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Fiscal Consolidation: Part 4. Case Studies of Large Fiscal Consolidation Episodes

Hansjörg Blöchliger,

Dae-Ho Song,

Douglas Sutherland

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FISCAL CONSOLIDATION
PART 4. CASE STUDIES OF LARGE FISCAL CONSOLIDATION EPISODES

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ABSTRACT / RÉSUMÉ

Fiscal consolidation
Part 4. Case studies of large fiscal consolidation episodes

This paper provides an analysis of large and sustained fiscal consolidation episodes in OECD countries implemented between 1980 and 2000. It reviews how fiscal policy variables evolved during these episodes, how consolidation was influenced by the wider economic environment, and how the political economy side helped trigger and sustain consolidation efforts. Results suggest that successful consolidation – as measured by deficit reduction and debt stabilisation or decline – was driven by spending cuts and to a lesser extent by revenue increases. Most episodes started on a basis of improving competitiveness following currency depreciation and, in turn, favourable growth prospects, closing output gaps and – with some lag – falling unemployment. Interest rates started to decline two years after consolidation had started, suggesting that it took some time to earn credibility. With regard to political economy, most consolidation episodes were implemented shortly after an election. More than half of the governments that had started consolidation were re-elected, and some even strengthened consolidation efforts after then. In some cases, an incoming government of a different political colour pursued consolidation.

JEL classification codes: E62; E65; H60

Keywords: Fiscal policy; fiscal consolidation; deficit reduction; political economy

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Consolidation budgétaire
Partie 4. Études de cas de redressements budgétaires passés de grande envergure

Ce document analyse les phases antérieures de corrections budgétaires fortes et durables dans des pays de l'OCDE intervenues entre 1980 et 2000. Il examine l'évolution des variables de la politique budgétaire au cours de ces phases, l'influence de l'environnement économique global sur le redressement budgétaire et le rôle des considérations d'économie politique dans le déclenchement et le maintien des efforts d'assainissement. Les résultats laissent penser qu'un programme de redressement réussi (réduction du déficit et stabilisation ou réduction de la dette) repose sur une contraction des dépenses et, dans une moindre mesure, une augmentation des recettes. La plupart des corrections ont été amorcées alors que la compétitivité s'améliorait à la suite d'une dépréciation de la monnaie, induisant des perspectives de croissance plus favorables, une réduction des écarts de production et, avec un certain décalage, un recul du chômage. Les taux d'intérêt ont commencé à baisser deux ans après le début de la correction, ce qui montre qu'il faut un certain temps pour acquérir une crédibilité. S'agissant d'économie politique, la plupart des corrections ont été engagées peu après une élection. Plus de la moitié des gouvernements qui avaient amorcé un resserrement ont été réélus et certains l'ont même accentué ensuite. Il est arrivé aussi qu'un nouveau gouvernement poursuive l'action de redressement.

Classification JEL : E62 ; E65 ; H60

Mots-clés : Politique budgétaire ; redressement budgétaire ; réduction du déficit ; économie politique

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FISCAL CONSOLIDATION

PART 4. CASE STUDIES OF LARGE FISCAL CONSOLIDATION EPISODES

by Hansjörg Blöchliger, Dae-Ho Song and Douglas Sutherland[1]

1. Introduction and main conclusions

Some OECD countries have implemented large and sustained fiscal consolidation packages in the past, with episodes extending over several years, during which budgets improved considerably and debt tended to stabilise or decline. This synthesis provides a summary and analysis of 13 large consolidation episodes between 1980 and 2000. This paper reviews how fiscal policy variables – government balances, spending and revenue items – evolved during these episodes, how consolidation was influenced by the economic environment – growth, unemployment, interest rates etc. –, and how the political economy side helped trigger and sustain consolidation efforts. A set of country tables traces the consolidation episodes and their results for the 13 consolidation episodes forming the sample (Box 1).

The main results can be summarised as follows:

- *Deficits and debt:* deficits have been reduced from around 8% to 1% of GDP on average, with most underlying primary balances being in surplus soon after consolidation began. In most cases, debt continued to rise after the trough, and subsequently declined. Nonetheless debt levels remained well above pre-crisis levels reaching 60% of GDP for the median observation. Consolidation was not always well coordinated between the central and the sub-central government level (such as in Finland, Italy and Sweden), yet the different government levels did not undermine each other's consolidation endeavours.
- *Spending:* spending rose sharply prior to consolidation and then declined gradually, such as in Canada, Denmark, Finland and Sweden. However, the spending-to-GDP share was typically higher after the consolidation episode than in the run up. Investment appears to have been one of the principal casualties of fiscal consolidation: it declined more sharply in relative terms than government wages and remained depressed relative to the pre-consolidation period for quite long.
- *Revenues:* the share of revenues in GDP generally rose gradually over the episodes, with no clear turning point around the trough, suggesting that the revenue increases – whether driven by a cyclical recovery or policy measures – also contributed to consolidation, but less than spending cuts.
- *Growth, output gap and unemployment:* Typically growth rates picked up before fiscal tightening began and became relatively robust, with the output gap beginning to close around the trough and unemployment rates starting to decline a bit after the trough. As such, consolidation was often implemented in an economic environment that had already turned favourable. However, in some cases, such as Australia, growth weakened again and large output gaps persisted.

1. At the time of writing, the authors were members of the Economics Department of the OECD. This paper is a revised version of a document prepared for a meeting of Working Party No. 1 of the OECD Economic Policy Committee held in October 2011. The authors are indebted to the participants of the meeting as well as Jorgen Elmeskov, Peter Hoeller, and Jean-Luc Schneider for valuable comments and suggestions, Chantal Nicq for meticulous statistical work and Susan Gascard for excellent editorial support.

- *Current account balances and external positions:* Currency depreciations led to a considerable improvement in external positions, which contributed to a gradual improvement of current account balances both before and during consolidation. Fiscal consolidation hence started on a basis of improving competitiveness and, in turn, favourable growth prospects.
- *Interest rates, spreads:* Long-term real interest rates and their spreads with respect to short rates increased in the run up to consolidation. They started to decline only two years after the trough, suggesting that it took some time to establish credibility.
- *Political economy:* Most consolidation episodes were implemented shortly after an election. More than half of the governments that had started consolidation were re-elected, and some strengthened consolidation efforts after re-election. In some cases, an incoming government of a different political colour pursued consolidation.

Box 1. **Selection and presentation of the large consolidation periods**

The 13 country cases representing large consolidations were selected on the basis of measuring the trough-to-peak of the underlying primary balance using a business cycle dating methodology. The cases thus selected are: Australia (1984-88 and 1994-98), Canada (1993-97), Denmark (1983-86), Finland (1993-2000), the United Kingdom (1993-98), Greece (1990-94), Ireland (1982-88), Italy (1990-95), Japan (1979-87), Sweden (1981-87 and 1994-97) and the United States (1993-98).

The figures in the overview provide an aggregate picture of the 13 consolidation episodes. They show the evolution of the median value, the 80% value and the 20% value of the variables under scrutiny before and during the consolidation period. T_0 denotes the year when consolidation started (the trough, *i.e*. when balances started to improve), and T_{0-x} and T_{0+x} denote the years before or after the trough. Since the figures show percentiles and not a given group of countries (*i.e*. a country may change the percentile from one year to the next), care should be taken so as not to interpret changes as developments in a single country or country sub-group. The figures cover a time span of five years before and after the trough, which for most countries allows discerning broadly three distinct periods: *a)* a pre-crisis period; *b)* a crisis period when fiscal variables tend to deteriorate; and *c)* a consolidation period when most fiscal variables are improving.

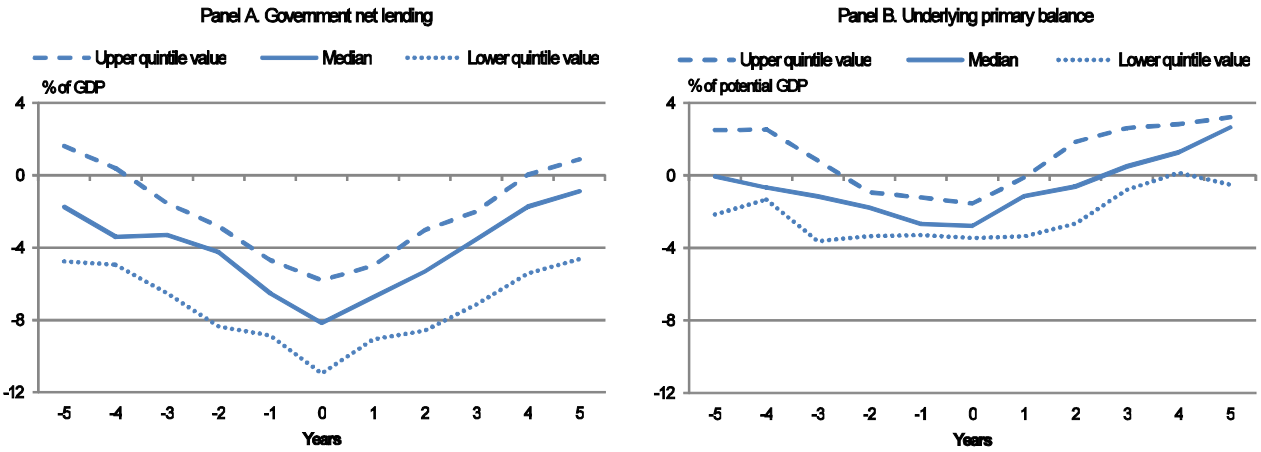
2. Overview

Fiscal policy

Balances improved greatly after the trough, but debt continued to rise for a while

The large consolidation episodes considered here typically continued over an extended period (Figure 1). The median general government balance improved from around -8% of GDP to around -1% of GDP within five years, with most countries' underlying primary balances reaching a surplus after two or three years of consolidation. The lower and upper quintiles follow a similar pattern, suggesting that annual budget improvements are largely independent of initial budget deficits or debt levels. The trough suggests that starting fiscal consolidation is a clear turning point in fiscal policy: a sharp deterioration in budget positions is followed by an equally sharp improvement of these positions, as exemplified by countries such as Canada, Sweden, Denmark and the United Kingdom, which had all rapid budget deteriorations followed by an equally quick consolidation. There is no "smooth" trough but an abrupt transition to fiscal tightening, although the abrupt transition can mask earlier tightening in spending with continuing deterioration in revenues as output declines further. In the aftermath of the 2008 crisis, fiscal balances deteriorated very fast across the OECD, dropping from –1.3% of GDP on average in 2007 to -7.6% of GDP on average in 2010, which is about the change experienced at the start of the large consolidations.

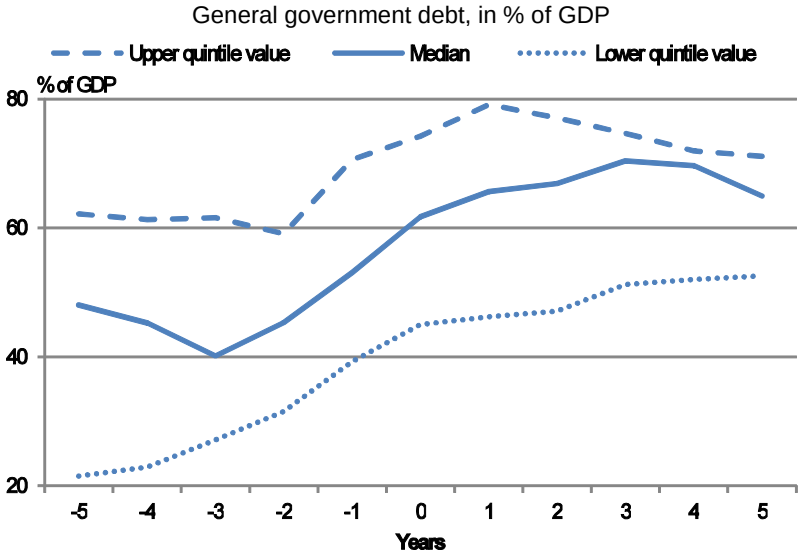
Figure 1. **General government balances improved**



Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

Typically debt continued to rise after the fiscal tightening began (Figure 2). The median debt observation continued to rise after the beginning of the consolidation episodes, reaching around 70% of GDP, before starting to decline. Debt in countries with high and/or rapidly rising debt levels, such as Denmark or Sweden, started to decline earlier, probably reflecting stronger pressure to avoid unsustainable fiscal positions. In some high debt countries – *e.g.* Italy – debt rose throughout the entire consolidation period. Debt in the lower quintile actually never declined, possibly reflecting less pressure to reduce debt. As a result, debt levels for the large consolidation episodes tended to converge in the aftermath of the consolidation episodes.

