The Composition of Fiscal Adjustments: New Evidence* Narrative Appendix

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Part I Country-by-Country Decomposition

1 Summary Table

Classification of fiscal adjustments

			4	4-components			3-components						
Country	Year	Tax	Spending	Tax Plan	Spending	New	DB	IΒ	СВ	TRB	СВ	TRB	TB
		Impact	Impact		Plan	Plan							
AUS	1985	0.00	0.27	0.00	0.53	1	0	0	0	1	0	1	0
AUS	1986	0.22	0.60	-0.67	0.77	1	0	0	0	1	0	1	0
AUS	1987	0.04	0.65	-0.22	0.97	1	0	0	0	1	0	1	0
AUS	1988	-0.26	0.32	-0.26	0.32	0	0	0	0	1	0	1	0
AUS	1993	0.00	0.00	0.53	0.00	1	1	0	0	0	0	0	1
AUS	1994	0.27	0.00	0.52	0.00	0	1	0	0	0	0	0	1
AUS	1995	0.74	0.00	1.23	0.00	1	1	0	0	0	0	0	1
AUS	1996	0.59	0.28	0.78	0.94	1	0	0	0	1	0	0	1
AUS	1997	0.16	0.57	0.12	1.00	1	0	0	0	1	0	1	0
AUS	1998	0.06	0.28	-0.03	0.42	0	0	0	0	1	0	1	0
AUS	1999	-0.10	0.15	-0.10	0.15	0	0	0	0	1	0	1	0
AUT	1980	0.12	0.73	0.12	0.73	1	0	0	0	1	0	1	0
AUT	1981	0.53	1.13	0.53	1.13	1	0	0	0	1	0	1	0
AUT	1984	1.36	0.78	1.36	0.78	1	0	1	0	0	0	0	1
AUT	1996	0.91	1.58	1.39	2.76	1	0	0	0	1	0	1	0
AUT	1997	0.48	1.18	0.48	1.18	0	0	0	0	1	0	1	0
AUT	2001	0.62	0.55	0.37	1.91	1	0	0	0	1	0	1	0
AUT	2002	-0.25	1.37	-0.25	1.37	0	0	0	0	1	0	1	0
BEL	1982	0.00	1.80	0.00	1.80	1	0	0	0	1	0	1	0
BEL	1983	0.63	0.98	0.63	0.98	1	0	0	0	0	0	0	0
BEL	1984	0.30	0.45	0.87	1.76	1	0	0	0	1	0	1	0
BEL	1985	0.57	1.31	0.57	1.31	0	0	0	0	1	0	1	0
BEL	1986	0.00	0.00	0.10	2.02	1	0	0	0	1	0	1	0
BEL	1987	0.10	2.30	0.10	2.30	1	0	0	0	1	0	1	0
BEL	1990	0.39	0.09	0.39	0.09	1	1	0	0	0	0	0	1
BEL	1992	1.03	0.84	0.98	1.33	1	0	0	0	0	0	0	0
BEL	1993	0.45	0.62	1.01	0.91	1	1	0	0	0	0	0	1
BEL	1994	0.56	0.69	0.56	0.69	1	0	0	1	0	0	0	1
BEL	1996	0.76	0.47	0.52	0.24	1	0	0	0	0	0	0	1
BEL	1997	0.15	0.23	0.15	0.23	1	0	0	0	1	0	1	0
CAN	1983	0.00	0.00	0.77	0.13	1	1	0	0	0	0	0	1
CAN	1984	0.13	0.06	0.72	0.12	0	1	0	0	0	0	0	1
CAN	1985	0.46	0.54	1.34	1.81	1	0	0	0	1	0	0	1
CAN	1986	0.97	0.43	1.52	1.63	1	0	0	0	1	0	0	1
CAN	1987	0.44	0.30	0.68	1.07	1	0	0	0	1	0	0	1
CAN	1988	0.39	0.22	0.29	0.69	1	0	0	0	1	0	0	1
CAN	1989	0.23	0.33	1.09	0.60	1	1	0	0	0	0	0	1
CAN	1990	0.43	0.41	1.14	0.61	1	1	0	0	0	0	0	1
CAN	1991	0.37	0.27	0.69	0.66	1	0	0	1	0	0	0	1
CAN	1992	0.26	0.16	0.33	0.38	1	0	0	1	0	0	0	1
CAN	1993	0.06	0.37	0.06	0.90	1	0	0	0	1	0	1	0
CAN	1994	0.06	0.46	0.20	1.52	1	0	0	1	0	0	1	0
CAN	1995	0.19	0.93	0.33	1.98	1	0	0	0	1	0	1	0
CAN	1996	0.10	0.57	0.13	0.93	1	0	0	1	0	1	0	0
CAN	1997	0.01	0.33	0.01	0.35	1	0	0	1	0	1	0	0

Country	Year	Tax Impact	Spending Impact	Tax Plan	Spending Plan	New Plan	DB	IB	СВ	TRB	СВ	TRB	ТВ
CAN	1998	0.00	0.05	0.00	0.05	0	0	0	0	0	1	0	0
CAN	1999	0.00	0.00	0.00	0.00	0	0	0	0	0	1	0	0
DEU	1982	0.58	0.64	0.26	0.64	1	0	0	0	1	0	1	0
DEU	1983	0.28	0.63	-0.03	0.63	1	0	0	0	1	0	1	0
DEU	1984	-0.31	0.62	-0.31	0.62	1	0	0	0	1	0	1	0
DEU	1991	1.10	0.03	1.69	0.51	1	0	1	0	0	0	0	1
DEU	1992	0.42	0.12	0.57	0.45	0	0	1	0	0	0	0	1
DEU	1993	0.10	0.17	1.02	0.44	1	1	0	0	0	0	0	1
DEU	1994	0.13	0.83	1.07	1.09	1	0	0	0	1	0	0	1
DEU	1995	0.94	0.27	0.94	0.27	0	0	0	0	1	0	0	1
DEU	1997	0.49	1.07	0.49	0.99	1	0	0	0	0	0	0	0
DEU	1998	0.10	-0.08	0.10	-0.08	1	0	1	0	0	0	0	1
DEU	1999	0.00	0.00	-0.44	0.80	1	0	0	0	0	0	0	0
DEU	2000	-0.05	0.80	-0.44	0.80	0	0	0	0	0	0	0	0
DEU	2001	0.00	0.00	-0.37	0.00	0	0	0	0	0	0	0	0
DEU	2002	0.00	0.00	-0.36	0.00	0	0	0	0	0	0	0	0
DEU	2003	1.12	0.05	0.42	0.05	1	0	1	0	0	0	0	1
DEU	2004	-0.70	1.09	-0.70	1.40	1	0	0	0	1	0	1	0
DEU	2005	0.00	0.00	0.00	0.31	0	0	0	0	1	0	1	0
DEU	2006	0.00	0.31	0.42	0.83	1	0	0	0	1	0	1	0
DEU	2007	0.42	0.52	0.42	0.52	0	0	0	0	1	0	1	0
DNK	1982	0.00	0.00	0.00	0.12	1	0	0	0	1	0	1	0
DNK	1983	1.02	2.05	1.02	3.27	1	0	0	0	0	0	0	0
DNK	1984	-0.22	2.00	0.70	2.92	1	0	0	0	0	0	0	0
DNK	1985	0.92	0.92	0.70	0.92	0	0	0	0	0	0	0	0
DNK	1995	0.32 0.04	0.32 0.12	0.04	0.32 0.12	1	0	0	0	1	0	1	0
ESP	1983	1.81	0.12	1.81	0.12	1	0	1	0	0	0	0	1
ESP	1984	0.42	0.84	0.42	0.84	1	0	0	0	0	0	0	
ESP ESP	1984 1989	1.11	0.84 0.09	$0.42 \\ 0.79$	0.84 0.09				0	0	0	-	0
						1	1	0	-	-	-	0	1
ESP	1990	-0.32	0.00	-0.32	0.00	0	1	0	0	0	0	0	1
ESP	1991	0.00	0.00	-0.62	0.00	1	0	0	0	0	0	0	1
ESP	1992	0.23	0.38	0.70	0.66	1	0	1	0	0	0	0	1
ESP	1993	0.75	0.28	0.75	0.28	1	1	0	0	0	0	0	1
ESP	1994	0.00	1.60	0.00	1.60	1	0	0	1	0	1	0	0
ESP	1995	0.00	0.80	0.00	0.80	1	0	0	1	0	1	0	0
ESP	1996	0.20	1.09	0.20	1.09	1	0	0	1	0	1	0	0
ESP	1997	0.09	1.40	0.09	1.40	1	0	0	1	0	1	0	0
FRA	1979	0.97	0.00	0.97	0.00	1	1	0	0	0	0	0	1
FRA	1986	0.00	0.00	-0.27	0.00	1	0	0	0	0	0	0	1
FRA	1987	-0.46	0.69	-0.66	0.69	1	0	0	1	0	1	0	0
FRA	1988	0.00	0.00	-0.19	0.00	0	0	0	1	0	1	0	0
FRA	1989	-0.19	0.00	-0.19	0.00	0	0	0	1	0	1	0	0
FRA	1991	0.09	0.22	0.03	0.22	1	0	0	0	0	0	0	0
FRA	1992	-0.06	0.00	-0.06	0.00	0	0	0	0	0	0	0	0
FRA	1995	0.41	-0.12	0.93	-0.12	1	0	1	0	0	0	0	1
FRA	1996	0.95	0.41	1.01	0.66	1	0	1	0	0	0	0	1
FRA	1997	0.37	0.25	0.07	0.25	1	0	0	0	1	0	1	0
FRA	1998	0.00	0.00	-0.29	0.00	0	0	0	0	1	0	1	0
FRA	1999	-0.10	0.00	-0.28	0.00	0	0	0	0	1	0	1	0
FRA	2000	-0.18	0.00	-0.18	0.00	0	0	0	0	1	0	1	0
GBR	1979	0.26	0.00	0.34	0.00	1	0	1	0	0	1	0	0
GBR GBR	1980	0.20	0.00	0.09	0.00	0	0	1	0	0	1	0	0
GBR	1981	1.16	0.00 0.13	1.54	0.00 0.17	1	0	1	0	0	0	0	1
	TOOL						U	1	U	U	U	U	т
GBR	1982	0.39	0.04	0.39	0.04	1	0	1	0	0	0	0	1

