increase in interest rates. Some of this adjustment has since then been reversed, and the most recent years have seen slight increases in structural expenditure.

Table 2 – 5-Year cumulated structural adjustment, pp. of potential GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Germany	-0,1	-0,7	-0,3	-0,6	-2,4	-2,7	-2,7	-3,3	-2,5	-0,2	0,6	0,7	1,2	1,1	0,1	-0,3	0,2
Austria	-3,1	-3,3	-0,5	-1,4	-1,5	-0,8	-0,8	-0,4	0,4	0,7	1,3	1,0	1,1	0,4	-0,4	-1,0	0,0
Belgium	0,2	-0,7	0,3	1,8	0,7	1,9	2,3	1,7	2,7	5,0	4,4	5,4	5,4	4,3	2,0	0,8	-0,6
Bulgaria				5,1	2,0	-0,3	-2,0	-1,3	1,3	1,7	-0,6	-0,4	-2,1	-1,5	-0,9	4,1	-0,2
Cyprus				7,0	5,8	5,5	4,4	2,0	0,1	3,3	2,7	2,5	0,4	-3,2	-5,6	-4,8	-4,2
Denmark	-1,4	-1,1	-0,4	-0,1	0,4	0,4	0,1	-0,4	-1,4	0,6	1,8	1,2	2,3	2,6	0,0	-1,0	-1,2
Spain	0,0	0,9	1,2	0,5	0,4	0,4	1,2	1,5	2,8	4,9	3,6	1,6	-1,6	-3,2	-5,0	-3,1	-1,9
Estonia	-0,3	0,0	0,0	-1,5	-1,4	0,9	3,1	3,2	6,0	6,0	2,4	0,2	0,4	-3,0	-2,6	1,9	2,6
Finland	-5,9	-7,2	-5,9	-3,0	-1,1	0,8	2,3	1,6	2,0	2,6	4,2	5,0	5,8	5,7	4,6	1,6	0,4
France	0,3	0,0	1,4	1,8	1,7	1,6	1,6	0,9	0,6	2,1	2,2	2,0	2,3	2,7	1,2	0,6	0,9
Greece	4,6	4,9	4,2	3,8	4,3	1,4	2,6	4,4	5,1	5,4	3,2	-1,1	-5,0	-7,9	-8,6	-3,1	0,1
Hungary			5,5	4,1	3,8	5,6	7,4	1,0	0,1	-1,6	-3,8	-6,4	-4,6	-2,1	0,9	2,6	0,5
Ireland	-4,4	-2,3	-0,3	0,2	1,7	2,7	2,3	4,2	8,4	7,1	5,7	3,8	-0,9	-5,9	-5,8	-13,0	-12,6
Italy	1,7	1,9	1,3	2,0	1,6	1,6	0,7	1,4	1,1	2,2	1,8	1,0	0,8	0,4	-0,9	-0,8	0,3
Latvia			0,0	-4,7	-5,2	-0,5	5,5	3,1	4,9	2,5	0,9	-4,4	-2,1	-2,4	-0,5	1,0	2,3
Lithuania				-9,2	-4,6	0,3	2,6	5,1	7,1	5,0	1,7	-0,4	-3,8	-6,9	-6,2	-3,2	-1,9
Luxembourg	0,4	1,9	2,4	2,2	3,6	3,2	-1,8	-2,7	-3,8	-1,5	-0,5	1,7	1,5	1,2	-1,5	-1,8	0,4
Malta	0,8	-0,8	-0,8	0,7	1,0	2,2	1,2	0,8	1,3	-1,2	-1,7	-1,5	-0,4	-2,2	1,1	1,6	-1,5
Netherlands	-2,8	-1,3	-0,1	0,6	-0,3	-0,8	0,8	1,0	1,7	3,5	5,0	2,9	1,9	0,4	-0,8	-2,1	-2,8
Poland	-4,2	-3,6	-4,0	-1,9	-1,9	0,5	0,8	1,3	2,6	3,0	3,0	0,0	-2,1	-3,8	-3,5	-4,1	-3,1
Portugal	4,5	3,8	2,7	1,9	2,2	2,4	0,0	0,4	1,3	3,4	4,1	2,7	-0,7	-0,7	-4,6	-6,4	-4,4
Czech Republic			2,2	7,9	3,3	1,9	2,8	1,0	-3,4	1,6	0,8	-0,3	-0,6	-1,3	-2,7	-1,3	-3,2
Romania	-0,7	-0,9	2,6	1,6	0,1	-0,1	4,3	7,0	8,6	6,7	3,9	-1,5	-6,0	-8,6	-7,0	-3,5	-3,3
United Kingdom	-1,7	1,2	3,1	4,7	5,4	6,5	4,6	3,7	3,2	4,2	3,1	2,0	1,4	-0,3	-2,5	-2,8	-2,0
Slovakia			-9,2	-6,9	-3,8	-0,7	0,7	-0,2	1,2	5,8	3,2	0,3	0,1	0,5	-1,8	1,8	0,8
Slovenia				2,0	1,4	0,8	0,4	-0,3	1,4	1,1	2,1	1,0	0,2	-2,1	-2,5	-4,0	-4,1
Sweden	-5,9	-4,7	-2,2	-1,8	-1,8	-0,4	0,6	-0,8	-1,9	-2,4	-1,7	-2,0	-0,5	0,5	0,7	-0,2	0,1