Figure 2. **Debt continued to rise for a while after the trough**



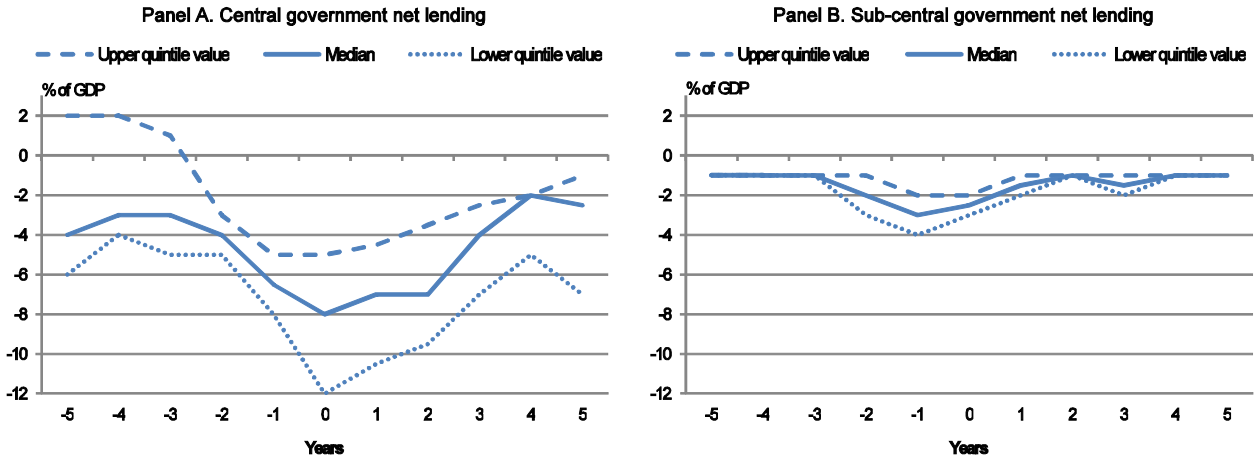
Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

One of the main differences between the aftermath of the recent crisis and earlier large consolidation episodes is the high level of accumulated debt. Starting from 57% of GDP for the OECD average in 2007, debt is projected to exceed 100% of GDP in 2011.

Central and sub-central government consolidation are not always in line

Central and sub-central government (SCG) consolidation efforts did often not evolve in parallel, yet they did not undermine each other (Figures 3). While central government balances tended to improve steadily starting from the trough, sub-central governments (state and local governments) started to consolidate earlier, but suffered from a second trough two to three years after central government consolidation had started. This second SCG trough is visible in some countries (namely Sweden, Finland, Italy, and to some extent Canada) where at some point in time improving central government balances coincided with deteriorating SCG balances. This trough may point both at a reduction in intergovernmental transfers or looser fiscal policy at the sub-central level.[2] While both deficits and the size of consolidation in terms of GDP were much smaller for SCGs than for the central government, they must be seen relative to the size of spending. In relation to spending, the SCGs consolidation effort is only a little smaller than that of central government.[3] In general, deficits are lower and trends are flatter for SCGs than for central government.[4] Given the relatively small number of observations for multi-level governments, the results should be taken with care.

Figure 3. **Central and sub-central government balances do not always evolve in parallel**



Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD National Accounts.

2. Transfers and SCG deficits could interact: expecting a bailout or another form of transfer, SCGs could actually increase their deficits, thereby triggering a circle of larger deficits and rising transfers (de Mello, 2007).

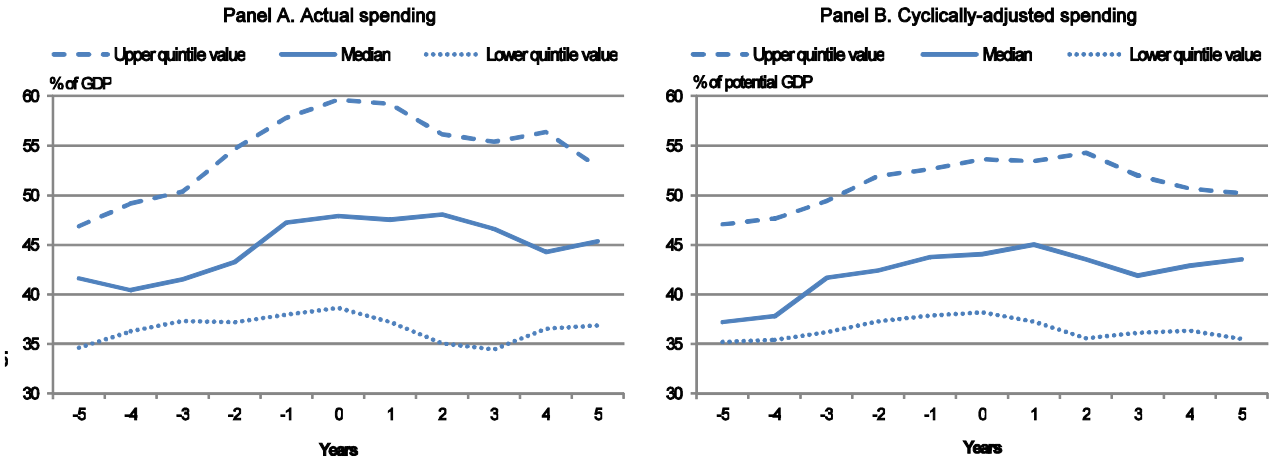
3. The ratio of SCG spending in general government spending for the countries and periods under scrutiny is around 36%. As a ratio of total spending, deficits were reduced by a bit more at the central than at the sub-central level. To keep the relative consolidation effort in terms of spending constant, central government would have to improve its balance by around 4.5% of GDP, while SCGs would have to improve it by around 2.5%.

4. This is in line with the analysis of the cyclical behaviour of SCG/CG balances over the past 25 years (Blöchliger *et al*., 2010).

Spending declined during consolidation, but remained higher than in the run up to the trough

Government spending often rose sharply prior to the onset of consolidation, particularly when spending was high as a share of GDP, before declining again. The consolidation episodes suggest that rapidly increasing government spending (such as in Canada, Denmark, Finland and Sweden in the mid-1990s) was a major driver for deteriorating fiscal balances. Even after consolidation, the spending-to-GDP ratios remained above the pre-crisis level, with the exception of low spending countries (Figure 4). Countries with higher spending levels typically reduced their underlying spending share more over a sustained period, possibly reflecting stronger pressure to bring spending back to sustainable levels. With the median having risen from 41% in 2007 to 50% of GDP in 2010, spending in the OECD is currently higher than at the beginning of the large consolidation episodes.

Figure 4. **Spending was reduced gradually**



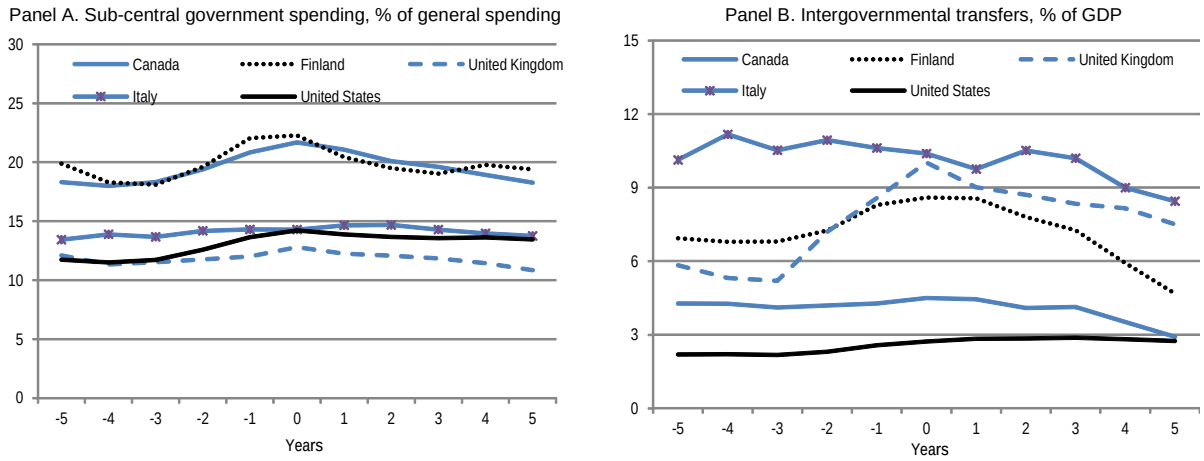
Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

Sub-central government spending and intergovernmental transfers were often reduced

The pattern of spending and transfers across government levels reflects some consolidation efforts at the sub-central government level. In countries for which data are available, sub-central government reduced their share of spending in GDP (Figure 5), although by less than central government, thereby increasing their share in total government spending. Some central governments cut transfers to sub-central governments considerably, shifting the burden of consolidation to lower government levels and generating some pro-cyclicality in the transfer system.[5] The Finnish case reflects a strong reduction in transfers during consolidation, which was only partially offset by a declining share of municipal spending. In the United States though, the start of fiscal consolidation had no impact on the trend of a rising share of sub-central government spending, partly fuelled by an increase in intergovernmental grants.

5. Transfers fluctuate strongly over the cycle and tend to destabilise sub-central revenue in more than half of the OECD countries (Blöchliger and Petzold, 2009).

Figure 5. **Sub-central government spending and intergovernmental transfers were often reduced**

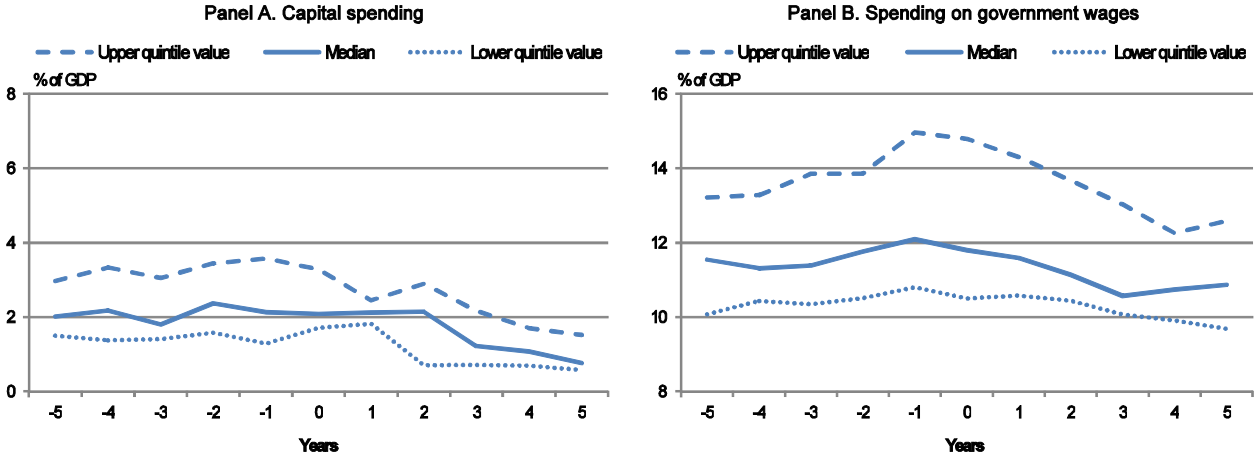


Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD National Accounts.

Investment was cut by more than wages

Spending cuts were unequally distributed across spending categories (Figures 6). Investment was cut back by 1% of GDP. As a result, government capital spending as a share of GDP was halved during the consolidation episodes and by more than three quarters in Australia (1984-88), Denmark and Ireland. By contrast, cuts in spending on government wages were often relatively moderate, although for high wage spending countries they dropped by around 2.5% of GDP. This pattern of spending cuts suggests that investment is more easily cut in the face of consolidation needs.[6] Investment, which is mostly discretionary by nature, is easier to curtail than current spending, much of which is mandated and based on entitlements. However, overall experience suggests that the size of consolidation is larger when episodes are driven by cuts in current spending (Molnar, 2012 and Guichard *et al.*, 2007), partly reflecting that investment is only a small share of total spending.