Country	Year	Tax Impact	Impact	Tax Plan	Spending Plan	New Plan	DB	IB	СВ	TRB	СВ	TRB	ТВ
GBR	1994	0.47	0.39	0.63	0.58	1	0	1	0	0	0	0	1
GBR	1995	0.16	0.19	0.16	0.19	0	0	1	0	0	0	0	1
GBR	1996	0.00	0.33	0.00	0.43	1	0	0	1	0	1	0	0
GBR	1997	0.57	0.26	1.09	0.54	1	1	0	0	0	0	0	1
GBR	1998	0.31	0.12	0.50	0.28	0	1	0	0	0	0	0	1
GBR	1999	0.19	0.16	0.19	0.16	0	1	0	0	0	0	0	1
IRL	1982	2.95	0.30	2.95	0.30	1	0	1	0	0	0	0	1
IRL	1983	2.66	0.07	2.66	0.07	1	0	1	0	0	0	0	1
IRL	1984	0.31	0.00	0.31	0.00	1	0	1	0	0	0	0	1
IRL	1985	0.13	0.00	0.13	0.00	1	0	1	0	0	0	0	1
IRL	1986	0.56	0.00	0.56	0.00	1	0	1	0	0	0	0	1
IRL	1987	0.61	1.02	0.61	1.02	1	0	0	1	0	1	0	0
IRL	1988	0.00	2.10	0.00	2.10	1	0	0	1	0	1	0	0
ITA	1991	1.82	0.95	0.73	0.95	1	0	0	1	0	0	0	1
ITA	1992	1.50	1.68	-0.46	1.68	1	0	0	1	0	1	0	0
ITA	1993	1.21	3.12	0.52	3.12	1	0	0	0	1	0	1	0
ITA	1994	-0.42	1.59	-0.42	1.59	1	0	0	1	0	1	0	0
ITA	1995	2.28	1.72	0.71	1.78	1	0	0	0	0	0	0	0
ITA	1996	0.02	1.10	-0.39	1.10	1	0	0	1	0	1	0	0
ITA	1997	0.68	1.16	0.09	1.16	1	0	0	0	1	0	1	0
ITA	1998	0.05	0.59	0.05	0.59	1	0	0	0	1	0	1	0
ITA	2004	0.93	0.36	0.64	0.36	1	1	0	0	0	0	0	1
ITA	2005	0.07	0.70	0.07	0.70	1	0	0	1	0	1	0	0
ITA	2006	0.63	0.83	0.63	0.83	1	0	0	1	0	1	0	0
ITA	2007	1.34	-0.42	1.34	-0.42	1	1	0	0	0	0	0	1
$_{ m JPN}$	1979	0.10	0.02	0.31	0.06	1	0	1	0	0	0	0	1
JPN	1980	0.20	0.11	0.23	0.17	1	0	1	0	0	0	0	1
JPN	1981	0.37	0.07	0.61	0.07	1	0	1	0	0	0	0	1
JPN	1982	0.32	0.68	0.37	0.75	1	0	0	1	0	1	0	0
JPN	1983	0.06	0.34	0.06	0.34	1	0	0	1	0	1	0	0
JPN	1997	0.98	0.44	1.31	0.59	1	1	0	0	0	0	0	1
JPN	1998	0.33	0.15	0.33	0.15	0	1	0	0	0	0	0	1
JPN	2003	0.00	0.48	0.00	0.48	1	0	0	1	0	1	0	0
JPN	2004	0.18	0.45	0.24	0.45	1	0	0	1	0	1	0	0
JPN	2005	0.06	0.22	0.06	0.22	1	0	0	1	0	1	0	0
JPN	2006	0.48	0.27	0.64	0.27	1	1	0	0	0	0	0	1
JPN	2007	0.16	0.00	0.16	0.00	0	1	0	0	0	0	0	1
PRT	1983	1.04	0.74	1.04	0.74	1	0	0	0	0	0	0	1
PRT	2000	0.00	0.47	0.00	0.47	1	Ö	0	1	0	1	0	0
PRT	2002	1.20	0.30	1.20	0.30	1	Ö	0	0	0	0	0	1
PRT	2003	-0.66	0.00	-0.66	0.00	1	Ö	0	0	0	0	0	1
PRT	2005	0.54	0.08	1.40	0.57	1	0	1	0	0	0	0	1
PRT	2006	1.06	1.29	1.57	2.71	1	Ö	0	1	0	1	0	0
PRT	2007	0.51	1.72	0.51	1.72	1	Ö	0	1	0	1	0	0
USA	1978	0.14	0.00	1.05	0.00	1	1	0	0	0	0	0	1
USA	1979	0.00	0.00	0.80	0.00	0	1	0	0	0	0	0	1
USA	1980	0.07	0.00	0.73	0.00	0	1	0	0	0	0	0	1
USA	1981	0.34	0.00	0.34	0.00	1	1	0	0	0	0	0	1
USA	1983	0.00	0.00	0.74	0.00	1	1	0	0	0	0	0	1
USA	1984	0.00	0.00	0.68	0.00	0	1	0	0	0	0	0	1
USA	1984	0.00	0.00	0.63	0.00	0	1	0	0	0	0	0	1
USA	1986	0.18	0.00	0.43	0.00	0	1	0	0	0	0	0	1
USA	1987	0.00	0.00	0.43	0.00	1	1	0	0	0	0	0	1
USA	1988	0.42	0.00 0.27	0.42	$0.00 \\ 0.27$	1	1	0	0	0	0	0	1
USA	1990	0.42 0.23	0.27	0.42	1.74	1	0	0	1	0	0	0	1
0.011	1000	0.20	0.01	0.02	T.1.I	1	U	U	1	U	U	U	1

Country	Year	Tax	Spending	Tax Plan	Spending	New	DB	$_{\mathrm{IB}}$	CB	TRB	CB	TRB	TB
		Impact	Impact		Plan	Plan							
USA	1991	0.30	0.30	0.58	1.59	0	0	0	1	0	0	0	1
USA	1992	0.18	0.31	0.27	1.26	0	0	0	1	0	0	0	1
USA	1993	0.10	0.30	0.93	1.93	1	0	0	0	1	0	0	1
USA	1994	0.44	0.48	0.80	1.57	0	0	0	0	1	0	0	1
USA	1995	0.20	0.33	0.34	1.04	0	0	0	0	1	0	0	1
USA	1996	0.10	0.21	0.15	0.69	0	0	0	0	1	0	0	1
USA	1997	0.07	0.27	0.04	0.46	0	0	0	0	1	0	0	1
USA	1998	-0.02	0.19	-0.02	0.19	0	0	0	0	1	0	0	1
					Total	120	33	25	33	50	29	38	82

Notes: "Tax/Spending Impact" report the sum of measures (announced or not) that become effective in the year; "Tax/Spending" report the sum of all the measures (announced for the future and implemented) in a given year. There is a new plan whenever new measures for immediate implementation or to be implemented in the future are introduced. DB= Direct Tax-based; IB= Indirect-Tax based; CB= Consumption-based; TB=Tax-based.