Note: In light blue, adjustments of more than 2 pp. of potential GDP; in dark blue, adjustments of more than 3 pp. of potential GDP.

Source: European Commission (AMECO), France Stratégie calculations.

Table 3 – Episode of expenditure adjustment in Central and Eastern Europe

Country	Start of adjustment	End of adjustment	Expenditure ratio excl. one-off			Adjustment (pp. of GDP)			Average adjustment (pp. of GDP)				Average annual growth rate		
			Start of period	End of period	Total expenditure	Total excl. one-off	o/w structural	Total excl. one-off	o/w structural	o/w cyclical	o/w interest	GDP	Potential GDP	Structural expenditure	
Bulgaria	2010	2011	39,1	33,6	-5,6	-5,6	-4,7	-2,8	-2,4	-0,4	0,0	1,6	0,6	-6,0	
Estonia	2009	2011	39,8	38,8	-2,3	-1,1	-3,8	-0,4	-1,3	1,0	0,0	-2,1	0,0	-3,1	
Hungary	2007	2012	50,9	47,9	-3,0	-3,0	-7,4	-0,5	-1,2	0,7	0,1	-0,8	0,5	-2,2	
Lithuania	2009	2014	37,8	33,5	-3,5	-4,3	-7,3	-0,7	-1,2	0,4	0,2	0,4	1,2	-2,2	
Latvia	2009	2011	37,6	38,4	2,8	0,8	-3,6	0,3	-1,2	1,1	0,4	-4,4	-1,7	-4,9	
Romania	2009	2016	38,0	33,1	-4,8	-4,8	-9,0	-0,6	-1,1	0,4	0,1	1,1	2,1	-1,0	
Slovakia	2010	2012	43,3	40,3	-3,5	-3,0	-3,3	-1,0	-1,1	0,0	0,1	3,2	3,1	0,3	
Slovenia	2011	2016	49,2	44,9	-4,1	-4,3	-4,7	-0,7	-0,8	-0,2	0,2	0,8	0,5	-1,2	
Poland	2011	2016	45,6	41,1	-4,6	-4,5	-4,5	-0,7	-0,7	0,1	-0,1	3,0	3,3	1,4	
Czech Republic	2010	2014	44,0	41,6	-2,0	-2,5	-2,7	-0,5	-0,5	0,0	0,0	1,1	1,2	-0,1	