Figure 6. **Governments cut investment and wages**



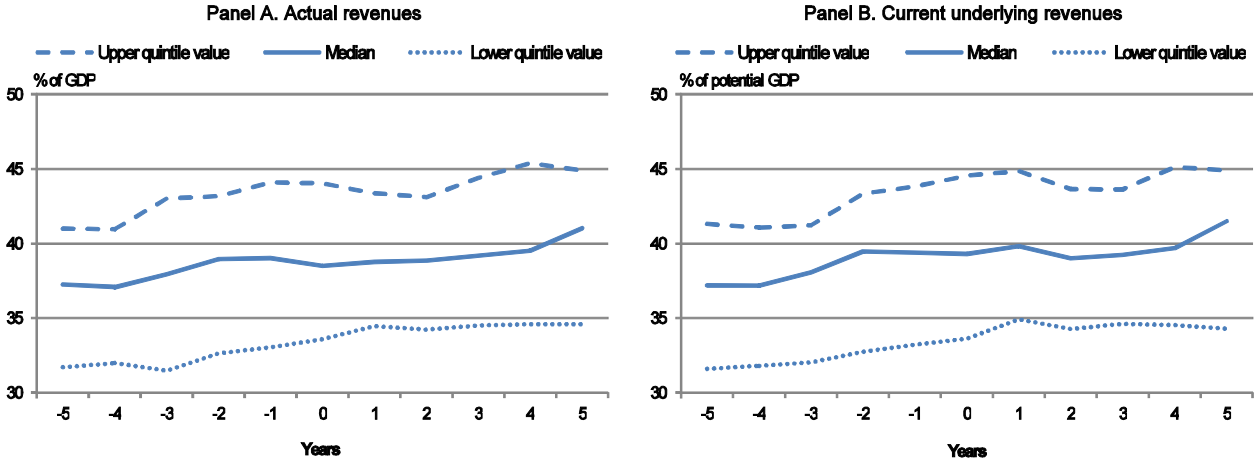
Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

6. Also, capital spending fluctuates much more than current spending over the cycle, suggesting more policy leverage over investment (Blöchliger *et al.*, 2009).

Revenues were rising steadily

Both total revenues and current underlying revenues – *i.e.* corrected for cyclical developments and one-offs – trended upward as a share of GDP (Figure 7). Changes around the start of consolidation episodes for both total and underlying current revenues are hardly visible. Countries with a high revenue share also had a stronger increase, resulting in some cross-country divergence with respect to the government revenue share. The overall picture of steadily increasing revenues once consolidation has started – especially for the countries with a high revenue to GDP ratio – suggests that increasing revenues underpin large consolidations. Also, comparing actual and underlying revenues suggests that both a cyclical recovery and policy measures to increase the revenue share (tax hikes etc.) played a role in large fiscal consolidations. In Australia (1995-98), Denmark, Ireland, Italy, Japan, Sweden (1993-97) and the United Kingdom tax hikes contributed a third or more towards overall consolidation (Devries *et al.*, 2011).[7] In general however, the contribution of revenues to consolidations tends to be smaller than spending cuts.[8] Unlike past consolidation episodes, revenues tended to decline during the recent crisis: between 2007 and 2010 the median OECD-wide ratio of revenues fell from 42 to 40% of GDP.

Figure 7. **Revenues were rising steadily**



Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

Economic environment

Growth picked up before consolidation started, helping to close the output gap

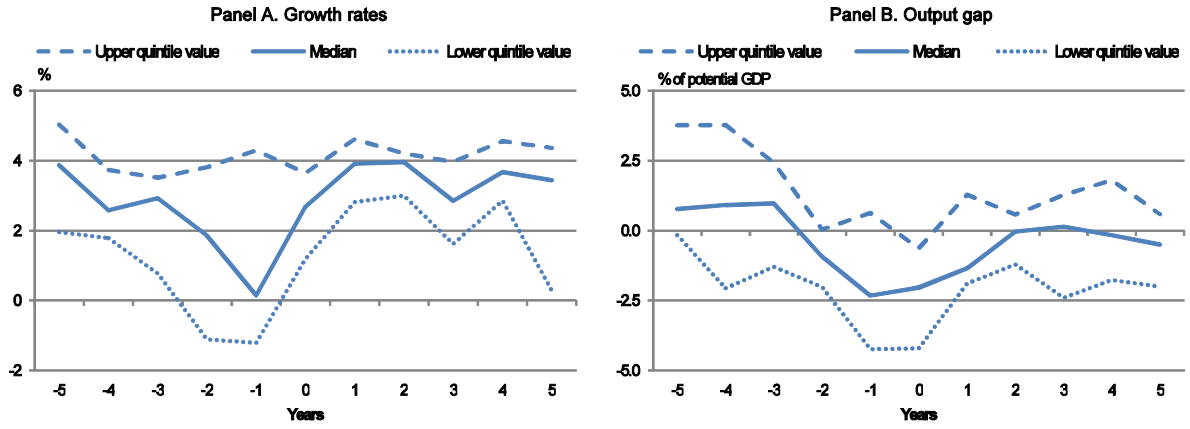
Economic conditions generally started to improve before consolidation episodes started (Figures 8). Growth picked up one year before the deficit trough, followed by a rapid recovery, but soon after consolidation had started, growth rates broadly stabilised, sometimes temporarily losing momentum, as in the cases of Australia (1984-88), Canada, Denmark and Sweden (1994-97). Some consolidations took place in the context of severe crises, often following an overheating of the economy. The output gap largely reflects the evolution of growth rates: it widened in the run up to the crisis and started to close before or around the time when consolidation started. During the recent crisis, activity declined by 4½ per

7. No sequential pattern in terms of spending cuts and tax hikes can be discerned, *i.e.* the timing of tax hikes and spending cuts appear to be evenly distributed over the entire consolidation episode.

8. Successful consolidations also appear to be mainly shaped by spending cuts rather than revenue increases (Guichard *et al.*, 2007).

cent between Q1 2008 and Q2 2009, which is more than in the past and the output gap widened from nearly 2% to almost -5% of potential GDP.

Figure 8. **Growth picked up before consolidation started**

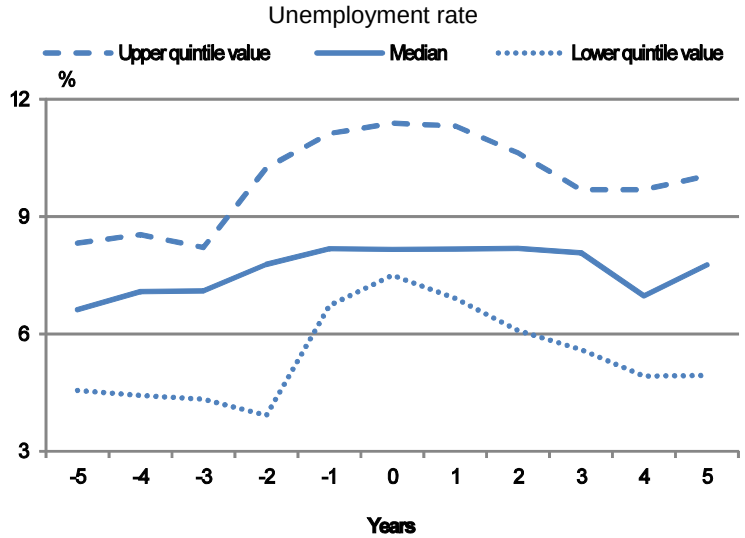


Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

After a sometimes steep increase, unemployment trended downwards once consolidation had started

Unemployment followed output developments with a lag of one to two years (Figure 9). Unemployment peaked around the time when countries started to consolidate, after a steep rise for some countries. Once consolidation had started, unemployment was pretty flat for the median, but declined for the upper and lower quintiles. The typical representatives for these movements are Australia (1984-88), Canada or Finland, where unemployment decreased rapidly, Sweden (1981-87), where low unemployment declined further, and Sweden (1994-97) and Japan where unemployment hardly moved in the first years of consolidation. In general, unemployment towards the end of a consolidation episode was higher than in the run up, especially for counties with higher levels of unemployment, such as Finland, Greece and Italy. The evolution of unemployment in the run up to the current crisis is similar to past episodes, but the unemployment rate then rose from 5.7% in 2007 to 8.3% in 2010.

Figure 9. **Unemployment followed largely output growth developments**

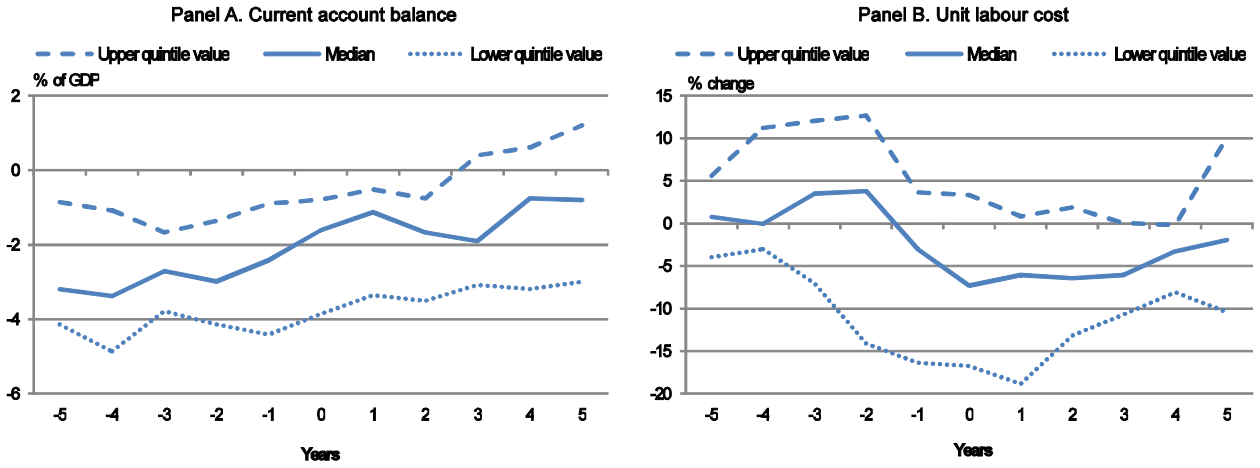


Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

External positions improved considerably before and during consolidation

External positions and competitiveness improved in the run up and during past large consolidation episodes (Figure 10). Current account balances (as a per cent of GDP) improved gradually, with no conspicuous turning points at or around the start of consolidation, although balances tended to remain negative for the entire consolidation period. The improvement of trade positions was partly due to improved competitive positions through devaluation or depreciation of nominal and real effective exchange rates. Effective exchange rates, expressed in terms of unit labour cost, improved before and during the consolidation period. The improvement in competitive positions is exemplified by Finland where exchange-rate-adjusted unit labour cost declined by more than 40% in the two years before the trough. The link between improved competitiveness and consolidation is also suggested in empirical research covering consolidation episodes in a systematic way (Ahrend *et al*., 2006).

Figure 10. **External positions improved both before and during consolidation**



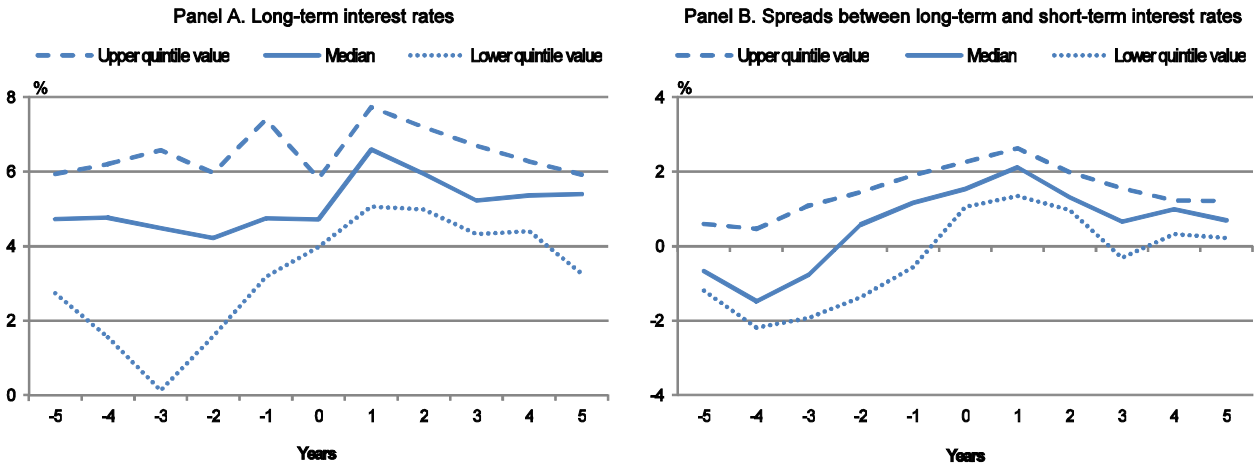
Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook Database.