2 Australia¹

						4	-com	pone	$_{ m nts}$	3-c	ompone	$_{ m ents}$
Year	Tax Impact	Spending Impact	Tax Plan	Spending Plan	New Plan	DB	IΒ	CB	TRB	СВ	TRB	ТВ
1985	0.00	0.27	0.00	0.53	1	0	0	0	1	0	1	0
1986	0.22	0.60	-0.67	0.77	1	0	0	0	1	0	1	0
1987	0.04	0.65	-0.22	0.97	1	0	0	0	1	0	1	0
1988	-0.26	0.32	-0.26	0.32	0	0	0	0	1	0	1	0
1993	0.00	0.00	0.53	0.00	1	1	0	0	0	0	0	1
1994	0.27	0.00	0.52	0.00	0	1	0	0	0	0	0	1
1995	0.74	0.00	1.23	0.00	1	1	0	0	0	0	0	1
1996	0.59	0.28	0.78	0.94	1	0	0	0	1	0	0	1
1997	0.16	0.57	0.12	1.00	1	0	0	0	1	0	1	0
1998	0.06	0.28	-0.03	0.42	0	0	0	0	1	0	1	0
1999	-0.10	0.15	-0.10	0.15	0	0	0	0	1	0	1	0
					7	3	Ω	Ω	8	Ω	7	1

Australia 1985

A multiyear program of deficit reduction began in 1985 based on spending cuts, with measures totaling 0.27 percent of GDP in 1985. The adjustment is motivated by the so called Trilogy agreement which prescribed a reduction of the deficit/GDP ratio, no increases in tax revenues and a commitment to a reduction of public spending. The measures introduced in May 1985 prescribed a cut in public spending of \$A 600 million. Data about components are taken from IMF Recent Economic Developments 1986, p. 34.

SPENDING: \$A 0.6 billion

Government Consumption (unexpected: \$A 0.042 billion)

• Reduced defense spending: \$A 0.042 billion

Government Transfers (unexpected: \$A 0.392 billion)

- Termination of family allowances for dependent students above 18 years of age and tightening of work tests and entitlement rules for disability and war widows' pensions: \$A 0.0635 billion
- Reduced grants to the States in respect to education, libraries, etc., and tightening of eligibility criteria for assistance to students: \$A 0.0365 billion
- Patients' contributions toward meeting the costs of prescriptions under the Pharmaceutical Benefits Scheme were raised by 25 percent and the level of nursing benefits was cut back: \$A 0.043 billion

 $^{^{1}}$ Australian fiscal year runs from July 1 to June 31.

- Transfer to private institutions of the administration of the Defense Service Homes Loans Scheme, reduced assistance to first-time home buyers: \$A 0.0565 billion
- Reductions in the Bicentennial Roads Development program², reduced grants and subsidies for airports, and reappraisal of certain civil aviation projects: of \$A 0.0905 billion
- Reduced subsidies paid under the Petroleum Products Freight Subsidy Scheme and reduced assistance provided under the Export Market Development Grants Scheme: \$A 0.102 billion

Other (unexpected: \$A 0.166 billion)

• Other spending cuts: \$A 0.166 billion

Australia 1986

The fiscal consolidation initiated in 1985 continued in 1986, with measures totaling 0.82 percent of GDP, 0.6 on the spending side and 0.22 on the tax side. The year is characterized by a large plan of spending cuts approved in the 1986/1987 Budget. The latter Budget also introduced tax hikes, that were partially offset by a reduction of revenues generated by a decrease in the PIT rate that was included in the Personal Income Tax Reform announced in September 1985. Data about components are taken from the IMF Recent Economic Developments 1987 (p. 35 on).

REVENUES³: \$A 0.55 billion

Income, Profits and capital gains (unexpected: \$A -0.250 billion)

- Reduction in personal income tax: \$A -0.615 billion (p. 38)⁴ (PIT Reform September 1985)
- Medicare levy increase would yield an estimated \$A 0.0875 billion in additional revenue in 1986/87
- The income tax base was broadened⁵: \$A 0.1625 billion (September 85 Reform, not announced)
- Company tax increase revenues by about \$A 0.110 billion
- Reduction in corporate and dividend taxation: \$A -0.150 billion
- Disallowing the deduction of entertainment expenses for tax purposes: \$A 0.155 billion (September 85 Reform)

 Personal (unexpected: \$A -0.365 billion)
- Reduction in personal income tax: \$A -0.615 billion (p. 38) (PIT Reform September 1985)
- Medicare levy increase would yield an estimated \$A 0.0875 billion in additional revenue in 1986/87
- The income tax base was broadened: \$A 0.1625 billion (September 85 Reform, not announced)

 Corporate (unexpected: \$A 0.115 billion)
- Company tax increase revenues by about \$A 0.110 billion
- Reduction in corporate and dividend taxation: \$A -0.150 billion
- Disallowing the deduction of entertainment expenses for tax purposes: \$A 0.155 billion (September 85 Reform)

Indirect (unexpected: \$A 0.221 billion)

- Wholesale sales tax rate raised on a range of goods including luxury motor vehicles, wine, certain nonalcoholic beverages, and swimming pools: \$A 0.1415 billion
- Wholesale sales tax was restructured, its base was broadened and its structure was simplified: \$A 0.055 billion (September 85 Reform)

²An Act to establish a Trust Fund for the purpose of the grant of financial assistance.

³The total amount of measures slightly differs from the aggregate provided by Devries et al. (2011), but we included all of the measures listed by the IMF Recent Economic Developments.

⁴The reduction is mainly due to a change in the tax rate.

⁵New "non cash" fringe benefits are introduced (p. 39).

• A new structure for air navigation charges was introduced: \$A 0.0245 billion

Other (unexpected: \$A 0.5835 billion)

- Other tax increase: A 0.0575 billion (860-745=115, 115/2=57.5)
- Other tax increase: \$A 0.526 billion (1430-378=1052, 1052/2=526)

SPENDING⁶: \$A 1.429 billion

Government Consumption 0.3495 (unexpected: \$A 0.3075 billion; announced: \$A 0.042 billion)

- Reduction in growth of defense real spending: \$A 0.0925 billion
- Consumption cuts from 1985: \$A 0.042 billion (announced in 1985)

Salaries (unexpected: \$A 0.015 billion)

 Reduction of 2,000 in the number of federal public servants through increased administrative efficiency: \$A 0.015 billion

Government Investments (unexpected: \$A 0.2 billion)

Reduction in the general purpose capital assistance under the Loan Council Government Borrowing Program:
 \$A 0.2 billion

Transfers 0.823 (unexpected: \$A 0.431 billion; announced: \$A 0.392 billion)

- Measures raising the income tests for pensions and rent assistance, which had been previously announced, were deferred until the beginning of the next fiscal year 1987/88: \$A 0.074 billion
- Requirements for unemployment benefits as well as for sole parent pensions and benefits were tightened: \$A 0.0685 billion
- Family allowances for students aged 16 and 17 years became income tested: \$A 0.010 billion
- Other welfare spending cuts: \$A 0.1095 billion
- Charge for previously free higher education was introduced commencing in January 1987: \$A 0.029 billion
- Reduced capital and specific purpose grants to States for schools: \$A 0.017 billion
- \bullet Planned increase in schedule fees received by specialists would be delayed for half a year until November 1986: \$A 0.0425 billion in 1986/87
- Pathology fees received by specialists were reduced: \$A 0.0255 billion
- Subsidy paid to private hospitals for each occupied approved bed-day was abolished: \$A 0.0395 billion
- Maximum patient contributions for medical services and for pharmaceuticals increased: \$A 0.0375 billion
- Other savings on health outlays amounted to \$A 0.024 billion
- Road grants to States was reduced by \$A 0.037 billion
- Rates of most production bounty⁷ assistance schemes were reduced: \$A 0.0215 billion
- \bullet Increased assistance to the rural sector: \$A -0.061 billion
- Subsidies to savings banks in order to enable them to compete more effectively for deposits: \$A -0.0435 billion
- Transfers from 1985: \$A 0.392 billion (announced in 1985)

⁶We take into account all of the measures whose details are reported in the IMF Recent Economic Developments 1987 (p. 35 on) and we compute a residual in order to sum up to the aggregate impact of measures.

⁷CHECK: bounty, amount paid by a government for the achievement of certain economic or other goals.