Table 4 – Episodes of expenditure adjustment in euro area programme countries

Country	Start of adjustment	End of adjustment	Expenditure ratio excl. one-off			Adjustment (pp. of GDP)			Average adjustment (pp. of GDP)				Average annual growth rate		
			Start of period	End of period	Total expenditure	Total excl. one-off	o/w structural	Total excl. one-off	o/w structural	o/w cyclical	o/w interest	GDP	Potential GDP	Structural expenditure	
Greece	2010	2013	53,2	50,6	8,1	-2,7	-9,3	-0,7	-2,3	2,0	-0,4	-6,3	-2,3	-7,3	
Spain	2010	2013	45,5	44,8	-0,2	-0,7	-5,3	-0,2	-1,3	0,7	0,4	-1,4	0,1	-3,2	
Portugal	2011	2016	50,3	44,8	-6,8	-5,6	-7,3	-0,9	-1,2	0,1	0,2	-0,5	-0,3	-3,0	
Cyprus	2010	2014	41,8	39,7	6,4	-2,1	-6,5	-0,4	-1,1	0,6	0,1	-1,8	-0,2	-3,2	
Ireland	2009	2014	41,8	37,4	-4,3	-4,4	-6,2	-0,7	-1,0	-0,1	0,4	1,6	1,4	-1,5	

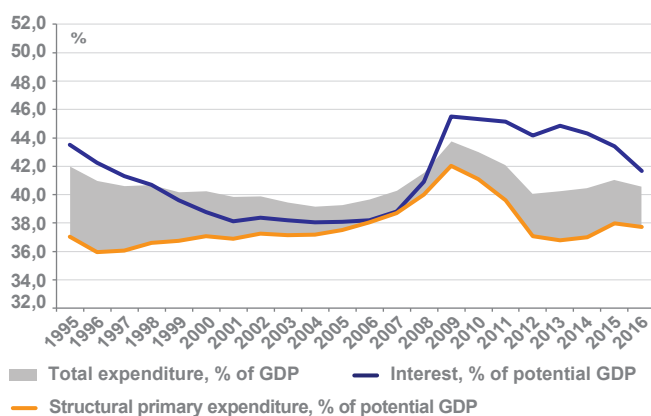
Note : AMECO, France Stratégie calculations. Countries are ranked by the size of the average yearly structural adjustment. The adjustment episodes correspond to periods where the structural ratio of public expenditures declined continuously by more than 2 percentage points of potential GDP over five years. By convention, we eliminate the episodes where the decline occurs over only one year. As, over five years, the cumulated adjustment can reach 5 pp. without it having been continuous, the adjustment episodes in the above tables may not correspond with the five-year periods highlighted in Table 2. Because adjustment episodes are identified using macroeconomic data, they may not coincide with policy announcements.

Source: European Commission (AMECO), France Stratégie calculations.

Given the specificities of the situations in which their adjustments took place, there are few lessons to be drawn from the experiences of these two groups for a large country in normal times.¹⁵ Faced with deep crises and limited options, these countries had little control over the pace and the composition of their spending adjustments. This is especially true for the Eurozone countries, whose chief concern - at a time when markets had serious doubts about the sustainability of their public debts - was to demonstrate their commitment to sound budgetary policies in an attempt to avoid economically and politically costly financial assistance programmes (among the most vulnerable countries at the time, only Italy was able to avoid having to call on the EU and the IMF). The context also facilitated the adoption of politically and socially costly measures that would have been difficult to implement in less turbulent times. Some of these decisions may, however, ultimately end up having a negative impact on long-term growth prospects, having been motivated by the prospect of short-term gains rather than based on sound cost-benefit analysis of the underlying policies. This is why investment spending - which is easy to cut in crisis times and produces immediate savings - was impacted to such a large extent in these two groups of

countries (admittedly, public investment in these countries was higher than the EU average prior to the crisis and was in part channeled towards unproductive investments). Lastly, in Central and Eastern European countries, the adjustment of public expenditures occurred after a period

Figure 7 – Decomposition of the expenditure ratio for Spain (1995-2016)



Note: The gap between the sum of structural expenditures as a share of potential GDP and interest spending, and total expenditures as a share of GDP, is the "cyclical component" of the public expenditure ratio (denominator effect and cyclical expenditures).

Source: European Commission (AMECO), France Stratégie calculations.

15. Small countries can adjust more easily than large economies: improved competitiveness or niche strategies, combined with a higher-than-average openness to trade, means that it is easier to compensate for the negative effects of spending cuts than in large countries.