Some countries experienced a weakening of their currency in the run up to the recent crisis. However, devaluations in order to sustain growth and fiscal consolidation are likely to be more difficult to achieve than in the past. *First*, the large number of OECD countries that have to consolidate, means that many countries would have to devalue simultaneously. *Second*, for many countries, especially in the euro area, the policy option of devaluing is not available any more. Although the real exchange rate in terms of relative cost or prices can still change, large relative price changes are difficult to engineer in a low inflation environment.

Long-term real interest rates and spreads started to decline only two years after the trough

Long-term real interest rates and interest rate spreads (*i.e.* long term government bond rates minus short-term money market rates) started to decline only two years after the start of a consolidation episode and across all quintiles (Figure 11). By implication while debt was stabilising, interest payments as a share of GDP also typically rose. In some countries, yield curves were inverted – with short rates above long rates – then beginning to normalise before the consolidation started. The start of consolidation itself was not sufficient to generate a turnaround in interest rates and spreads, which tended to coincide with the stabilisation of debt. The slow reaction of real interest rates and spreads to consolidation – as experienced by Canada, Finland, Italy and Sweden (1994-97) – suggests that governments had to build up credibility. Real interest rates tended to remain higher after than during the run up to the consolidation.

Figure 11. **Long-term real interest rates and interest spreads take some time to react to consolidation efforts**



Note: Evolution before and during the consolidation period. Data concern 13 episodes. More explanation is provided in Box 1.
Source: OECD Economic Outlook 89 Database.

The political economy

Consolidation started right after an election

Most consolidation episodes started within one year of the election of a new government. Also, several of the newly elected governments had declared during the election campaign that they intended to consolidate. Bold consolidation was an electoral promise and not done by stealth. Most governments that initiated large consolidation episodes did so very quickly after the election (Ireland, Canada, Sweden, Australia, Greece, United Kingdom and United States). The evolution of fiscal variables around the election date suggests that in several countries it was the outgoing government rather than the new one that had started consolidating. Single-party governments – whether in a majority or minority position – typically started a consolidation faster. For example, it took the coalition governments in Finland and Italy two to three years after election to start consolidating. The ratio of centre-right to centre-left governments starting a consolidation was around two to one.

Around half of governments were re-elected

Slightly more than half of the governments that pursued consolidation were re-elected. The probability of losing power was higher if the election date was soon after consolidation had started, probably because benefits had not yet become visible. In some cases the election of a new government also went together with the end of consolidation, such as in Greece. In several countries consolidating governments were ousted but the new government nonetheless continued to consolidate and sometimes more intensely and with greater success than the previous government. Ireland, Finland, the United Kingdom and both Swedish consolidation episodes are cases where a new government continued and strengthened the consolidation efforts of its predecessor. In the United States the Republicans, having campaigned for a balanced budget and strong spending cuts, gained a majority in both parliamentary chambers in 1996, although the Democratic (Clinton) administration had started consolidation before mainly through spending cuts.

3. Country experiences

Australia (1984-88)

Fiscal consolidation was based mainly on spending cuts with some increase in revenues. The consolidation came on the back of a severe economic downturn.

Fiscal policy

After consolidation had started, tax revenues initially started to rise as a share of GDP, partly as a result of policies aimed at broadening the tax base. Marginal personal income tax rates were reduced (the top marginal rate was lowered from 60% to 49% between the end of 1986 and mid-1987) and capital taxation was rationalised (Alesina, 1998). The budget of 1985-86 laid out a deficit reduction strategy by complying with a 'Trilogy of Budget Commitments', which set out medium-term fiscal rules. Under the trilogy, there would be no further increases in tax revenue or spending as a proportion of GDP and the budget deficit would be reduced, both for 1985-86 and the remaining life of the parliament. As a result, almost all of the fiscal adjustment was based on the spending side (Devries *et al.*, 2011). In particular, the government wage bill and social security transfer programmes accounted for a large share of the adjustment. While the overall balance remained negative, there was a significant tightening of the primary balance.

Economic environment

Australia joined the world-wide slowdown in the early 1980s, but the Australian recession was exacerbated by both a serious drought, which reduced farm output by about one-quarter in 1982/3, and significant rises in real wages. The unemployment rate, which had been under 6% in 1981, rose sharply to almost 10% in 1983 (Gruen, 2005). Concern centred on the current account, and policy focused on adjusting to external shocks by lowering inflation and preserving international competiveness. A marked depreciation and lower unit labour costs underpinned competitiveness gains and led to a significant rise in business investment. Nonetheless, the current account balance remained in deficit. Monetary policy was tight in response to high inflation and the large current account deficit. However, domestic demand strengthened, partly boosted by easier access to credit following financial deregulation in 1985-86, helping to bring down unemployment.

Political situation

In the federal election following the premature dissolution of Parliament on 1 December 1984, the incumbent Labour Party defeated a coalition of the Liberal Party and the National Party. The Labour Party government then implemented the fiscal consolidation policy based largely on spending cuts. In the subsequent federal elections in July 1987 the incumbent Labour Party retained power.

Australia (1984-88)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation				
	1981	1982	1983	1984	1985	1986	1987	1988
Government financial balance	-3.58	-4.96	-6.55	-6.40	-6.28	-5.06	-2.56	-0.27
Primary balance	-2.17	-1.33	-2.36	-1.27	-1.24	-0.94	1.60	2.10
Government debt	Na	Na	Na	Na	Na	Na	Na	24.89
Total disbursements	33.25	35.94	37.47	38.97	39.88	39.61	37.37	34.16
Underlying total disbursement	33.82	35.27	37.48	37.80	38.47	39.62	37.01	35.12
Government net capital outlays (investment)	1.51	2.56	1.81	3.45	3.86	2.59	2.46	0.63
Current disbursements	31.64	33.23	35.50	35.42	35.93	36.90	34.81	33.46
- Government wages	12.49	13.13	13.06	12.70	12.32	12.35	11.64	11.09
- Subsidies	1.48	1.56	1.71	1.59	1.64	1.72	1.51	1.36
- Social security benefits	6.22	6.65	7.63	7.34	6.98	7.06	6.72	6.41
Total receipts	29.66	30.98	30.91	32.56	33.60	34.55	34.81	33.89
Underlying total receipts	29.15	31.19	32.07	33.25	33.54	34.64	34.73	33.59

Economic situation

	Before consolidation			During consolidation				
	1981	1982	1983	1984	1985	1986	1987	1988
Real GDP growth rate	4.05	-0.39	-0.23	6.59	5.36	1.97	4.61	4.40
Output gap	2.16	-1.75	-4.88	-1.51	0.72	-0.57	0.55	1.33
Inflation (CPI, % change)	9.61	11.23	10.05	3.94	6.74	9.08	8.49	7.26
Core inflation (% change)	-	-	-	-	-	-	-	7.40
Unemployment rate	5.72	7.09	9.87	8.90	8.18	7.85	7.82	6.93
Real short term interest rate based on private consumption deflator	5.76	6.45	3.02	5.73	9.23	8.49	5.43	5.34
Real long term interest rate based on private consumption deflator	4.61	5.03	4.81	7.18	7.15	5.51	4.82	4.60
Current account balance/ GDP	-4.16	-4.09	-3.16	-4.16	-4.90	-5.02	-3.40	-3.80
Relative labour cost (cumulative % change)	13.85	16.14	13.89	18.10	-3.45	-19.26	-24.11	-16.74

Australia (1994-98)

Another large fiscal consolidation occurred during the 1990s, again following on the heels of a recession. This time the consolidation was based initially on the revenue side before extending to significant spending cuts. The fiscal consolidation occurred alongside changes to the fiscal framework and the introduction of inflation targeting.

Fiscal policy

To reduce the dependence on foreign saving, and to ensure that the government's finances are in better shape to meet future budgetary pressures, the government started a fiscal consolidation programme in 1994 with revenue increasing measures. Underlying receipts increased by around 2% of GDP during the consolidation, with direct taxes on households providing the bulk of the revenue hike between 1993 and 1998. Reducing spending became a focus later on. The government reduced public spending by 3.6% of GDP by 1998, with the government wage bill, social security and investment all sharing some of the cut-backs. The fiscal policy framework was strengthened by the introduction of the "Charter of Budget Honesty". The Charter imposed a formal requirement on the Australian government to set out and report

against a medium-term fiscal strategy. In addition, "principles of sound fiscal management" required fiscal policy to take account of government debt and the management of financial risks, the state of the economic cycle, the adequacy of national saving and equity between generations (Kennedy, 2004).

Economic environment

As the economy emerged from the recession in the early 1990s, the monetary policy framework was changed with the introduction of inflation targeting. In 1993 the Reserve Bank of Australia introduced a target of keeping underlying inflation between 2 and 3% over the course of the cycle. In response to the sharp acceleration of economic growth in the first half of 1994, policy interest rates were raised. Hence, monetary tightening began at a time of low inflation (around 2%) and high unemployment (about 9%), which helped stabilise inflation expectations. The new framework was endorsed by the Treasurer in a joint statement with the Reserve Bank Governor in August 1996, the "Statement on the Conduct of Monetary Policy". As growth recovered the unemployment rate fell gradually.

Political situation

Whilst the consolidation was already underway in early 1996, a coalition of the Liberal Party and National Party of Australia (centre-right) defeated the incumbent Australian Labour Party (left), which had been in power since 1983. The Liberal-National alliance government campaigned on fiscal reform in order to improve the soundness of the public finances. The coalition retained power in elections in late 1998, which followed dissolution of Parliament.

Fiscal variables (% of GDP)

	Before consolidation			During consolidation				
	1991	1992	1993	1994	1995	1996	1997	1998
Government financial balance	-4.53	-5.44	-4.25	-4.19	-3.36	-1.98	-0.47	1.26
Primary balance	-0.48	-1.11	-0.90	-0.56	0.37	1.13	2.13	3.01
Government debt	22.91	27.13	30.25	39.59	41.30	38.64	36.99	31.98
Total disbursements	36.91	37.51	36.96	37.13	36.95	36.10	35.06	34.44
Underlying total disbursement	36.78	37.40	36.86	37.21	36.91	36.05	35.02	34.53
Government net capital outlays (investment)	1.47	1.25	1.12	1.06	1.05	0.88	0.71	0.74
Current disbursements	35.35	36.19	35.73	35.96	35.79	35.06	34.16	33.54
- Government wages	11.30	11.39	11.34	10.87	10.50	10.58	10.44	10.07
- Subsidies	1.42	1.40	1.46	1.33	1.23	1.27	1.19	1.19
- Social security benefits	7.44	7.99	8.49	8.16	8.15	8.36	8.16	7.64
Total receipts	32.37	32.07	32.71	32.94	33.59	34.12	34.59	35.70
Underlying total receipts	33.33	33.12	33.44	33.26	33.82	34.31	34.73	35.54

Economic situation

	Before consolidation			During consolidation				
	1991	1992	1993	1994	1995	1996	1997	1998
Real GDP growth rate	-1.20	2.93	3.80	4.74	3.70	3.99	3.88	5.15
Output gap	-3.71	-3.23	-2.13	-0.63	-0.65	-0.61	-0.56	0.75
Inflation (CPI, in %)	3.22	0.99	1.81	1.89	4.64	2.61	0.25	0.85
Core inflation (% change)	4.54	2.72	2.85	2.42	3.26	2.93	1.92	1.72
Unemployment rate	9.20	10.40	10.52	9.38	8.16	8.17	8.19	7.67
Real short term interest rate based on private consumption deflator	6.65	4.76	3.27	4.43	5.00	4.99	3.95	3.81
Real long term interest rate based on private consumption deflator	7.23	7.49	5.50	7.67	6.48	6.05	5.51	4.30
Current account balance/ GDP	-3.24	-3.24	-2.97	-4.41	-4.81	-3.35	-2.77	-4.66
Relative labour cost (cumulative % change)	-4.04	-9.12	-18.12	-13.65	-9.63	0.66	2.16	-6.95

Canada (1993-97)

Canada's large fiscal consolidation during the 1990s, following a sharp deterioration in growth and fiscal positions, was based principally on bringing spending under control and reducing it significantly. The consolidation accompanied the introduction of inflation targeting. A substantial exchange rate depreciation supported consolidation.

Fiscal policy

In 1991 and 1992, total public spending jumped above 50% of GDP, the budget deficit surpassed 9% of GDP and the public debt to GDP ratio rose sharply to above 90% of GDP. Against this backdrop, the "Spending Control Act" was introduced in 1992, which held federal expenditure below the 1991 level for five consecutive years. The federal government continued an ambitious consolidation programme from 1993 on. Expenditure cuts at both the federal and provincial level contributed to a significant improvement in the underlying primary balance, which turned into a surplus from 1995. The public sector wage bill was reduced significantly. Reforms to the unemployment insurance system contributed to lower spending on income support by adjusting eligibility requirements and cutting the replacement rate. Reforms in the system of inter-governmental transfers also contributed to better federal spending control. All aspects of public spending were reconsidered under a "Programme Review" with the aim of ensuring all resources are efficiently allocated. This led to state-owned enterprises being privatised, which explains why investment turned negative. Revenue reforms reduced the tax burden while promoting the fairness of the tax system and broadening the tax base (ECB, 2006).