Other 0.2565 (unexpected: \$A 0.0905 billion; announced: \$A 0.166 billion)⁸

- Other spending cuts: \$A 0.326 billion
- Other increase in outlays: \$A -0.3035 billion⁹
- Overseas aid is reduced: \$A 0.068 billion
- Other spending cuts from 1985: \$A 0.166 billion (anticipated in 1985)

Australia 1987

Fiscal consolidation totaled 0.69 percent of GDP, with spending cuts of 0.65 percent of GDP and tax hikes of 0.04 percent of GDP. The consolidation introduced new measures to reduce outlays and implemented the measures announced in 1986. Data about components are taken from the 1988 IMF Recent Economic Developments, p. 25-26. Notice that for what concerns the change in the cumulative effects of measures introduced in the 96/97 Budget, we projected the share of measures in the original reform on the aggregate change computed between 1986/87 and 1987/88 (i.e. \$A -0.405 billion¹⁰).

REVENUES: \$A 0.22 billion

Income, Profits and capital gains (announced: \$A -1.455 billion)

- Reduction in PIT announced in September 1985 (direct effect)¹¹: \$A -1.205 billion (announced in 1985)
- Calendar year allocation of measures of 1986: \$A -0.365 billion (announced in 1986)
- Calendar year allocation of measures of 1986: \$A 0.115 billion (announced in 1986)

Personal (announced: \$A -1.570 billion)

- Reduction in PIT announced in September 1985 (direct effect)¹²: \$A -1.205 billion (announced in 1985)
- Calendar year allocation of measures of 1986: \$A -0.365 billion (announced in 1986)

Corporate (announced: \$A 0.115 billion)

• Calendar year allocation of measures of 1986: \$A 0.115 billion (announced in 1986)

Indirect (announced: \$A 0.221 billion)

• Calendar year allocation of measures of 1986: \$A 0.221 billion (announced in 1986)

Not yet classified (unexpected: \$A 0.87 billion)

• Decrease in spending: \$A 0.87 billion (1.74/2)

Other (announced: \$A 0.5835 billion)

• Calendar year allocation of measures of 1986: \$A 0.5835 billion (announced in 1986)

SPENDING: \$A 1.713 billion

Government Consumption 0.2475 (unexpected: \$A 0.175 billion; announced: \$A 0.0725 billion)

- Cut in real defense spending: \$A 0.175 billion
- Consumption reduction announced in 1986 Budget: \$A -0.020 billion (announced in 1986)
- Calendar year allocation of 1986 measures: \$A 0.0925 billion (announced in 1986)

 $^{^8}$ We excluded the following measures, being under the line: reduction of the allocation to the Australian Broadcasting Corporation, reflecting savings on current and capital expenditures; the Australian Telecommunications Commission was required to repay part of its outstanding debt to the Commonwealth; accelerated disposal of Commonwealth property. $^9816\text{-}122\text{-}87\text{=}607$; 607/2=303.5

¹⁰Notice that we deviate from Devries et al (2011) since some of the measures introduced in the Budget were extraordinary and under-the-line. They amounted to \$A 0.125 billion. And were the allocation to the Broadcasting Corporation and a repayment from the Australian Telecommunications Commission.

¹¹This is not a calendar year allocation, but the allocation of the effect for the fiscal year 87/88 amounting to \$A 3.64 billion.

 $^{^{12}}$ This is not a calendar year allocation, but the allocation of the effect for the fiscal year 87/88 amounting to \$A 3.64 billion.

Salaries (announced: \$A 0.011 billion)

- Salaries cuts announced in 1986 Budget: \$A -0.004 billion (announced in 1986)
- Reduction of 2,000 in the number of federal public servants through increased administrative efficiency (calendar year allocation): \$A 0.015 billion (announced in 1986)

Government Investments 0.5135 (unexpected: \$A 0.3575 billion; announced: \$A 0.156 billion)

- General purpose capital assistance was reduced by \$A 0.3575 billion
- Investments reduction announced in 1986 Budget: \$A -0.044 billion (announced in 1986)
- Calendar year allocation of 1986 measures: \$A 0.2 billion (announced in 1986)

Government Transfers 1.026 (unexpected: \$A 0.725 billion; announced: \$A 0.301 billion)

- General purpose assistance to the States: \$A 0.5 billion
- Changes to improve administration, tighten eligibility criteria, and counter fraud and abuse in the payment of income support and unemployment benefits, waiting period prior to the payment of unemployment benefits was lengthened: \$A 0.25 billion
- Cut in road grant programs: \$A 0.1 billion.
- Program to restructure income support for families with children and to phase in a new system of incometested assistance for families: \$A -0.125 billion
- Transfers reduction announced in 1986 Budget: \$A -0.130 billion (announced in 1986)
- Transfers announced in 1986: \$A 0.431 billion (announced in 1986)

Other -0.085 (unexpected: \$A -0.175 billion; announced: \$A 0.09 billion)

- Other spending increases: \$A -0.175 billion
- Other measures announced in 1986 Budget: \$A -0.005 billion (announced in 1986) (66-71, see excel file)
- Overseas aid is reduced: \$A 0.068 billion (announced in 1986)
- Calendar year allocation of 1986 measures: \$A 0.0225 billion (announced in 1986)

Australia 1988

Fiscal consolidation totaled 0.06 percent of GDP, with spending cuts of 0.32 percent of GDP largely offset by tax cuts of 0.26 percent of GDP. The event is composed by the policies announced in the previous two years reported to the calendar year 1988. For what concerns the fiscal components see entry for 1986 and 1987.

REVENUES: \$A -0.7 billion

Income, profits and capital gains (announced: \$A -1.570 billion)

- \bullet Reduction in PIT prescribed by 1985 reform: A -1.570 billion (announced in 1985)
 - Personal (announced: \$A -1.570 billion)
- Reduction in PIT prescribed by 1985 reform: \$A -1.570 billion (announced in 1985)

Not yet classified (unexpected: \$A 0.87 billion)

• Decrease in spending: \$A 0.87 billion (1.74/2)

SPENDING: \$A 0.88 billion

Government Consumption (announced: \$A 0.155 billion)

- Consumption reduction announced in 1986 Budget: \$A -0.020 billion (announced in 1986)
- Cuts in real defense spending announced in 1987: \$A 0.175 billion (announced in 1987)

Salaries (announced: \$A -0.004 billion)

• Salaries cuts announced in 1986 Budget: \$A -0.004 billion (announced in 1986)

Government Investments (announced: \$A 0.3135 billion)

- Investments reduction announced in 1986 Budget: \$A -0.044 billion (announced in 1986)
- General purpose capital assistance was reduced by \$A 0.3575 billion (announced in 1987)

Government Transfers (announced: \$A 0.595 billion)

- Transfers reduction announced in 1986 Budget: \$A -0.130 billion (announced in 1986)
- Transfers announced in 1987: \$A 0.725 billion (announced in 1987)

Other (announced: \$A -0.180 billion)

- Calendar year allocation of other spending increases of 1987: \$A -0.175 billion (announced in 1987)
- Other measures announced in 1986 Budget: \$A -0.005 billion (announced in 1986)

Australia 1994

Fiscal consolidation totaled 0.27 percent of GDP based entirely on tax measures. The 1993/94 Budget introduced a four-year consolidation plan to reduce the budget deficit to around 1 percent of GDP by FY 1996/97. The bulk of the saving measures over the four years were planned on the revenue side (OECD Economic Surveys 1994, p. 41). "The measures announced in the FY 1993/94 budget, following post-budget changes negotiated to achieve passage of the budget through the Senate, are expected to increase revenue by A\$6.9 billion and reduce outlays by A\$1.6 billion by FY 1996/97 compared with a "no policy change" baseline". Of these A\$ 6.9 billion, 3.6 billion include the deferral of the second tranche of personal income tax cuts which are delayed to 1 January 1996, and the rest of the measures are indirect taxes (excise duties on petroleum products and tobacco and a 1 percentage point increase in wholesale sales tax for most goods in the base. Since the amounts reported above represent cumulated savings, we assume that the flow of savings is equally distributed along the three fiscal years (1993-94, 1994-95, 1995-96) and we allocate the change in the first year to calendar years 1994 and 1995.

REVENUES: \$A 1.15 billion

Income, profits and capital gains (announced: A\$0.6billion)

• A\$0.6 billion from the deferral of personal income tax cuts decided in the 1993-94 Budget.

Personal Taxes (announced: A\$0.6billion)

• A\$0.6 billion from the deferral of personal income tax cuts decided in the 1993-94 Budget.