Table 5 – Variation of expenditures by function of spending, pp. of potential GDP

Country	Start	End	Compensation of employees	Intermediate consumption	Subsidies	Social transfers	Property income	Investment	Acq. and capital transfers	Other	Total (% pot. GDP) (1)	Cyclical effect** (2)	Total (% GDP) (1)+(2) = (3)	One-off (4)	Cyclical component*** (5)	Interest (6)	Structural expenditure = (3)-(4)-(5)-(6)
Central and Eastern European countries during the crisis																	
Bulgaria	2010	2011	-0,5	-0,2	-0,2	0,2	0,0	-1,4	0,0	-2,6	-4,7	-0,8	-5,6	0,0	-0,8	0,0	-4,7
Estonia	2009	2011	-1,2	-0,3	0,0	0,1	-0,1	-2,1	-1,4	-0,1	-4,9	2,6	-2,3	-1,3	2,9	-0,1	-3,8
Hungary	2007	2012	-2,9	0,3	-0,1	-2,2	0,4	-1,8	-0,3	-0,3	-6,9	4,0	-3,0	0,1	4,0	0,4	-7,4
Lithuania	2009	2014	-1,7	-1,2	-0,4	-1,5	0,9	-2,2	0,8	-0,1	-5,4	2,0	-3,5	0,8	2,1	0,9	-7,3
Latvia	2009	2011	-2,7	-0,1	-0,4	2,4	1,1	-0,6	1,9	-2,0	-0,4	3,2	2,8	2,0	3,3	1,1	-3,6
Romania	2009	2016	-3,0	-1,7	-0,8	-0,5	0,7	-3,6	0,4	0,3	-8,1	3,3	-4,8	0,0	3,4	0,7	-9,0
Slovakia	2010	2012	-0,3	-0,6	-0,5	-0,3	0,3	-0,6	-1,1	-0,3	-3,4	-0,1	-3,5	-0,4	-0,1	0,3	-3,3
Slovenia	2011	2016	-1,0	-0,2	-1,0	-1,1	1,4	-1,7	0,0	0,3	-3,2	-0,9	-4,1	0,1	-0,9	1,4	-4,7
Poland	2011	2016	-0,9	-0,8	-0,4	0,3	-1,8	-2,4	-0,2	-0,2	-5,4	0,7	-4,6	-0,2	0,8	-0,8	-4,5
Czech Rep.	2010	2014	-0,2	-1,1	0,5	0,0	0,1	-1,9	0,2	0,2	-2,2	0,2	-2,0	0,5	0,2	0,1	-2,7
Euro area programme countries during the crisis																	
Greece	2010	2013	-2,8	-2,7	0,8	-2,5	-1,7	-1,1	8,9	-0,5	-1,5	9,6	8,1	10,8	8,2	-1,6	-9,3
Spain	2010	2013	-1,1	-0,6	-0,2	0,9	1,5	-2,9	-0,2	-0,2	-2,8	2,5	-0,2	0,5	3,0	1,5	-5,3
Portugal	2011	2016	-2,5	-0,3	-0,2	0,2	1,2	-3,8	-1,5	-0,3	-7,2	0,4	-6,8	-1,2	0,5	1,2	-7,3
Cyprus	2010	2014	-2,4	-1,8	0,2	0,9	0,7	-2,4	8,1	-0,7	2,8	3,6	6,4	8,5	3,2	0,3	-5,6
Ireland	2009	2014	-1,7	-0,7	-0,1	0,7	2,7	-3,1	-1,0	-0,4	-3,6	-0,6	-4,3	0,1	-0,8	2,7	-6,2
Northern European countries																	
Luxembourg	2005	2006	-0,6	-0,4	0,0	-1,2	0,0	-1,4	0,2	-0,5	-3,9	-0,3	-4,2	0,5	-0,3	0,0	-4,5
Austria	1996	1997	-0,5	-0,5	-0,4	-0,7	-0,4	-1,0	-0,2	0,0	-3,7	0,1	-3,5	0,2	0,1	-0,4	-3,5
Finland	1996	2001	-1,5	-0,1	-1,2	-4,8	-1,1	-0,2	-2,3	0,1	-11,1	-2,5	-13,7	-2,3	-2,9	-1,1	-7,2
Sweden	1996	2001	-0,7	-1,0	-2,0	-1,4	-2,3	-0,8	-0,5	-0,7	-9,5	-1,3	-10,8	-0,1	-1,4	-2,4	-6,8
Sweden	2007	2009	-0,6	-0,0	0,0	-0,4	-0,6	0,0	0,0	-0,8	-2,4	4,1	1,7	0,0	4,7	-0,6	-2,5
United Kingdom	2011	2016	-1,2	-0,8	0,1	-0,2	-0,3	-0,4	-0,4	-0,8	-4,1	-2,2	-6,2	-0,1	-2,2	-0,3	-3,6
Netherlands	1996	2000	-0,7	0,0	0,4	-3,4	-1,7	0,2	-5,3	0,5	-10,2	-1,7	-11,9	-5,3	-2,1	-1,7	-2,8
Netherlands	2011	2016	-0,7	-1,1	-0,4	0,5	-0,7	-0,6	-0,6	-0,6	-4,2	-0,5	-4,7	-0,5	-0,5	-0,7	-3,0
Germany	1997	2007	-1,2	0,2	-0,9	-1,6	-0,7	-0,5	-0,1	-0,2	-4,9	-1,3	-6,1	0,3	-1,5	-0,7	-4,3