Economic environment

Canada was facing substantial competitive disadvantages due to a pronounced appreciation since 1988. Growth turned sharply down and the unemployment rate increased significantly, breeching 11% in 1992. A major innovation in the macroeconomic framework was the introduction of inflation targeting in order to better anchor inflation expectations. In early 1991 the Government and Bank of Canada set a target aimed at reducing inflation to a range of 1 to 3% by the end of 1995. From 1995, the Bank of Canada loosened monetary conditions given the strong fiscal consolidation and low real domestic demand growth in 1995 and 1996. The credibility of the inflation target and the fiscal balance improvements allowed interest rates to remain below US levels without downward pressure on the exchange rate (OECD, 1997). In addition, the government launched a major financial system reform.

Political situation

The Liberal Party (centre-left) defeated the incumbent Progressive Conservative Party (centre-right) government in elections in October 1993. The Liberal Party, promising to continue fiscal consolidation policy by cutting federal spending to create a budget surplus, retained power in elections in June 1997.

Canada (1993-97)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation				
	1990	1991	1992	1993	1994	1995	1996	1997
Government financial balance	-5.83	-8.35	-9.13	-8.71	-6.70	-5.33	-2.80	0.19
Primary balance	-1.18	-1.83	-1.80	-1.55	-0.64	1.00	3.38	5.44
Government debt	75.19	82.34	90.23	96.32	97.96	101.60	101.72	96.32
Total disbursements	48.80	52.26	53.34	52.23	49.74	48.48	46.59	44.28
Underlying total disbursement	48.85	52.04	53.14	52.14	49.85	48.53	46.63	44.32
Government net capital outlays(investment)	1.41	1.30	1.03	0.73	0.70	0.61	0.33	-0.03
Current disbursements	47.33	50.78	52.13	51.30	48.87	47.66	45.98	43.82
- Government wages	14.05	15.07	15.56	13.23	14.35	13.67	13.03	12.25
- Subsidies	1.48	1.88	1.76	1.43	1.25	1.08	1.04	1.06
- Social security benefits	10.74	12.23	13.29	13.52	12.78	12.16	11.81	11.38
- Transfers to sub-national government	7.97	8.37	8.90	8.68	8.17	8.12	7.14	6.30
Total receipts	42.98	43.91	44.21	43.51	43.03	43.15	43.79	44.46
Underlying total receipts	42.53	44.85	45.92	45.19	44.00	43.83	44.79	45.07

Economic situation

	Before consolidation			During consolidation				
	1990	1991	1992	1993	1994	1995	1996	1997
GDP growth rate	0.19	-2.09	0.88	2.34	4.80	2.81	1.62	4.23
Output gap	0.95	-3.37	-4.58	-4.19	-1.82	-1.54	-2.70	-1.74
Inflation (CPI, in %)	Na	Na	Na	1.87	0.14	2.19	1.58	1.61
Core inflation (% change)	3.48	2.79	1.81	2.07	1.84	2.24	1.73	1.90
Unemployment rate	8.15	10.30	11.22	11.39	10.39	9.47	9.65	9.09
Real short term interest rate based on private consumption deflator	8.54	3.88	4.84	2.66	4.42	5.75	2.86	1.98
Real long term interest rate based on private consumption deflator	6.48	4.46	6.40	4.92	7.30	6.87	5.63	4.54
Current account balance/ GDP	-3.40	-3.74	-3.62	-3.86	-2.30	-0.75	0.55	-1.29
Relative labour cost (cumulative % change)	1.74	5.38	-2.75	-12.58	-20.59	-19.42	-14.94	-14.68

Denmark (1983-86)

Fiscal consolidation was based on both reducing spending and increasing tax revenue. The consolidation was preceded by a depreciation and fundamental change in monetary policy.

Fiscal policy

Consolidation efforts started shortly after a severe economic shock, which contributed to a sharp rise in government debt. In 1982, government debt to GDP reached 65%, up 20% of GDP at the beginning of the decade. Once consolidation had started, the main spending cuts occurred in field of social security, such as unemployment insurance, the pensions system (2.4% of GDP) and the government wage bill (2.7% of GDP). Social security spending was cut back by the suspension of price indexation of some social payments and eliminating the benefit covering the first day of sickness. The contribution to unemployment insurance was raised. Rules for supplementary unemployment insurance benefits were also tightened. Retirement pensions were set according to the income level (Bergman, 2009). On the revenue side, total revenue increased, especially following a rise in corporate taxation in 1984 (OECD, 2004).

Economic environment

With the oil crisis, real GDP growth turned negative in the early 1980s and unemployment jumped. Furthermore, inflation was substantial with nominal and real interest rates high. As a result of a new monetary policy regime that helped lower interest rates, both private investment and consumption increased, and business investment increased considerably. The consolidation was also assisted by exchange rate depreciation at the beginning of the decade, leading to a fall in relative unit labour costs and an increase in competitiveness immediately before the fiscal adjustment. During the consolidation, GDP growth remained above the G7 average.

Political situation

When a new centre-right coalition (composed of the Conservative People's Party, Liberals, Centre Democrats, Christian People's Party) took office in September 1982, the large fiscal contraction was announced and implemented in stages between 1983 and 1986. Centre-right coalition governments were elected in 1984 and again in 1987 elections.

Denmark (1983-86)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation			
	1980	1981	1982	1983	1984	1985	1986
Government financial balance	-3.74	-8.07	-10.96	-8.59	-4.17	-2.00	3.66
Primary balance	-3.32	-3.25	-4.46	-1.21	1.91	3.25	6.06
Government debt	43.69	53.54	65.10	75.75	77.04	74.65	71.93
Total disbursements	53.42	57.81	59.61	59.21	56.13	55.13	51.09
Underlying total disbursement	54.17	56.67	57.59	57.52	56.23	55.27	52.55
Government net capital outlays (investment)	1.86	2.80	3.30	2.29	0.34	0.23	-0.85
Current disbursements	50.99	54.46	56.04	56.62	55.50	54.36	51.60
- Government wages	17.65	18.56	19.04	18.63	17.47	16.94	16.31
- Subsidies	1.48	1.51	1.72	1.70	1.57	1.47	1.30
- Social security benefits	16.06	17.22	17.50	16.99	16.54	15.80	15.11
- Transfers to sub-national government	Na	Na	Na	Na	Na	Na	Na
Total receipts	49.68	49.74	48.65	50.62	51.96	53.13	54.75
Underlying total receipts	49.63	50.99	50.01	51.60	52.24	52.26	53.01

Economic situation

	Before consolidation			During consolidation			
	1980	1981	1982	1983	1984	1985	1986
GDP growth rate	-0.49	-0.89	3.71	2.65	4.17	4.02	4.95
Output gap	-0.99	-3.75	-2.24	-1.70	0.29	2.08	4.35
Inflation (CPI, % change)	12.31	11.77	10.12	6.91	6.29	4.68	3.68
Core inflation (% change)	8.73	8.94	9.62	8.82	6.95	5.20	4.21
Unemployment rate	5.20	7.02	7.50	8.08	7.73	6.47	4.92
Real short-term interest rate based on private consumption deflator	7.34	3.31	6.44	6.13	4.77	6.46	8.20
Real long-term interest rate based on private consumption deflator	9.60	8.10	10.90	8.41	7.52	7.78	9.10
Current account balance/ GDP	Na	Na	Na	Na	Na	Na	Na
Relative labour cost (cumulative % change)	-9.99	-15.36	-17.16	-16.62	-15.11	-11.54	-4.89

Finland (1993-2000)

Finland's fiscal consolidation was based on a large reduction in spending, beginning in the recession of the early 1990s that followed a financial crisis and severe economic dislocation. Consolidation was accompanied by a significant depreciation and a change in monetary policy.

Fiscal policy

The underlying primary balance began to improve from 1993, although some early measures were introduced after a new government took office in 1991. The primary balance began to improve and turned positive from 1996 and reached almost 7 % of GDP in 2000, remaining positive until 2009. During the consolidation, the underlying primary balance improved by 10.5% of GDP. Consolidation was mainly based on public spending cuts. Total disbursements fell by over 16% of GDP with the savings spread across many spending items. Social security payments fell substantially, the government wage bill was cut back as were subsidies, government investment and transfers to sub-central governments. In addition, partly as a consequence of the substantial fiscal tightening, favourable debt dynamics reduced interest payments. While raising additional revenue as a share of GDP was not a major strand of the consolidation strategy, the tax system was rationalised with a view to improve incentives and enhance its neutrality. For example, a new flat tax of 25% on corporate and household capital income was implemented in 1993 replacing the old system with high statutory rates but relatively low effective rates.

Economic environment

Finland experienced an economic and financial crisis during 1991-94. It was preceded by high output growth with a rapid expansion in credit, significant capital inflows and strong asset price growth, following the deregulation of financial markets. A move to a floating exchange rate and the ensuing depreciation and the move to inflation targeting – from 1995 monetary policy targeted a 2% inflation rate – has largely been credited with the following recovery. The move to credible inflation targeting enabled wage agreements that reduced nominal wage inflation and improved the competitiveness of Finnish goods, aiding the revival in exports that proved crucial to the recovery and subsequent strength of the Finnish economy. Both domestic demand and the export sector helped economic growth. Falling interest rates underpinned business investment and stimulated domestic demand, while the depreciation of the currency during 1990-93 boosted the competitiveness of the export sector, helping the current account balance to turn positive early in the consolidation.

Political situation

A coalition government of centrist parties started consolidation after taking power in the 1991 elections. A centre-left coalition government took power after the 1995 election and continued consolidation policy. It was re-elected in 1999.

Finland (1993-2000)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation							
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Government financial balance	5.39	-0.96	-5.44	-8.28	-6.73	-6.14	-3.52	-1.43	1.50	1.56	6.84
Primary balance	1.21	-1.76	-3.67	-3.28	-1.32	-0.91	0.47	0.37	2.67	2.89	6.83
Government debt	16.39	24.78	44.36	57.66	60.70	65.11	66.07	64.79	61.20	54.96	52.43
Total disbursements	48.17	57.03	61.96	64.63	63.52	61.25	59.88	56.62	52.90	51.74	48.31
Underlying total disbursement	48.92	57.13	61.80	63.06	61.89	58.76	58.79	57.04	53.31	51.75	48.62
Government net capital outlays (investment)	1.54	1.65	1.23	1.71	2.12	2.91	1.63	0.68	0.55	0.95	0.28
Current disbursements	46.46	55.18	60.53	62.67	61.21	58.16	57.99	55.63	52.02	50.44	47.62
- Government wages	14.78	17.17	17.56	16.46	15.69	15.12	15.41	14.67	13.92	13.62	13.08
- Subsidies	2.77	3.26	3.37	3.19	3.02	2.73	1.99	1.85	1.69	1.60	1.52
- Social security benefits	14.66	18.31	22.04	23.63	23.66	21.87	21.31	19.79	18.27	17.77	16.21
- Transfers to sub-national government	7.76	8.90	9.46	10.30	9.46	8.73	6.54	5.13	4.64	4.44	4.25
Total receipts	53.55	56.07	56.52	56.36	56.80	55.11	56.36	55.20	54.40	53.30	55.15
Underlying total receipts	52.01	57.36	59.63	59.92	59.47	57.01	57.88	55.63	54.40	53.22	54.42

Economic situation

	Before consolidation			During consolidation							
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP growth rate	0.14	-5.87	-3.68	-0.86	3.57	3.99	3.59	5.89	4.77	3.97	5.33
Output gap	4.02	-3.36	-7.45	-8.68	-6.09	-4.31	-3.47	-0.91	0.03	0.14	1.75
Inflation (CPI, % change)	6.15	4.31	2.92	2.19	1.09	0.79	0.63	1.19	1.40	1.16	3.04
Core inflation (% change)	6.52	4.77	3.58	2.20	1.54	2.90	0.28	1.09	1.59	1.23	2.56
Unemployment rate	4.56	8.04	13.03	17.62	17.87	16.70	15.87	12.77	11.43	10.25	9.81
Real short-term interest rate based on private consumption deflator	7.46	7.82	9.84	3.88	4.80	4.76	3.11	1.58	1.54	1.53	0.20
Real long-term interest rate based on private consumption deflator	6.67	6.45	8.56	4.94	8.49	7.80	6.57	4.31	2.76	3.29	1.29
Current account balance/ GDP	-5.02	-5.36	-4.59	-1.28	1.09	4.08	4.00	5.58	5.62	6.26	8.12
Relative labour cost (cumulative % change)	5.47	4.41	-17.21	-37.29	-34.18	-23.64	-27.82	-32.12	-32.24	-32.08	-38.73

Greece (1990-94)

Fiscal consolidation was based on increasing revenue and followed an earlier stalled consolidation in the mid-1980s.