Indirect (announced: A\$0.55 billion)

• A\$0.55 billion from the Budget 1993-94

Australia 1995

Implementation of the multiyear fiscal consolidation program announced in the FY 1993/94 Budget continued in 1995, with measures amounting to 0.74 percent of GDP on the tax side. The adjustment is motivated by the need to reduce budget deficit. All the measures fall on the revenues side and include increases in corporate taxes, wholesale taxes and indirect taxes in general. Data about fiscal components are taken from the IMF Recent Economic Developments 1996 (p.20) and the Australian Government "Budget Speech 1995-96" (p. 10, 11).

REVENUES: \$A 3.52 billion

Income, profits and capital gains 1.785 (unexpected: A\$1.185; announced: A\$0.6billion)

- A\$0.6 billion from the deferral of personal income tax cuts decided in the 1993-94 Budget (announced)
- Increase in the company tax rate from 33 percent to 36 percent: 0.25% of GDP (A\$ 1.185 billion)

Personal Taxes (announced: A\$0.6billion)

- A\$0.6 billion from the deferral of personal income tax cuts decided in the 1993-94 Budget (announced). Corporate (unexpected: A\$1.185)
- Increase in the company tax rate from 33 percent to 36 percent: 0.25% of GDP (A\$ 1.185 billion)

Indirect (announced: A\$0.55 billion)

• A\$0.55 billion from the Budget 1993-94

Not yet classified (unexpected: A\$1.185)

• Second round of wholesale sales tax increases and the bringing forward of company tax payments: 0.25% of GDP (A\$1.185 billion)¹³

Australia 1996

Fiscal consolidation accelerated in 1996 with a new multiyear fiscal consolidation program, and measures totaling 0.87 percent of GDP, 0.59 on the tax side, 0.28 on the spending side. The Budget 1996/97 introduced measures both on spending and revenues that are summed to the ones that were announced in the 1995/96 Budget. Data about fiscal components are taken from the OECD Economic Surveys 1997, p. 59.

REVENUES: \$A 2.53 billion

Income, profits and capital gains (announced: A\$1.185 billion)

 \bullet Increase in the company tax rate from 33 percent to 36 percent: 0.25% of GDP (A\$ 1.185 billion) from the Budget 1995-96

Corporate (announced: A\$1.185 billion)

 \bullet Increase in the company tax rate from 33 percent to 36 percent: 0.25% of GDP (A\$ 1.185 billion) from the Budget 1995-96

Indirect (unexpected: \$A 0.1565 billion)

 \bullet Tariff concession system and policy by-law system: \$A 0.1565 billion

Not yet classified (announced: A\$1.185 billion)

• Second round of wholesale sales tax increases and the bringing forward of company tax payments: 0.25% of GDP (A\$1.185 billion)

Other (unexpected: \$A 0.377 billion)

• Other revenues: \$A 0.377 billion

SPENDING: \$A 1.42 billion

Government Transfers (unexpected: \$A 0.5205 billion)

- State fiscal contributions (transfers to States): \$A 0.3095 billion
- Private health insurance incentive: \$A -0.003 billion
- Family tax initiative: \$A -0.1975 billion
- AUSTUDY and HECS (education transfers): \$A 0.0945 billion
- Labour market programmes: \$A 0.2875 billion
- Reduction of tax concessions for R&D investments: \$A 0.0295 billion

Other (unexpected: \$A 0.9 billion)

• Other: \$A 0.9 billion

¹³It is not clear whether the measure was explicitly announced in advance or not.

Australia 1997

Implementation of the fiscal consolidation program initiated in 1996 continued in 1997 and, with some additional measures, amounted to 0.73 percent of GDP, 0.57 on the spending side and 0.16 on the tax side. The consolidation is composed by new measures introduced on the spending side and the continuation of the measures introduced in the 1996/97 Budget. Data about fiscal components are taken from OECD Economic Surveys 1998, p. 49¹⁴.

REVENUES: \$A 0.834 billion

Income, profits and capital gains 0.2465 (unexpected: \$A -0.015 billion; announced: \$A 0.2615 billion)

- Superannuation measures¹⁵: \$A 0.2615 billion (Budget 96/97 announcements)
- Fringe Benefits¹⁶: \$A -0.015 billion

Personal (announced: \$A 0.2615 billion)

• Superannuation measures: \$A 0.2615 billion (Budget 96/97 announcements)

Corporate (unexpected: -0.015 billion)

• Fringe Benefits: \$A -0.015 billion

Indirect (announced: \$A 0.172 billion)

- Tariff concession system and policy by-law system: \$A 0.1565 billion (announced in 1996)
- Tariff concession system and policy by-law system: \$A 0.0155 billion (Budget 96/97 announcements)

Not yet classified (unexpected: \$A 0.010 billion)

• Revenue protection/tax avoidance and minimization: \$A 0.010 billion

Other (announced: \$A 0.4055 billion)

- \bullet Other revenues: \$A 0.377 billion (announced in 1996)
- Other: \$A 0.0285 billion (Budget 96/97 announcements)

SPENDING: \$A 2.96 billion¹⁷

Government Consumption (unexpected: \$A 0.0235 billion)

• Government administration: \$A 0.0235 billion

Government Transfers 0.778 (unexpected: \$A 0.0795 billion; announced: \$A 0.6985 billion)

- \bullet Commitment to maintain the pension at 25% of MTAWE: \$A -0.032 billion
- Delivery of LAW tax cut commitment as a savings rebate : \$A 0.0005 billion
- Health care programmes: \$A 0.049 billion
- Social security, including child care: \$A 0.0265 billion
- Public housing: \$A 0.0355 billion
- \bullet Private health insurance incentive: \$A -0.2445 billion (Budget 96/97 announcements)

¹⁴Notice that we compute the components' changes using the amounts in billion. This means that we find positive changes for both components and the aggregates also for the year 2000. However, we do not include this year because, as Devries et al. (2011) specifies, the measures are more than compensated by a fiscal stimuli of 1% of GDP (see footnote 11, Devries et al. (2011)).

¹⁵Superannuation in Australia refers to the arrangements which people make in Australia to have funds available for them in retirement. In Australia, superannuation arrangements are government-supported and encouraged, and minimum provisions are compulsory for employees.

 $^{^{16}}$ Paid by the employer not by the employee.

¹⁷As can be seen from Table NUMBER! we excluded the additional spending coming from the creation of the NHT Fund in line with OECD and Devries et al. (2011). EXPLAIN WHY????

- Family tax initiative: \$A -0.3885 billion (Budget 96/97 announcements)
- State fiscal contributions: \$A 0.320 billion (Budget 96/97 announcements)
- AUSTUDY and HECS: \$A 0.248 billion (Budget 96/97 announcements)
- Labour market programmes: \$A 0.478 billion (Budget 96/97 announcements)
- Revenue raising R&D measures: \$A 0.3295 billion (Budget 96/97 announcements)
- Reduction of tax concessions for R&D investments: \$A 0.0295 billion (announced in 1996)
- Family tax initiative: \$A -0.0735 billion (announced in 1996)

Other 2.156 (unexpected: \$A 0.117 billion; announced: \$A 2.039 billion)

- Other cuts in spending introduced in 1997/98 Budget: \$A 0.117 billion
- Other spending cuts: \$A 2.039 billion (Budget 96/97 announcements)

Australia 1998

Fiscal consolidation totaled 0.34 percent of GDP, 0.06 on the revenue side and 0.28 on the spending side. The adjustment is the consequence of the two plans announced in the two previous years. Indeed, the 1998/1999 Budget does not introduce any new measure having achieved the objective to eliminate the deficit by 1998. For what concerns data about components see entry for 1996 and 1997.

REVENUES¹⁸: \$A 0.25 billion

Income, profits and capital gains (announced: \$A -0.0395 billion)

- Capital Gains Tax: \$A -0.0875 billion (announced in 1997/98 Budget)
- Taxation rebate for savings: \$A -0.175 billion (announced in 1997/98 Budget)
- Superannuation measures: \$A 0.2605 billion (Budget 96/97 announcements)
- Fringe Benefits: \$A -0.0375 billion (announced in 1997/98 Budget)

Personal (announced: \$A -0.002 billion)

- Capital Gains Tax: \$A -0.0875 billion (announced in 1997/98 Budget)
- Taxation rebate for savings: \$A -0.175 billion (announced in 1997/98 Budget)
- Superannuation measures: \$A 0.2605 billion (Budget 96/97 announcements)
 Corporate (announced: -0.0375)
- Fringe Benefits: \$A -0.0375 billion (announced in 1997/98 Budget)

Indirect (announced: \$A 0.028 billion)

• Tariff concession system and policy by-law system: \$A 0.028 billion (Budget 96/97 announcements)

Not yet classified (announced: \$A 0.145 billion) \$A 0.0575 billion (according to C vs P))

- Capital Gains Tax: \$A -0.0875 billion (announced in 1997/98 Budget) (according to C vs P)
- Revenue protection/tax avoidance and minimization: \$A 0.145 billion (announced in 1997/98 Budget)

Other (announced: \$A 0.118 billion)

- Other revenues: \$A 0.1975 billion (announced in 1997/98 Budget)
- \bullet Other: \$A -0.0795 billion (Budget 96/97 announcements)

¹⁸The measures announced in the 97/98 Budget were not included by Devries et al. (2011), however, since their impact are negligible only in 1997, we take them into account in the computation of fiscal shocks for years 1998 and 1999.