Note: Unlike Tables 3, 4, 6 and 8, Table 5 is based on total public expenditures (including cyclical spending and one-off measures). The two largest reductions in public spending as a share of potential GDP are in the blue-shaded cells (excluding property income, i.e. interest payments, acquisition less disposals of non-produced non-financial assets, capital transfers, and Economic Affairs). The final columns show the correspondence between the total adjustment in public spending and the figures in Tables 3, 4, and 6 related to the structural expenditure adjustment.

* Other: Other current transfers and adjustments for the change in pension entitlements.

** Denominator effect (excluding cyclical expenditures).

*** Cyclical component: denominator effect and cyclical expenditures.

Source: AMECO, Eurostat (base COFOG), France Stratégie calculations.

of high growth and strong improvements in living standards, thereby softening the social and political impact of cuts in social benefits or public employment: in real terms, the average wage increased by 80% between 2000 and 2007 in Lithuania and Latvia, 70% in Estonia, and more than 30% in Hungary. For all of these reasons, the experiences of these countries are of little relevance for France.

What lessons can be drawn from the remaining countries?

Leaving aside the countries that were hit hardest by the crisis, there are still nine examples of successful adjustments of more than 2 percentage points of potential GDP between 1995 and 1996. Two of these episodes, in Sweden and Finland, took place in the wake of the Nordic crisis in the 1990s. Two others, in Netherlands and Austria, also took place in the 1990s. Three episodes - Sweden, Luxembourg and Germany - occurred in the 2000's. The recent past also has two major episodes of expenditure consolidation, in the

United Kingdom and the Netherlands after the financial crisis of 2008/2009.

Sweden and Finland stand out for the size of the decline in the structural expenditure ratio, about 7 percentage points of potential GDP over five years (between 1996 and 2001) in both cases. The decline was facilitated by solid potential GDP growth after the crisis, but also took place against the background of wide-ranging reforms implemented in the aftermath of the economic and banking crises: an overhaul of the welfare state and in-depth reform of the pension system in Sweden, for example, and substantial changes to the social transfer system in Finland towards less universalism and lower benefits (largely via dis-indexation measures). Sweden went through a second phase in the mid-2000s, which in the data is mostly explained by a decline in expenditures on sickness and disability benefits due to reforms aimed at increasing labor force participation.

In both cases, the adjustment process was supported by reforms of the budgetary process and procedures, whose aim was to improve incentives for sound public finances: a move towards top-down budgeting, three-year expenditure ceilings, and many other technical changes in Sweden, for example; in Finland, a framework aiming at aligning expenditure growth with evolution in potential GDP and modernization of the State and public management, especially at the sub-national level.¹⁶ Unlike most of the crisis countries discussed in the previous sections, structural expenditure continued to increase during the adjustment episodes but at a slower pace than potential GDP. Adjustment was also facilitated by cyclical factors and the favorable characteristics of these small open economies.