Fiscal policy

Greece had experienced a sharp rise in the government deficit since the early 1980s. Greece pursued fiscal consolidation based on raising additional revenue between 1990 and 1994, which improved revenues by 8% of GDP. Tax revenues increased by 28% in 1993, achieved largely from improved efficiency in tax administration, while effective tax rates remained unchanged (OECD, 1995). The underlying primary balance improved and the primary budget balance turned positive in 1993. However, during consolidation current government spending rose by 4% of GDP, which was offset by reduced investment, with the investment-to-GDP ratio falling to barely 1% of GDP at the end of the consolidation episode. The rise in current spending was partly due to higher interest payments following a strong rise in interest rates during the consolidation period.

Economic environment

Before consolidation, economic growth had been low accompanied by high inflation and high nominal interest rates. During the consolidation episode, competitiveness in terms of relative labour cost actually deteriorated. However, the current account deficit did narrow once consolidation got underway.

Political economy

A centre-right coalition government started consolidation after the April 1990 election. But this government was defeated by a centre-left coalition in 1993, which brought consolidation to a halt. The centre-left coalition was re-elected in 1996.

Greece (1990-94)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation				
	1987	1988	1989	1990	1991	1992	1993	1994
Government financial balance	-8.56	-10.33	-12.14	-14.03	-9.86	-10.93	-11.93	-8.26
Primary balance	-3.47	-3.11	-5.62	-2.66	-1.35	0.14	1.56	3.69
Government debt	Na	Na	Na	Na	Na	Na	Na	Na
Total disbursements	40.36	39.31	40.58	44.87	41.77	44.24	46.54	44.72
Underlying total disbursement	42.68	38.92	40.27	42.34	41.31	42.83	44.54	45.46
Government net capital outlays (investment)	1.31	1.97	2.01	4.11	2.51	3.50	3.53	1.08
Current disbursements	38.31	36.60	37.89	39.83	38.21	39.26	41.43	42.16
- Government wages	9.82	9.93	10.82	11.14	10.23	9.76	9.75	9.48
- Subsidies	1.78	1.81	1.33	1.09	0.55	0.46	0.45	0.36
- Social security benefits	13.11	12.81	13.09	12.99	12.83	12.77	13.02	13.27
- Transfers to sub-national government	Na	Na	Na	Na	Na	Na	Na	Na
Total receipts	31.80	28.97	28.44	30.83	31.91	33.31	34.60	36.47
Underlying total receipts	33.33	29.47	28.35	31.04	31.72	33.10	35.38	37.40

Economic situation

	Before consolidation			During consolidation				
	1987	1988	1989	1990	1991	1992	1993	1994
GDP growth rate	-2.26	4.29	3.80	0.00	3.10	0.70	-1.60	2.00
Output gap	-4.25	-0.86	1.77	0.27	1.27	0.17	-3.07	-2.86
Inflation (CPI, in %)	16.40	13.53	13.66	20.43	19.46	15.88	14.41	10.87
Core inflation (% change)	-	-	-	18.76	19.14	16.84	16.21	11.29
Unemployment rate	7.76	8.07	7.86	7.43	8.07	9.05	10.04	10.00
Real short-term interest rate based on private consumption deflator	1.72	4.14	5.50	3.17	3.73	6.05	7.14	8.31
Real long-term interest rate based on private consumption deflator	Na	Na	Na	Na	Na	Na	Na	Na
Current account balance/ GDP	-2.74	-2.06	-4.40	-4.98	-2.49	-3.17	-1.90	-1.22
Relative labour cost (cumulative % change)	1.69	6.86	14.50	24.90	20.89	22.62	34.19	37.38

Ireland (1982-88)

Ireland's fiscal consolidation was based initially on raising revenue before turning to cutting spending.

Fiscal policy

Deficits had been getting worse from the late 1970s reaching their nadir in 1982, when public spending had reached 57% of GDP. At the beginning of consolidation, policy was largely based on revenue raising measures. However, the consolidation strategy was insufficient to restore a sound fiscal position. Spending cuts were introduced as part of the expenditure reform "Programme for National Recovery" in 1987. Spending on health and pensions was reduced considerably and user fees for universities and hospitals were introduced. The amount of borrowing by public enterprises was reduced and major projects in the energy and telecommunications sector were cancelled (Hauptmeier *et al.*, 2006). After the consolidation, the underlying primary balance had improved by 10% of GDP.

Economic environment

Ireland had been in a difficult situation in the early 1980s. It had been suffering from low growth and high unemployment, aggravated by high inflation with CPI inflation hitting 20% in 1982. In March 1983, the realignment of the currencies in the European Monetary System (EMS) resulted in a devaluation of the Irish pound by 3.5%. However, as inflation in Ireland still exceeded other EMS countries, the real exchange rate appreciated. As a result competitiveness deteriorated. From the middle of the decade a number of factors began to support growth. Inflation fell from 1985 and wages moderated partly as a result of public sector pay restraint and in 1986, a modest depreciation against major trading partners occurred.

Political economy

A centrist coalition government (Fine Gael and Labour Party) started consolidation in 1982, but the coalition collapsed in 1987 when the Labour Party refused to support budget plans to tackle the country's budget deficit through spending cuts, especially in health and social welfare programmes. Fianna Fail (centre left) won the resulting election and continued the consolidation.

Ireland (1982-88)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation						
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Government financial balance	-10.13	-11.19	-12.25	-13.28	-11.59	-9.53	-10.80	-10.63	-8.57	-4.64
Primary balance	Na	-6.76	-6.62	-5.62	-2.44	-0.74	-1.34	-0.13	1.78	4.35
Government debt	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
Total disbursements	49.17	54.26	54.67	57.28	56.14	53.23	53.87	53.57	52.01	48.44
Underlying total disbursement	Na	52.34	53.75	56.63	56.41	54.40	55.00	54.43	52.49	48.99
Government net capital outlays (investment)	4.19	4.73	4.70	4.78	4.16	3.33	3.32	3.12	2.12	1.01
Current disbursements	41.15	44.34	46.23	49.21	49.73	48.66	49.52	49.58	48.82	46.41
- Government wages	10.79	11.77	12.11	12.09	11.92	11.72	11.51	11.61	11.28	10.46
- Subsidies	2.40	2.42	2.46	2.37	2.40	2.18	2.10	1.86	2.60	2.94
- Social security benefits	9.95	11.08	11.96	13.71	14.32	14.16	14.50	14.87	14.48	13.83
- Transfers to sub-national government	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
Total receipts	39.04	43.07	42.43	44.00	44.55	43.70	43.06	42.94	43.44	43.81
Underlying total receipts	Na	40.12	40.72	43.09	45.66	45.48	44.67	45.70	45.76	45.48

Economic situation

	Before consolidation			During consolidation						
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
GDP growth rate	3.07	3.08	3.33	2.28	-0.24	4.35	3.09	-0.43	4.66	5.22
Output gap	4.08	2.77	2.41	0.85	-2.45	-1.39	-1.26	-4.50	-3.47	-2.07
Inflation (CPI, in %)	13.30	18.15	20.37	17.14	10.48	8.61	5.47	3.76	3.16	2.13
Core inflation (% change)	12.72	18.21	20.47	18.26	11.07	8.62	5.67	4.82	3.74	2.35
Unemployment rate	8.64	7.44	11.09	11.63	15.21	16.70	16.81	17.25	16.99	16.51
Real short-term interest rate based on private consumption deflator	Na	Na	Na	Na	Na	5.88	6.94	7.95	8.41	4.21
Real long-term interest rate based on private consumption deflator	0.17	-3.23	-2.34	2.14	4.68	7.26	7.80	6.65	8.84	5.52
Current account balance/ GDP	-11.83	-10.12	-12.85	-9.05	-5.73	-5.29	-3.57	-3.08	-0.23	-0.03
Relative labour cost (cumulative % change)	7.93	6.93	1.94	7.01	11.61	9.83	12.02	21.07	13.14	6.44

Italy (1990-95)

Fiscal consolidation in the first half of the 1990s mainly focused on raising revenue before bringing spending under control.

Fiscal policy

Budget deficits had been a long-standing concern, reaching over 12% of GDP in the late 1980s. Initially, a large share of the consolidation was on the revenue side. Spending restraint only accounted for a large share of fiscal consolidation during the second half of the consolidation episode, following agreements with the unions to limit the growth of wages (Alesina *et al*., 1998). The budget balance remained negative throughout the consolidation episode, while the primary balance turned positive.

Economic environment

As the currency value depreciated from 1993, the current account balance improved. In September 1992, Italy left the European Monetary System and the Italian currency fell significantly relative to trading partners. As a result of the combined effect of the devaluation and the agreement with the unions on wage moderation, relative unit labour costs fell substantially.

Political economy

A centre-right coalition government took power in June 1987 and started consolidation from 1990. A succession of different coalition governments were appointed until April 1996, when a centre-left coalition government took power.

Italy (1990-95)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation					
	1987	1988	1989	1990	1991	1992	1993	1994	1995
Government financial balance	-11.52	-11.04	-11.42	-11.44	-11.38	-10.39	-10.05	-9.09	-7.41
Primary balance	-3.09	-2.82	-3.04	-1.73	-0.59	-0.06	3.15	2.80	4.55
Government debt	96.51	98.80	95.52	97.56	100.39	106.87	116.25	120.93	122.55
Total disbursements	49.80	50.37	51.53	52.90	53.99	55.40	56.37	53.50	52.47
Underlying total disbursement	49.44	49.92	51.23	52.50	54.09	55.62	56.45	53.71	51.60
Government net capital outlays (investment)	3.60	3.58	3.29	3.55	2.89	0.71	1.65	1.56	2.07
Current disbursements	45.97	46.53	47.90	49.11	50.76	52.57	53.85	51.54	49.57
- Government wages	11.55	11.69	11.56	12.20	12.26	12.16	12.03	11.61	10.96
- Subsidies	2.38	2.14	2.15	1.83	1.81	1.75	1.90	1.66	1.43
- Social security benefits	14.65	14.61	15.02	15.02	15.13	16.10	16.61	16.81	16.28
- Transfers to sub-national government	11.03	10.68	10.47	9.80	10.55	10.23	9.03	8.49	8.11
Total receipts	38.28	39.32	40.12	41.46	42.61	45.01	46.31	44.41	45.06
Underlying total receipts	38.94	39.32	39.57	41.19	42.62	43.86	47.57	45.96	45.46

Economic situation

	Before consolidation			During consolidation					
	1987	1988	1989	1990	1991	1992	1993	1994	1995
GDP growth rate	2.96	4.30	3.47	1.95	1.53	0.65	-0.89	2.28	2.90
Output gap	-0.70	1.08	1.95	1.19	0.36	-1.01	-3.37	-2.32	-0.81
Inflation (CPI, in %)	4.75	5.06	6.26	6.46	6.25	5.27	4.63	4.05	5.24
Core inflation (% change)	5.36	5.49	6.38	6.17	5.84	5.64	5.24	4.16	5.07
Unemployment rate	10.25	1045	10.21	9.13	8.59	8.78	9.88	10.86	11.35
Real short-term interest rate based on private consumption deflator	6.23	4.93	6.08	5.78	5.31	8.87	4.82	3.39	4.44
Real long-term interest rate based on private consumption deflator	5.54	5.01	6.25	7.08	6.38	8.13	5.81	5.40	6.19
Current account balance/ GDP	-0.33	-0.83	-1.24	-1.48	-2.05	-2.37	0.81	1.19	2.23
Relative labour cost (cumulative % change)	0.30	0.13	4.26	11.17	13.92	8.31	-10.17	-14.81	-22.46

Japan (1979-87)

Revenue increases contributed to fiscal consolidation at the beginning, but from 1984 Japan's fiscal policy focused more on spending cuts.