SPENDING: \$A 1.46 billion

Government consumption (announced: \$A 0.045 billion)

• Government administration: \$A 0.045 billion (announced in 1997/98 Budget)

Government Transfers (announced: \$A 0.0493 billion)

- Commitment to maintain the pension at 25% of MTAWE: \$A -0.225 billion (announced in 1997/98 Budget)
- Establishment of the Federation Fund: \$A -0.055 billion (announced in 1997/98 Budget)
- Delivery of LAW tax cut commitment as a savings rebate: \$A 0.5393 billion (announced in 1997/98 Budget)
- Health care programmes: \$A 0.120 billion (announced in 1997/98 Budget)
- Social security, including child care: \$A 0.0685 billion (announced in 1997/98 Budget)
- Public housing: \$A 0.054 billion (announced in 1997/98 Budget)
- Private health insurance incentive: \$A -0.244 billion (Budget 96/97 announcements)
- Family tax initiative: \$A -0.34 billion (Budget 96/97 announcements)
- State fiscal contributions: \$A -0.1595 billion (Budget 96/97 announcements)
- AUSTUDY and HECS: \$A 0.258 billion (Budget 96/97 announcements)
- Labour market programmes: \$A -0.2225 billion (Budget 96/97 announcements)
- Revenue raising R&D measures: \$A 0.2855 billion (Budget 96/97 announcements)

Other (announced: \$A 1.366 billion)

- Other cuts in spending introduced in 1997/98 Budget: \$A -0.024 billion (announced in 1997/98 Budget)
- Other spending cuts: \$A 1.39 billion (Budget 96/97 announcements)

Australia 1999

A small fiscal consolidation of 0.05 percent of GDP occurred, based on 0.15 spending cuts mostly offset by a tax cut of 0.1. The adjustment is the consequence of the two plans announced in 1996 and 1997. For what concerns data about components see entry for 1996 and 1997.

REVENUES: \$A -0.56 billion

Income, profits and capital gains (announced: \$A -0.7885 billion)

- Capital Gains Tax: \$A -0.09 billion (announced in 1997/98 Budget)
- Taxation rebate for savings: \$A -0.685 billion (announced in 1997/98 Budget)
- Superannuation measures: \$A -0.001 billion (Budget 96/97 announcements)
- Fringe Benefits: \$A -0.0125 billion (announced in 1997/98 Budget)

Personal (announced: \$A -0.776 billion)

- Capital Gains Tax: \$A -0.09 billion (announced in 1997/98 Budget)
- Taxation rebate for savings: \$A -0.685 billion (announced in 1997/98 Budget)
- Superannuation measures: \$A -0.001 billion (Budget 96/97 announcements)

 Corporate (announced: -0.0125)
- Fringe Benefits: \$A -0.0125 billion (announced in 1997/98 Budget)

Indirect (announced: \$A 0.0125 billion)

• Tariff concession system and policy by-law system: \$A 0.0125 billion (Budget 96/97 announcements)

Not yet classified (announced: \$A 0.1275 billion) \$A 0.0375 billion (according to C vs P))

- Capital Gains Tax: \$A -0.09 billion (announced in 1997/98 Budget) (according to C vs P)
- Revenue protection/tax avoidance and minimization: \$A 0.1275 billion (announced in 1997/98 Budget)

Other (announced: \$A 0.0895 billion)

- Other revenues: \$A 0.1975 billion (announced in 1997/98 Budget)
- Other: \$A -0.108 billion (Budget 96/97 announcements)

SPENDING: \$A 0.8355 billion

Government consumption (announced: \$A 0.0255 billion)

• Government administration: \$A 0.0255 billion (announced in 1997/98 Budget)

Government Transfers (announced: \$A 0.371 billion)

- Commitment to maintain the pension at 25% of MTAWE: \$A -0.318 billion (announced in 1997/98 Budget)
- Establishment of the Federation Fund: \$A -0.1 billion (announced in 1997/98 Budget)
- Delivery of LAW tax cut commitment as a savings rebate: \$A 1.2065 billion (announced in 1997/98 Budget)
- Health care programmes: \$A 0.087 billion (announced in 1997/98 Budget)
- Social security, including child care: \$A 0.0765 billion (announced in 1997/98 Budget)
- Public housing: \$A 0.0195 billion (announced in 1997/98 Budget)
- Private health insurance incentive: \$A -0.0025 billion (Budget 96/97 announcements)
- Family tax initiative: \$A -0.0755 billion (Budget 96/97 announcements)
- State fiscal contributions: \$A -0.170 billion (Budget 96/97 announcements)
- AUSTUDY and HECS: \$A 0.1045 billion (Budget 96/97 announcements)
- Labour market programmes: \$A -0.413 billion (Budget 96/97 announcements)
- Revenue raising R&D measures: \$A -0.044 billion (Budget 96/97 announcements)

Other (announced: \$A 0.439 billion)

- Other cuts in spending introduced in 1997/98 Budget: \$A 0.1325 billion (announced in 1997/98 Budget)
- Other spending cuts: \$A 0.3065 billion (Budget 96/97 announcements)

3 Austria

Austria 1980

Fiscal consolidation totaled 0.85 percent of GDP, with spending cuts of 0.73 percent of GDP and tax hikes of 0.12 percent of GDP. The plan was motivated by the objective to reduce the medium term budget deficit. The episode is mainly centered on spending cuts and in particular on cuts on transfers. Data about disaggregated components are taken from *IMF*, Recent Economic Developments, 1981.

REVENUES: S 1.2 billion

Not yet classified (unexpected: S 1.2 billion)

• Increased revenue from various sources (S 1.2 billion)

SPENDING: S 7.2 billion

Transfers (unexpected: S 7.2 billion)

- Reduction in the federal contribution to the social security system: S 5,9 billion (p. 25)
- Cut in price subsidies for agricultural products: S 0.8 billion (p. 25)
- Reduced outlays for savings promotion schemes: S 0.4 billion (p. 25)

Fiscal consolidation totaled 1.66 percent of GDP, with tax hikes of 0.53 percent of GDP and spending cuts of 1.13 percent of GDP. The adjustment is part of the medium-term deficit reduction plan that also characterized the previous episode. Data on fiscal components are taken from IMF Recent Economic Developments 1982, p. 15-16.

REVENUES: S 5.6 billion

Not yet classified (unexpected: S 5.6 billion)

 Abolition of savings promotion, raise of VAT, special tax on petrol, increase in postal charges and rail fees, increase in unemployment insurance contributions, improve of depreciation allowances for business (OECD Economic Survey 1981-1982)

SPENDING: S 11.9 billion

Transfers (unexpected: S 11.9 billion)

• Pensions: S 11.9 billion ("fell mainly on pensions")

Austria 1984

Fiscal consolidation totaled 2.14 percent of GDP, with tax hikes of 1.36 percent of GDP and spending cuts of 0.78 percent of GDP. Disaggregated data are taken from OECD Economic Survey, 1984-1985, p. 56-57.

REVENUES: S 17.5 billion

Income, profits and capital gains (unexpected: S 2.75 billion)

- Raise in unemployment and pension insurance contributions for self-employed: S 6.5 billion
- Other corporate tax relieves: S -3.75 billion¹⁹

Corporate (unexpected: S 2.75 billion)

- Raise in unemployment and pension insurance contributions for self-employed: S 6.5 billion
- Other corporate tax relieves: S -3.75 billion

Indirect (unexpected: S 14.75 billion)

- Rise in VAT rate by 2%: S 12.5 billion
- Road transportation, motor vehicle tax, insurance tax: S 2.25 billion

SPENDING: S 10 billion

Transfers (unexpected: S 10 billion)

- Abolition of the housing grant: S 1.25 billion
- Reduction of childbirth grant: S 0.5 billion
- Economies in social security institutions: S 3 billion
- Extension of the interest rate subsidy scheme for innovative investments: S 2 billion
- Foundation of an Environmental Fund: S -0.5 billion
- Additional promotion of small scale enterprises: S -0.25 billion
- Other transfers: S 4 billion

¹⁹The measures are: abolition of the trading capital tax, reduction of the tax on corporate capital and increase in tax allowance for retained earnings for small scale enterprises.