In the case of **Germany**, social transfers made a large contribution to the decline in the structural expenditure ratio, thanks to the reform of the different Schroeder governments in the 2000s. These wide-ranging reforms had an impact on healthcare expenditures (introduction of a copayment system for prescriptions, etc.), the pension system, and on the labour market. The so-called Hartz reforms of the labour market reduced unemployment and inactivity-related transfers and encouraged labour market participation, leading to lower expenditures in these areas. Although the composition of the adjustment in Germany was skewed towards social transfers, most expenditure areas made a positive contribution towards the reduction in the ratio of structural expenditure (-0.5 pp. for public investment, -0.9 pp. for subsidies, etc.).

The **United Kingdom** and the **Netherlands** are the two most recent examples of countries that managed to reduce the ratio of structural expenditures by more than 2 percentage points without having been forced to do so under the pressure of financial markets. In both instances, the bulk of the adjustment was undertaken under unfavorable economic conditions (i.e. subdued or negative GDP growth); like the crisis countries in the previous section, a large share of the adjustment fell on public investment (-0.5 pp. of potential GDP in both cases) and on the public payroll (-1.2 pp. in the United Kingdom and -0.7 pp. in the Netherlands). Public employment fell by more than 10% in the United Kingdom and by near 8% in the Netherlands between 2009 and 2015. Beyond these similarities, however, the two countries differ in the composition of the spending adjustment.

In the United Kingdom, the largest reductions were in education (-1.5 pp. of potential GDP), defense (-0.5 pp., half of which related to foreign military aid), public order and security (-0.5 pp., through measures such as a reduction in the size of the police force, prison reform, and scaling back of legal aid). Pension spending went up (+0.5 pp.) but social spending towards family and children fell sharply (-0.8 pp., notable through a decrease in the size of tax credits and eligibility restrictions).

In the Netherlands, general government services bore a large share of the adjustment (-0.5 pp., driven in part by lower employment at the central government level), as well as official development aid (-0.3 pp.) and expenditures

Table 6 – Episodes of expenditure adjustment in Northern European countries

Country	Start of adjustment	End of adjustment	Expenditure ratio excl. one-off		Total expenditure	Adjustment (pp. of GDP)			Average adjustment (pp. of GDP)			Average annual growth rate		
			Start of period	End of period		Total excl. one-off	o/w structural	Total excl. one-off	o/w structural	o/w cyclical	o/w interest	GDP	Potential GDP	Structural expenditure
Luxembourg	2005	2006	43,8	39,2	-4,2	-4,7	-4,5	-2,3	-2,2	-0,1	0,0	4,2	3,8	-1,6
Austria	1996	1997	55,5	51,8	-3,5	-3,8	-3,5	-1,9	-1,8	-1,8	-0,2	2,2	2,4	-1,2
Finland	1996	2001	58,5	47,2	-13,7	-11,3	-7,2	-1,9	-1,2	-1,2	-0,2	4,7	3,8	1,3
Sweden	1996	2001	63,5	52,9	-10,8	-10,6	-6,8	-1,8	-1,1	-1,1	-0,4	3,2	2,9	0,7
Sweden	2007	2009	51,2	52,9	1,7	1,7	-2,5	0,6	-0,8	-0,8	-0,2	-0,8	1,9	0,2
United Kingdom	2011	2016	47,7	41,6	-6,2	-6,1	-3,6	-1,0	-0,6	-0,6	0,0	2,0	1,2	-0,2
Netherlands	1996	2000	49,0	42,4	-11,9	-6,6	-2,8	-1,3	-0,6	-0,6	-0,3	4,3	3,5	2,2
Netherlands	2011	2016	47,5	43,3	-4,7	-4,2	-3,0	-0,7	-0,5	-0,5	-0,1	1,0	0,9	-0,3
Germany	1997	2007	48,9	42,4	-6,1	-6,4	-4,3	-0,6	-0,4	0,4	-0,1	1,7	1,4	0,5

Note: Countries are ranked by the size of the average yearly structural adjustment.