Fiscal policy

The fiscal balance of Japan had deteriorated, partly due to the oil crisis. The government had tried to stimulate economic activity through spending, which relied on significant borrowing. The government failed to introduce a consumption tax in 1979. The government instead introduced a "zero ceiling", which set a maximum budget request that each ministry could submit, but it had only a modest impact on spending. As a result, from 1983 a "minus ceiling" was introduced, which limited budget requests to below the current budget. The minus ceiling system reduced spending gradually and contributed to a positive primary balance emerging by the end of the consolidation. The privatisation of the national railway and telecom companies helped stave off tax increases (OECD, 2006).

Economic environment

Growth was relatively stable before the consolidation episode, hovering around 4% to 5% annually. Despite an appreciation of the Yen and the ensuing adverse effect on competiveness, the current account remained positive, and growth was solid through the entire consolidation period.

Political situation

The Liberal Democratic Party was elected in 1980, taking over power from an 8 party alliance. The government was re-elected in 1986 and again in 1990.

Japan (1979-87)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation								
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Government financial balance	-3.89	-4.02	-5.79	-5.00	-4.66	-4.05	-4.01	-4.18	-2.77	-1.43	-1.43	-0.38
Primary balance	Na	Na	-4.87	Na	-3.03	-2.34	-2.08	-1.67	-0.15	0.70	0.68	1.71
Government debt	26.99	32.37	40.97	45.54	47.08	52.81	58.77	64.95	67.05	69.40	75.08	76.80
Total disbursements	29.11	30.40	32.10	33.18	33.45	33.99	34.23	34.54	33.79	32.71	32.83	33.25
Underlying total disbursement	Na	Na	Na	Na	33.06	33.65	34.10	34.53	33.87	32.93	33.20	33.53
Government net capital outlays (investment)	4.08	4.65	5.81	6.09	5.96	5.82	5.25	4.77	4.35	3.82	3.76	3.90
Current disbursements	24.51	25.23	25.77	26.57	26.97	27.60	28.37	29.11	28.77	28.26	28.38	28.49
- Government wages	7.33	7.28	7.13	7.08	7.04	7.01	6.92	6.84	6.73	6.55	6.53	6.40
- Subsidies	1.22	1.24	1.24	1.24	1.40	1.38	1.38	1.40	1.28	1.15	1.12	1.00
- Social security benefits	5.55	5.83	6.17	6.44	6.58	7.05	7.36	7.39	7.21	7.22	7.41	7.65
- Transfers to sub-national government	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
Total receipts	25.22	26.38	26.30	28.18	28.80	29.94	30.22	30.37	31.02	31.27	31.40	32.87
Underlying total receipts	Na	Na	Na	Na	28.79	29.95	30.38	30.81	31.56	31.48	31.79	33.24

Economic situation

	Before consolidation			During consolidation								
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
GDP growth rate	3.98	4.39	5.27	5.48	2.82	4.18	3.38	3.06	4.46	6.33	2.83	4.11
Output gap	-2.36	-1.65	-0.20	1.31	-0.03	0.14	-0.74	-1.87	-1.85	-0.19	-1.61	-1.65
Inflation (CPI, in %)	9.42	8.14	4.18	3.72	7.81	4.91	2.74	1.89	2.25	2.84	0.13	0.05
Core inflation (% change)	9.84	8.55	5.53	3.88	5.10	4.62	2.94	2.57	2.84	2.74	2.06	1.51
Unemployment rate	2.0	2.01	2.23	2.08	2.01	2.21	2.35	2.65	2.72	2.62	2.77	2.84
Real short-term interest rate based on private consumption deflator	-2.64	-1.15	0.44	2.45	3.38	3.03	4.40	4.76	4.29	5.10	4.76	3.95
Real long-term interest rate based on private consumption deflator	-1.22	0.01	1.74	4.74	1.37	3.82	5.65	5.89	5.15	4.95	4.74	4.74
Current account balance/ GDP	0.62	1.52	1.70	-0.92	-1.06	0.39	0.60	1.72	2.73	3.67	4.23	3.43
Relative labour cost (cumulative % change)	-2.25	7.65	26.77	7.70	-1.65	6.31	-5.28	8.41	11.75	7.45	44.45	54.57

Sweden (1981-87)

Sweden's fiscal consolidation was based on increasing revenue initially and then cutting spending.

Fiscal policy

Government debt was rising quite rapidly from the middle of the 1970s and exceeded 70% of GDP in 1983, when the budget deficit was around 6% of GDP. The rising deficits stemmed largely from rapidly increasing public spending. Total spending had increased from below 45% of GDP in the early 1970s to over 60% of GDP on the eve of the consolidation. At the beginning of the consolidation revenue jumped, but this was insufficient to make a marked dent on deficits. When cuts in public spending were introduced they relied significantly on investment and the government wage bill. The contraction of government wages was mainly between 1983 and 1987. In 1988, a ceiling was applied to the central government wage bill in order to better control public spending on wages.

Economic environment

The Swedish economic growth rate was sluggish averaging below 2% annually. At the beginning of the consolidation period, inflation was in double digits. Real interest rates then increased strongly as inflation was brought under control. After devaluation in 1982 and the ensuing improvement in competitiveness, the monetary authorities started targeting the exchange rate.

Political situation

Two years after the election in 1979, the centre-right coalition government started consolidation, but lost in September 1982. A centre-left coalition government continued consolidation after taking power in 1982 and remained there until the 1991 election.

Sweden (1981-87)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation						
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Government financial balance	-0.65	-2.80	-5.71	-4.69	-6.59	-5.13	-3.03	-3.67	-3.04	3.29
Primary balance	na	Na	-4.97	-3.94	-3.47	-1.66	-1.13	-1.47	-0.16	1.82
Government debt	32.72	37.50	46.86	55.29	65.47	69.49	70.80	70.33	69.63	61.85
Total disbursements	58.48	59.71	62.67	62.87	64.98	64.92	62.31	63.19	60.74	58.54
Underlying total disbursement	Na	Na	62.15	63.80	64.57	64.01	62.21	63.00	61.59	60.14
Government net capital outlays (investment)	2.67	3.06	4.50	2.63	3.35	3.61	2.62	2.54	1.31	0.58
Current disbursements	55.64	56.48	58.00	60.07	61.46	61.13	59.53	60.48	59.26	57.78
- Government wages	19.59	19.79	20.16	20.16	20.02	19.31	18.67	18.27	18.09	17.39
- Subsidies	3.23	3.28	3.32	3.57	3.80	3.96	3.82	3.85	3.73	3.61
- Social security benefits	15.79	15.89	16.05	16.54	16.70	16.73	16.00	16.63	16.71	16.95
- Transfers to sub-national government	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
Total receipts	57.83	56.90	56.96	58.17	58.40	59.78	59.28	59.53	60.40	61.83
Underlying total receipts	Na	Na	56.94	58.93	59.28	60.62	59.02	59.08	59.59	60.42

Economic situation

	Before consolidation			During consolidation						
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
GDP growth rate	1.75	3.84	1.70	-0.20	1.19	1.81	4.27	2.19	2.86	3.46
Output gap	-2.11	0.10	0.05	-1.71	-2.02	-1.85	0.59	1.02	1.80	3.03
Inflation (CPI, in %)	10.00	7.21	13.71	12.10	8.59	8.87	8.04	7.37	4.24	4.19
Core inflation (% change)	-	-	-	-	-	-	-	-	-	-
Unemployment rate	2.99	2.78	2.67	3.32	4.21	4.62	4.15	3.66	3.38	2.72
Real short-term interest rate based on private consumption deflator	Na	Na	Na	Na	3.08	0.19	4.36	7.31	5.14	4.15
Real long-term interest rate based on private consumption deflator	-1.28	2.77	-0.42	1.66	3.12	1.33	4.96	6.37	5.85	6.44
Current account balance/ GDP	0.34	-1.67	-2.99	-2.08	-2.95	-0.51	0.94	-0.77	0.31	0.26
Relative labour cost (cumulative % change)	-6.18	-10.94	-11.67	-10.33	-21.91	-31.68	-29.66	-25.75	-25.67	-25.40

Sweden (1994-97)

The second fiscal consolidation was based on both spending cuts and revenue increases with the spending cuts contributing significantly to the improvement in the budget balance.

Fiscal policy

After some tentative measures, consolidation began in earnest in 1994 with an expenditure freeze. All current central government spending items were frozen for three years. State transfers to sub-central levels of government were frozen at their nominal 1994 level until 2000. Moreover, local government borrowing was barred. Furthermore, the government introduced important changes to social security transfers, reducing child allowances, family and child benefits, pensions as well as unemployment and sickness benefits. Eligibility for benefits was tightened and replacement rates significantly reduced (ECB, 2006). Fiscal consolidation was supported by institutional changes in the fiscal framework, notably the strengthening of the Fiscal Committee in parliament at the expense of other committees; the introduction of top-down budgeting; and towards the end of consolidation the introduction of a long-term surplus target. During the consolidation, the underlying primary balance improved by 7½ per cent of GDP.

Economic environment

Sweden's severe recession followed the turn of the bubble-economy of the late 1980s. During the recession, the unemployment rate spiked from 2% in 1990 to 11% in 1993. The fixed exchange rate was abandoned in late 1992, allowing the currency to depreciate before consolidation started in earnest. The improved competiveness gave the export sector a boost, and robust growth resumed in 1994.

Political situation

The centre-right coalition government (1991-93) started consolidation, but the primary balance did not improve partly due to the economic crisis. The centre-left coalition government continued fiscal consolidation after the 1994 election and then the primary budget balance was positive from 1996 to 2001.

Sweden (1994-97)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation			
	1991	1992	1993	1994	1995	1996	1997
Government financial balance	-0.08	-8.89	-11.20	-9.09	-7.33	-3.32	-1.64
Primary balance	-1.17	-3.96	-4.96	-4.63	-3.72	0.48	2.64
Government debt	55.04	73.38	78.19	82.50	81.06	84.36	82.98
Total disbursements	61.14	69.42	70.57	68.36	65.12	62.98	60.73
Underlying total disbursement	62.94	66.29	68.25	67.69	64.82	63.13	60.30
Government net capital outlays (investment)	0.62	4.92	3.80	2.56	2.10	1.18	1.24
Current disbursements	60.35	64.32	66.60	65.67	62.82	61.65	59.30
- Government wages	17.97	18.89	18.18	17.29	16.34	16.84	16.39
- Subsidies	3.79	4.11	4.39	3.98	3.64	3.15	2.64
- Social security benefits	18.87	20.93	22.22	21.68	20.15	19.24	18.48
- Transfers to sub-national government	Na	Na	6.38	5.85	5.21	4.25	4.32
Total receipts	61.06	60.53	59.37	59.28	57.79	59.66	59.09
Underlying total receipts	61.27	61.84	62.12	61.14	58.62	60.83	59.94

Economic situation

	Before consolidation			During consolidation			
	1991	1992	1993	1994	1995	1996	1997
GDP growth rate	-1.12	-1.20	-2.06	3.88	4.20	1.63	2.95
Output gap	-0.43	-2.81	-5.80	-3.86	-1.88	-2.41	-1.81
Inflation (CPI growth in %)	9.44	2.37	4.73	2.16	2.46	0.53	0.66
Core inflation (% change)	9.38	2.02	5.02	2.36	2.65	1.27	1.77
Unemployment rate	3.81	6.73	10.90	11.32	10.63	11.57	11.84
Real short-term interest rate based on private consumption deflator	1.19	10.78	1.45	4.69	5.90	4.87	2.78
Real long-term interest rate based on private consumption deflator	0.28	7.94	1.63	6.78	7.40	7.11	5.29
Current account balance/ GDP	-1.46	-2.79	-1.25	1.12	3.30	3.54	4.08
Relative labour cost (cumulative % change)	2.82	0.10	-26.68	-31.62	-34.42	-26.07	-31.42

United Kingdom (1994-98)

Fiscal consolidation was based more on spending control than revenue increases.

Fiscal policy

In the late 1980s, the UK's public finances appeared to be in good health. But by 1993, on the back of a recession in the early 1990s, the primary budget deficit reached nearly 4% of GDP and government debt was almost 50% of GDP. From 1993, fiscal consolidation was implemented steadily, with a mix of tight expenditure control and some revenue increases, and led to a steady improvement in the underlying primary balance and helped to stabilise debt. A new system of budgeting was introduced to constrain spending to a pre-planned total, which was calibrated to keep total public spending growth below the GDP growth rate. Furthermore, restraint was placed on the funding of sub-central levels of government. On the revenue side, total receipts increased somewhat, largely from direct taxes on businesses.