Fiscal consolidation totaled 2.49 percent of GDP, with spending cuts of 1.58 percent of GDP and tax hikes of 0.91 percent of GDP. The adjustment is motivated by the necessity to meet the criteria fixed by the Maastricht Treaty in order to enter the EMU. Data about the fiscal components of the plan are taken from IMF Staff Reports 1997 (p. 13).

REVENUES: S 22 billion

Income, profits and capital gains (unexpected: S 16.4 billion)

- Capital yield tax (interest, dividends): S 2 billion
- Corporate income tax: S 8.1 billion
- Wage and personal income tax: S 6.3 billion

Personal (unexpected: S 6.3 billion)

 \bullet Wage and personal income tax: S 6.3 billion

Corporate (unexpected: S 8.1 billion)

• Corporate income tax: S 8.1 billion

Indirect (unexpected: S 10.6 billion)

- Value-added tax: S 5.7 billion
- Energy tax (electricity, gas): S 3 billion
- Tobacco, inheritance, gift, insurance and car registration taxes: S 1.9 billion

Other (unexpected: S -5 billion)

• Share of lower levels of government: S -5 billion

Not yet classified: C vs P, S 2 billion

• Capital yield tax (interest, dividends): S 2 billion (according to P vs C)

SPENDING: S 38.2 billion

Salaries (unexpected: S 8 billion)

• Civil service remuneration: S 8 billion

Investments (unexpected: S 5.2 billion)

• Repeal of earmarking provisions: S 5.2 billion

Transfers (unexpected: S 25 billion)

• Long-term care for the elderly: S 1.3 billion

• Unemployment compensation: S 1.8 billion

• Pensions: S 8.1 billion

• Subsidies: S 2.8 billion

• Federal ministries and enterprises: S 11 billion

Fiscal consolidation totaled 1.65 percent of GDP, with spending cuts of 1.18 percent of GDP and tax hikes of 0.47 percent of GDP. The adjustment is part of the plan that started in 1996 and aims at achieving the Maastricht criteria. All the measures implemented were announced in 1996. Data are from the IMF Staff Report 1997 (p. 13)

REVENUES: S 11.4 billion

Income, profits and capital gains (announced: S 17.6 billion)

- Capital yield tax (interest, dividends): S 1 billion (1996 plan)
- Wage and personal income tax: S 16.6 billion (1996 plan)

Personal (announced: S 16.6 billion)

• Wage and personal income tax: S 16.6 billion (1996 plan)

Indirect (announced: S 2.2 billion)

- Value-added tax: S -3.7 billion (1996 plan)
- Energy tax (electricity, gas): S 4 billion (1996 plan)
- Tobacco, inheritance, gift, insurance and car registration taxes: S 1.9 billion (1996 plan)

Other (announced: S -8.4 billion)

• Share of lower levels of government: S -8.4 billion (1996 plan)

Not yet classified C vs P S 1 billion

• Capital yield tax (interest, dividends): S 1 billion (according to P vs C) (1996 plan)

SPENDING: S 28.4 billion

Salaries (announced: S 8 billion)

• Civil service remuneration: S 8 billion (1996 plan)

Investments (announced: S -1.2 billion)

• Repeal of earmarking provisions S -1.2 billion (1996 plan)

Transfers (announced: S 21.6 billion)

- Family allowances: S 6.3 billion (1996 plan)
- Long-term care for the elderly: S 0.6 billion (1996 plan)
- Unemployment compensation: S 2.4 billion (1996 plan)
- Pensions: S 10.3 billion (1996 plan)
- Federal ministries and enterprises: S 2 billion (1996 plan)

Austria 2001

Fiscal consolidation totaled 1.17 percent of GDP, with tax hikes of 0.62 percent of GDP and spending cuts of 0.55 percent of GDP. The adjustment is designed with the aim of reducing budget deficit and facing the rising skepticism of international institutions. The consolidation is a two year plan based both on spending reductions and tax hikes. Data about components are from the Austria Stability Program 2001 (p. 10-11).

REVENUES: S 17.8 billion

Income, profits and capital gain (unexpected: S 3.2 billion)

• Increase of the tax on gifts to foundations and trusts: S 0.1 billion

- Extension of the application of the wages tax: S 0.5 billion
- Interim taxation of income from trusts: S 2 billion
- Increasing assessed value of inheritance assets: S 0.5 billion

Personal (unexpected: S 3 billion)

- Extension of the application of the wages tax: S 0.5 billion
- Interim taxation of income from trusts: S 2 billion
- Increasing assessed value of inheritance assets: S 0.5 billion

Indirect (unexpected: S -0.6 billion)

- Beverage tax, advertising levy: S -3 billion
- Catering turnover subject to turnover tax: S -1.3 billion
- Motor vehicle tax: S 0.7 billion
- Enrollment fees: S 1 billion
- Tax adjustment of accidental benefits (insurance services): S 2 billion

Not yet classified (unexpected: S 15.2 billion), C vs P S 15.3 billion

- Interest on tax arrears, deposits: S 0.2 billion
- Raising prepayments, effects of early payments: S 15 billion
- Increase of the tax on gifts to foundations and trusts: S 0.1 billion (according to C vs P)

SPENDING: S 15.7 billion

Consumption (unexpected: S 11 billion)

- Provinces and municipalities: S 8 billion (result of structural reform between Federal Government and provinces, p. 14)
- Social insurance institutions: S 3 billion (maintain efficiency, reduced costs, synergistic effects, p. 13)

Salaries (unexpected: S 5 billion)

• Administration and staff cost: S 5 billion

Investments (unexpected: S 0.5 billion)

• Universities: S 0.5 billion

Transfers (unexpected: S 18.3 billion)

• Pension insurance: S 4.5 billion

• Other social transfers: S 3.7 billion

• Disabled persons: S 1 billion

• Changes to deductions: S 5.1 billion

• Changes to tax privileges (tax depreciation for corporate assets, IMF Staff Report p. 9): S 4 billion

Other (unexpected: S -19.1 billion)

• Miscellaneous spending: S -19.1 billion

Fiscal consolidation totaled 1.12 percent of GDP based on spending cuts of 1.37 percent of GDP partly offset by a net tax cut of 0.25 percent of GDP. The adjustment is a continuation of the fiscal plan started the previous year with the aim of reducing budget deficit and facing the rising skepticism of international institutions. This episode is only based on spending cuts in aggregate, but we will also report the classification of revenues since the composition changes in 2002 when compared to the previous year. Moreover the temporary raising of prepayments introduced in 2001 expired, generating a negative budgetary impact of S -15 billion. All the shocks are part of the announced measures in the 2001 Stability Program. Data about components are from the Austria Stability Program 2001 (p. 10-11).

REVENUES: S -7.1 billion

Income, profits and capital gain (announced: S 4.2 billion)

- Increase of the tax on gifts to foundations and trusts: S 0.1 billion (announced in 2001)
- Extension of the application of the wages tax: S 0.1 billion (announced in 2001)
- Increasing assessed value of inheritance assets: S 0.5 billion (announced in 2001)
- Non-wage labour costs: S -2 billion (announced in 2001)
- Restriction of liability provisions: S 3 billion (announced in 2001)
- Limitation of losses brought forward: S 2.5 billion (announced in 2001)

Property (announced: S 2.5 billion)

- Extension of the depreciation time on buildings: S 2.5 billion (announced in 2001)

 Personal (announced: S 0.6 billion)
- Extension of the application of the wages tax: S 0.1 billion (announced in 2001)
- Increasing assessed value of inheritance assets: S 0.5 billion (announced in 2001)

Corporate (announced: S 6 billion)

- Non-wage labour costs: S -2 billion (announced in 2001)
- Restriction of liability provisions: S 3 billion (announced in 2001)
- Extension of the depreciation time on buildings: S 2.5 billion (announced in 2001)
- Limitation of losses brought forward: S 2.5 billion (announced in 2001)

Indirect (announced: S 0.9 billion)

- Catering turnover subject to turnover tax: S -0.3 billion (announced in 2001)
- Motor vehicle tax: S 0.2 billion (announced in 2001)
- Enrollment fees: S 1 billion (announced in 2001)

Not yet classified (announced: S -14.7 billion), C vs P S -14.6 billion

- Increase of the tax on gifts to foundations and trusts: S 0.1 billion (according to C vs P) (announced in 2001)
- Interest on tax arrears, deposits: S 0.3 billion (announced in 2001)
- Raising prepayments, effects of early payments: S -15 billion (announced in 2001)

SPENDING: S 39.3 billion²⁰

Consumption (announced: S 3.5 billion)

 $^{^{20}}$ Notice that in line with Devries et al. (2011) we ruled out the effect of interest on debt that amounted to S 3 billion.