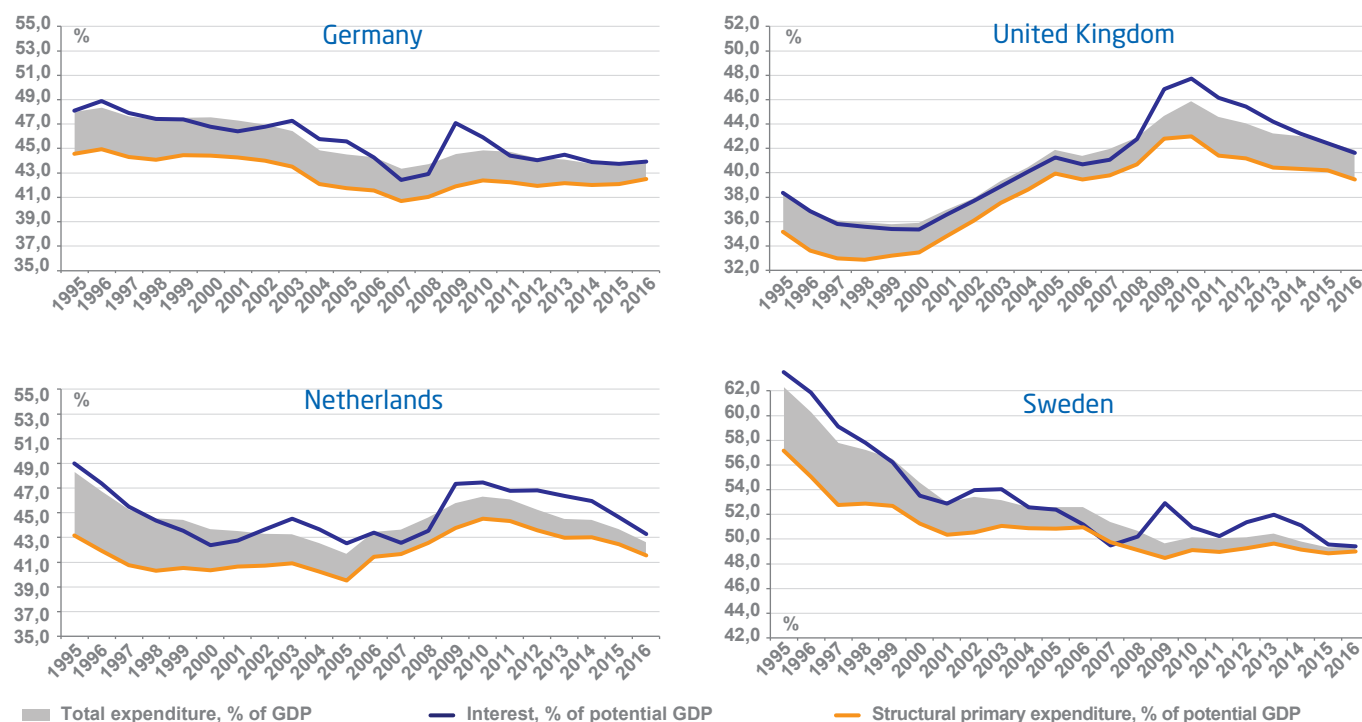
Source: European Commission (AMECO), France Stratégie calculations. Countries are ranked by the size of the average yearly structural adjustment.

16. See Chabert G. and Clavel L. (2012), "Quelles leçons tirer aujourd'hui de la crise des années 1990 en Suède ?", Trésor-Éco No.105, Directorate General of the Treasury. For a detailed review of the budget reforms in Sweden, see Molander P. and Holmquist J. (2013), "Reforming Sweden's budgetary institutions: Background, design and experiences", report for the Swedish Fiscal Policy Council (*Finanspolitiska radet*).

on recreation, culture and religion (-0.4 pp.). As in the United Kingdom, spending on pensions increased (+0.6 pp.) but expenditures related to sickness and disability decreased sharply (-0.6 pp.) in continuation of a trend initiated in the mid-2000s when the Netherlands introduced a

substantial reform of disability benefits¹⁷ (expenditures in this area stood at 5.5% of potential GDP in 2001, compared to 4.2% in 2016 and 2.4% on average in the European Union).¹⁸

Figure 8 – Decomposition of the expenditure ratio (1995-2016)



Note: The gap between the sum of structural expenditures as a share of potential GDP and interest spending, and total expenditures as a share of GDP, is the “cyclical component” of the public expenditure ratio (denominator effect and cyclical expenditures).