Economic environment

Following the recession, the economy recovered strongly between 1993 and 1998, with steady growth in domestic demand and a boost from exports, which was helped by the low pound during 1993-97. During this period, monetary policy switched to an explicit inflation target in order to provide a new nominal anchor after the UK left the European Exchange Mechanism in 1992.

Political situation

The centre-right government (Conservatives) started consolidation after the election in 1992, but a centre-left government (Labour) won in the 1997 election and continued consolidation for some time based on spending restraint. The primary budget balance turned positive in 1987 and remained so until 2001.

United Kingdom (1993-98)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation				
	1991	1992	1993	1994	1995	1996	1997	1998
Government financial balance	-3.42	-6.52	-7.98	-6.83	-5.84	-4.15	-2.24	-0.10
Primary balance	-0.46	-2.72	-3.95	-3.48	-2.18	-0.81	0.96	2.66
Government debt	32.80	38.97	48.73	46.84	51.58	51.20	52.01	52.54
Total disbursements	43.24	45.25	45.27	44.59	44.08	42.18	40.65	39.49
Underlying total disbursement	42.91	45.00	44.92	44.41	43.71	42.00	40.60	39.64
Government net capital outlays (investment)	2.13	2.05	2.05	1.82	1.84	1.15	0.81	0.81
Current disbursements	40.60	42.86	42.97	42.49	41.99	40.76	39.57	38.44
- Government wages	11.76	12.22	11.8.	10.98	10.65	10.52	10.11	9.72
- Subsidies	0.58	0.67	0.64	0.67	0.63	0.50	0.56	0.42
- Social security benefits	13.90	15.33	15.75	15.36	15.08	14.49	14.11	13.39
- Transfers to sub-national government	8.57	10.02	9.01	8.71	8.34	8.15	7.50	7.15
Total receipts	39.82	38.73	37.29	37.76	38.24	38.02	38.41	39.40
Underlying total receipts	40.07	39.83	38.42	38.28	38.45	38.13	39.40	39.26

Economic situation

	Before consolidation			During consolidation				
	1991	1992	1993	1994	1995	1996	1997	1998
GDP growth rate	-1.39	0.15	2.22	4.28	3.05	2.89	3.31	3.61
Output gap	-4.15	-3.16	-2.84	-0.90	-0.35	-0.24	0.17	0.54
Inflation (CPI, in %)	7.53	4.26	2.51	1.98	2.66	2.48	1.78	1.59
Core inflation (% change)	Na	Na	Na	Na	Na	Na	Na	Na
Unemployment rate	8.82	9.95	10.37	9.49	8.62	8.10	6.97	6.26
Real short-term interest rate based on private consumption deflator	3.93	4.95	2.35	3.48	3.43	2.56	4.37	4.97
Real long-term interest rate based on private consumption deflator	2.51	4.39	3.89	6.10	4.95	4.35	4.60	3.18
Current account balance/ GDP	-1.77	-2.09	-1.90	-0.98	-1.24	-0.81	-0.12	-0.36
Relative labour cost (cumulative % change)	1.84	0.19	-3.32	-11.64	-9.66	-12.83	-11.57	6.13

United States (1993-98)

Fiscal consolidation was based both on reducing spending and increasing revenue.

Fiscal policy

During the slowdown and recession at the beginning of the 1990s, deficits ballooned. A fiscal tightening started in 1993 and continued until 1998, by which time budget balances were in positive territory and debt was declining. Consolidation was achieved by both spending cuts – mainly government wages – and tax increases, of which the former made up around two thirds, while the latter made up around one third of the total consolidation endeavour. The increase in tax revenue reflected the phase-in of the tax hikes incorporated in the 1993 Omnibus Budget Reconciliation Act and some tax rate hikes for high-income earners (OECD, 1996). Investment was cut marginally.

Economic environment

From 1992, the economy had bounced back quite strongly, leading to falling unemployment with stable interest rates and low inflation. Consolidation took place in an environment of strong GDP growth. Monetary policy helped to keep bond yields close to nominal GDP growth, so that the interest burden remained low (Bibow, 2004).

Political economy

In 1992 and 1993, the Democratic Party had won Congressional majorities and the Presidential election, respectively. In 1994, the Republican Party (centre-right), campaigning for a balanced budget and reduced welfare spending, gained majorities in Congress. The incumbent President (Bill Clinton) was re-elected president in 1996, whereas the Republican Party retained Congressional majorities until 2000.

United States (1993-98)

Fiscal variables (% of GDP)

	Before consolidation			During consolidation					
	1990	1991	1992	1993	1994	1995	1996	1997	1998
Government financial balance	-4.34	-5.03	-5.88	-5.08	-3.70	-3.30	-2.29	-0.89	0.31
Primary balance	-0.52	-1.10	-1.61	-1.01	-0.02	0.50	1.28	2.18	2.99
Government debt	63.02	67.76	70.17	71.78	70.98	70.57	69.81	67.35	64.13
Total disbursements	37.20	37.97	38.65	38.10	37.11	37.08	36.55	35.44	34.62
Underlying total disbursement	37.09	37.78	38.48	37.97	37.05	37.17	36.62	35.61	34.80
Government net capital outlays (investment)	1.14	1.29	1.69	0.86	0.71	0.64	0.69	0.60	0.61
Current disbursements	35.52	36.43	37.31	36.98	36.12	36.17	35.56	34.52	33.65
- Government wages	10.51	10.81	10.68	10.51	10.22	10.03	9.78	9.51	9.33
- Subsidies	0.47	0.46	0.47	0.55	0.46	0.47	0.45	0.41	0.41
- Social security benefits	9.98	10.92	11.60	11.74	11.57	11.69	11.59	11.25	10.92
- Transfers to sub-national government	2.30	2.57	2.73	2.83	2.84	2.87	2.82	2.74	2.76
Total receipts	32.86	32.94	32.76	33.02	33.41	33.78	34.26	34.55	34.93
Underlying total receipts	32.61	33.44	33.32	33.55	33.67	34.13	34.52	34.57	34.69

Economic situation

	Before consolidation			During consolidation					
	1990	1991	1992	1993	1994	1995	1996	1997	1998
GDP growth rate	1.88	-0.23	3.39	2.85	4.07	2.51	3.74	4.46	4.36
Output gap	0.62	-2.33	-1.72	-1.76	-0.67	-1.20	-0.75	0.08	0.71
Inflation (CPI, in %)	5.42	4.22	3.04	2.97	2.60	2.81	2.94	2.34	1.55
Core inflation (% change)	4.26	3.91	3.41	2.56	2.31	2.23	1.94	1.92	1.45
Unemployment rate	5.61	6.84	7.50	6.91	6.09	5.60	5.40	4.94	4.51
Real-short term interest rate based on private consumption deflator	3.68	2.33	0.83	1.05	2.62	3.75	3.27	3.79	4.55
Real-long term interest rate based on private consumption deflator	4.15	3.98	4.07	3.68	5.02	4.37	4.26	4.48	4.31
Current account balance/ GDP	-1.81	-1.36	-0.79	-1.27	-1.72	-1.53	-1.59	-1.69	-2.45
Relative labour cost (cumulative % change)	0.14	-0.63	-2.97	-3.07	-4.62	-9.58	-8.44	-5.29	0.52

Table 1. **Fiscal variables at the beginning and the end of consolidation**

% of GDP

		Australia		Canada	Denmark	Finland	United Kingdom	Greece	Ireland	Italy	Japan	Sweden		United States
		1984-88	1994-98	1993-97	1983-86	1993-2000	1993-98	1990-94	1982-88	1990-95	1979-87	1981-87	1994-97	1993-98
Government financial balance	Beginning	-6.55	-4.25	-9.13	-10.96	-5.44	-7.98	-12.14	-12.25	-11.42	-5.79	-5.71	-11.20	-5.88
	End	-0.27	1.26	0.19	3.66	6.84	-0.10	-8.26	-4.64	-7.41	-0.38	3.29	-1.64	0.31
Primary balance	Beginning	-2.36	-0.90	-1.80	-4.46	-3.67	-3.95	-5.62	-6.62	-3.04	-4.87	-4.97	-4.96	-1.61
	End	2.10	3.01	5.44	6.06	6.83	2.66	3.69	4.35	4.55	1.71	1.82	2.64	2.99
Government debt	Beginning	Na	30.25	90.23	65.10	44.36	48.73	Na	Na	95.52	40.97	46.86	78.19	70.17
	End	24.89	31.98	96.32	71.93	52.43	52.54	Na	Na	122.55	76.80	61.85	82.98	64.13
Total disbursements	Beginning	37.47	36.96	53.34	59.61	61.96	45.27	40.58	54.67	51.53	32.10	62.67	70.57	38.65
	End	34.16	34.44	44.28	51.09	48.31	39.49	44.72	48.44	52.47	33.25	58.54	60.73	34.62
Total receipts	Beginning	30.91	32.71	44.21	48.65	56.52	37.29	28.44	42.43	40.12	26.30	56.96	59.37	32.76
	End	33.89	35.70	44.46	54.75	55.15	39.40	36.47	43.81	45.06	32.87	61.83	59.09	34.93
Government wages	Beginning	13.06	11.34	15.56	19.04	17.56	11.80	10.82	12.11	11.56	7.13	20.16	18.18	10.68
	End	11.09	10.07	12.25	16.31	13.08	9.72	9.48	10.46	10.96	6.40	17.39	16.39	9.33
Government investment	Beginning	1.81	1.12	1.03	3.30	1.23	2.05	2.01	4.70	3.29	5.81	4.50	3.80	1.69
	End	0.63	0.74	-0.03	-0.85	0.28	0.81	1.08	1.01	2.07	3.90	0.58	1.24	0.61

Note: Beginning refers to the start of a consolidation episode and end refers to its end.

Table 2. **Economic environment at the beginning and end of consolidation**

		Australia		Canada	Denmark	Finland	United Kingdom	Greece	Ireland	Italy	Japan	Sweden		United States
		1984-88	1994-98	1993-97	1983-86	1993-2000	1993-98	1990-94	1982-88	1990-95	1979-87	1981-87	1994-97	1993-98
Real GDP growth rate	Beginning	-0.23	3.80	0.88	3.71	-3.68	2.22	3.80	3.33	3.47	5.27	1.70	-2.06	3.39
	End	4.40	5.15	4.23	4.95	5.33	3.61	2.00	5.22	2.90	4.11	3.46	2.95	4.36
Output gap (% potential GDP)	Beginning	-4.88	-2.13	-4.58	-2.24	-7.45	-2.84	1.77	2.41	1.95	-0.20	0.05	-5.80	-1.72
	End	1.33	0.75	-1.74	4.35	1.75	0.54	-2.86	-2.07	-0.81	-1.65	3.03	-1.81	0.71
Relative labour cost (index)	Beginning	102.57	68.08	72.04	62.35	104.11	69.50	70.91	139.01	99.99	91.62	208.93	134.98	127.04
	End	72.31	73.30	71.54	71.12	101.72	93.62	78.00	139.45	69.74	131.49	173.80	135.37	131.75
Current account balance (% of GDP)	Beginning	-3.16	-2.97	-3.62	Na	-4.59	-1.90	-4.40	-12.85	-1.24	1.70	-2.99	-1.25	-0.79
	End	-3.80	-4.66	-1.29	Na	8.12	-0.36	-1.22	-0.03	2.23	3.43	0.26	4.08	-2.45
Inflation (CPI growth in %)	Beginning	10.05	1.81	Na	10.12	2.92	2.51	13.66	20.37	6.26	4.18	13.71	4.73	3.04
	End	7.26	0.85	1.61	3.68	3.04	1.59	10.87	2.13	5.24	0.05	4.19	0.66	1.55
Unemployment rate	Beginning	9.87	10.52	11.22	7.50	13.03	10.37	7.86	11.09	10.21	2.23	2.67	10.90	7.50
	End	6.93	7.67	9.09	4.92	9.81	6.26	10.00	16.51	11.35	2.84	2.72	11.84	4.51
Real short-term interest rate	Beginning	3.02	3.27	4.84	6.44	9.84	2.35	5.50	Na	6.08	0.44	Na	1.45	0.83
	End	5.34	3.81	1.98	8.20	0.20	4.97	8.31	4.21	4.44	3.95	4.15	2.78	4.55
Real long-term interest rate	Beginning	4.81	5.50	6.40	10.90	8.56	3.89	Na	-2.34	6.25	1.74	-0.42	1.63	4.07
	End	4.60	4.30	4.54	9.10	1.29	3.18	Na	5.52	6.19	4.74	6.44	5.29	4.31

Note: Beginning refers to the start of a consolidation episode and end refers to its end.

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