Source: European Commission (AMECO), France Stratégie calculations.

CONCLUSION

What lessons can be drawn from these experiences for France? There doesn't appear to be any single recipe to rein in public spending, as the composition of adjustments tends to reflect inefficiencies and preferences that are very specific to each of the countries concerned. However, three observations can be made. First, in all of the countries under study, a substantial share of the adjustment concerned the public payroll and social transfers. Second, the largest adjustments, in Sweden and Finland, were accompanied by reforms to the budgetary processes themselves. Lastly, reducing the weigh of structural expenditures by 2 to 3 percentage points of potential GDP over five years is far from being without precedent; save for Italy, France, Denmark and Belgium, all European countries have managed to do so at least once over the past twenty years, some of them in periods of moderate or low growth, without having been forced to do so in the midst of a severe crisis.

17. See Fultz E. (2015), “Disability Insurance in the Netherlands: A Blueprint for U.S. Reform?”, Center on Budget and Policy Priorities Policy Futures. The 2004 and 2006 reforms increased employer’s participation for sick leave and created a tiered system for disability benefits to encourage workers with partial disabilities to stay in employment.

18. The authors wish to thank Marie Cases, a former analyst at France Stratégie, for her contribution to the preparation of this report.

Box 3: Sources, hypotheses and parametres

The structural effort is sensitive to the estimates of the output gap and potential GDP, as well as to the elasticity of public expenditures to the output gap. In this paper we use the European Commission's estimate of potential GDP (AMECO database, November 2017) which are also used in the context of EU budgetary surveillance for assessing compliance with Stability and Growth Pact provisions. The output gap and potential GDP are estimated using a production function approach developed by the European Commission and endorsed by the Member States in the Output Gap Working Group.

The OECD and the European Commission's estimates of the elasticity of expenditures to output place a at +0.1 on average for EU countries, with values ranging from 0 (for the United Kingdom) to +0.3 (Spain). In the case of France, the elasticity is estimated at +0.11. This means that when GDP growth is 1 percentage point lower than potential, spending increases on average by 0.1%. Given the weight of public spending in GDP, this means that the ratio of public expenditure to GDP mechanically increases by 0.6 pp.

In order to calculate the structural component of expenditure, total public expenditures need to be adjusted for cyclical expenditures (estimated using the output gap and the elasticity of expenditures to the output gap) and also for one-off expenditure items, i.e. temporary increases or decreases in public expenditures that have no lasting

effect. Recapitalizations of financial institutions are the typical example of one-off items on the expenditure side, but other types of spending may also qualify (such as exceptional expenditures related to natural disasters for example).

For the purpose of budgetary surveillance the EU relies on an ad hoc framework to determine whether or not revenue or expenditure items can be considered as one-offs, which directly impacts the measure of the structural balance. The Commission's estimates of one-off measures for years prior to 2010 were not available in the ESA2010 accounting standard at time of writing, however, making it impossible to measure and compare structural expenditure evolutions since 1995 between countries.

To circumvent this problem, this paper focuses on expenditures excluding capital transfers (minus investment grants) and excluding acquisitions less disposals of non-produced non-financial assets. When we refer to one-off measure we are referring to the total expenditures of these two expenditure categories. These are typically recapitalizations of financial institutions (capital transfers) or the sale of mobile-phone spectrums (acquisitions less disposals of non-financial non-produced assets). This methodological choice is imperfect, but it offers an acceptable approximation. It has the advantage of providing a framework for comparing EU countries over an extended period of time.

Keywords : public spending, public expenditure, public finances, taxation, budget, macroeconomics

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