• Provinces and municipalities: S 3.5 billion (result of structural reform between Federal Government and provinces, p. 14) (announced in 2001)

Salaries (announced: S 6.1 billion)

• Administration and staff cost: S 6.1 billion (announced in 2001)

Investments (announced: S 0.5 billion)

• Universities: S 0.5 billion (announced in 2001)

Transfers (announced: S 20.3 billion)

- Pension insurance: S 6.4 billion (announced in 2001)
- Family assistance: S 7.3 billion (announced in 2001)
- Changes to deductions: S 0.1 billion (announced in 2001)
- Changes to tax privileges: S 0.5 billion (announced in 2001)
- Abolition of the investment allowance: S 6 billion (announced in 2001)

Other (announced: S 8.9 billion)

• Miscellaneous spending: S 8.9 billion (announced in 2001)

4 Belgium

Belgium 1982

Fiscal consolidation totaled 1.8 percent of GDP, based entirely on spending cuts. Fiscal consolidation measures implemented in 1982 consisted of spending cuts totaling BF 69 billion. As Devries et al. (2011) state, this plan is part of a multi-year program of fiscal consolidation announced by the government following the November 1981 election aimed at reducing the fiscal deficit to 7 percent of GNP by 1985. However, since in the IMF and OECD reports we have never found clear budget indications about fiscal plans for future years, we code all the plans until 1985 as unexpected. The decomposition of the plan goes as follows (IMF Recent Economic Developments 1982 p.22):

SPENDING: BF 69 billion

Government Consumption + Salaries (16 unexpected)

- BF 8.8 billion from cuts in education
- BF 7.2 billion from public employment and salaries

Transfers (45.1 unexpected)

- BF 34.9 billion from cuts mainly related to pensions and transfers to social security funds
- BF 10.2 billion from subsidies to public enterprises.

Not yet classified (7.9 unexpected)

• BF 7.9 billion as a residual component

Belgium 1983²¹

Fiscal consolidation totaled 1.6 percent of GDP, with spending cuts of 0.98 percent of GDP and tax hikes of 0.62 percent of GDP. According to Devries et al. (2011), on January 1, 1983, the standard VAT rate rose from 17 to 19 percent with estimated savings of BF 15 billion, or about 0.40 percent of GDP (1983 OECD

²¹This is a year in which Devries et al. (2011) only take into account the March 1983 'correction measures' but ignored the budget decided by October 1982. In particular Devries did not take into account "Expenditure cuts made mainly in the field of social security, and by halving the partial budgetization of employers' social security contributions ("Operation Maribel", implemented in July 1981, with a cost to firms of some BF 15 billion in terms of higher nonwage labor costs" IMF Recent Economic Developments 1983.

Economic Surveys, p. 58). In addition, the government introduced supplementary measures in March amounting to BF 50 billion, or 1.30 percent of GDP (p. 22), of which BF 41 billion (1.10 percent of GDP) corresponded to expenditure cuts and the remainder corresponding to revenue measures. The decomposition of these measures goes as following:

REVENUES: BF 26 billion

Income, profits and capital gains (6 unexpected)

• a hike in social security contributions yielding BF 6 billion (0.16 percent of GDP) (p.58 OECD 1983)

Indirect Taxes (20 unexpected)

- On January 1, 1983, the standard VAT rate rose from 17 to 19 percent with estimated savings of BF 15 billion, or about 0.40 percent of GDP (1983 OECD Economic Surveys, p. 58).
- an increase in taxes on petrol products, yielding BF 5 billion, or 0.13 percent of GDP (p. 58).

SPENDING: BF 40.9

Not yet classified (40.9 unexpected)

• we could not retrieve details on the BF 40.9 spending cuts implemented in the year

Belgium 1984

Fiscal consolidation totaled 0.75 percent of GDP, with spending cuts of 0.45 percent of GDP and tax hikes of 0.3 percent of GDP. According to Devries et al. (2011), The March 1984 fiscal consolidation measures had an impact in 1984 on taxes and non-interest spending estimated at BF 13.4 billion and BF 19.7 billion, respectively (p. 47), implying a total fiscal consolidation of 0.75 percent of GDP. In 1985, the March 1984 program generated additional savings (over those achieved in 1984) of BF 36.8 billion in higher taxes and BF 44.6 billion in lower spending (p. 47). For details on components see table 20, p.47 of 1984 IMF Recent Economic Developments.

REVENUES: BF 13.4 billion

Income profits and capital gains (13.4 unexpected)

• BF 13.4 billion from income moderation package suspended the first indexation adjustment (of 2 percent) each year from 1984 to 1986, affecting all public and private sector wages and salaries and all but minimum social security benefits. The disindexation of wages and salaries will effectively function as a wage tax, raising fiscal pressure, as the proceeds will not accrue to enterprises, but will be transferred to the State.

Personal taxes (9.4 unexpected)

• BF 9.4 billion from the income moderation package

Corporate taxes (4 unexpected)

• BF 4 billion from the income moderation package applied on self-employed

SPENDING: BF 19.7 billion

Consumption (1.1 unexpected)

• BF 1.1 billion from public sector operating costs

Salaries (6.1 unexpected)

- BF 5.4 billion. The fruits of deindexation of civil service and related public sector wages will accrue directly to the Treasury
- BF 0.7 billion of public sector wage bill cuts

Transfers (12.5 unexpected)

- BF 8.4 billion from the deindexation of social security benefits except minimum guaranteed transfers
- BF 4.1 billion from Social security savings

Belgium 1985

Fiscal consolidation totaled 1.88 percent of GDP, with spending cuts of 1.31 percent of GDP and tax measures of 0.57 percent of GDP. Fiscal consolidation continued in 1985, motivated by the March 1984 deficit-reduction plan that generated additional fiscal savings in 1985 of 1.61 percent of GDP. All the following measures were anticipated from March 1984.

REVENUES: BF 25.1 billion²²

Income profits and capital gains (25.1 announced)

- BF 22.6 billion from income moderation package suspended the first indexation adjustment (of 2 percent) each year from 1984 to 1986, affecting all public and private sector wages and salaries and all but minimum social security benefits. The disindexation of wages and salaries will effectively function as a wage tax, raising fiscal pressure, as the proceeds will not accrue to enterprises, but will be transferred to the State.
- BF 2.5 billion: the tax threshold for certain transfer (replacement) incomes is to be lowered **Personal taxes (18.3 announced):**
- BF 15.8 billion from the income moderation package
- BF 2.5 billion: the tax threshold for certain transfer (replacement) incomes is to be lowered Corporate taxes (6.8 announced)
- BF 6.8 billion from the income moderation package applied on self-employed

For details on spending see table 20, p.47 of 1984 IMF Recent Economic Developments.

Spending: BF 57.8 billion Consumption (2.9 announced)

• BF 2.9 billion from public sector operating costs

Salaries (12.2 announced)

- BF 9.3 billion. The fruits of deindexation of civil service and related public sector wages will accrue directly to the Treasury
- BF 2.9 billion of public sector wage bill cuts

Transfers (42.7 announced)

- BF 17.2 billion from the deindexation of social security benefits except minimum guaranteed transfers
- BF 14 billion from Social security savings
- BF 11.5 billion from adjustment of tax deductibility, with three fifths of the amount coming from personal income tax receipts and the remainder from corporate taxes (p.37)

Belgium 1987

Fiscal consolidation totaled 2.4 percent of GDP, with spending cuts of 2.3 and tax hikes of 0.1. At the end of the first half of 1986 a new corrective programme (the "Saint Anne" or "Val Duchesse" Plan) was introduced. The aim of the new plan was to reduce the net Treasury borrowing requirement by almost BF 130 billion. (OECD 1988 p.62). According to our calculations, of these BF 130 billions, tax hikes amounted to BF 5.6 billion, while expenditure cuts were BF 102 billions²³ According to Devries et al. (2011) the Government also reviewed the execution of the program in February 1987, and implemented additional expenditure cuts in 1987 worth BF 21 billion (0.40 percent of GDP). The decomposition of these measures goes as follows:

REVENUES: BF 5.3 billion²⁴

Income. Profits and capital gains (5.3 announced)

 $^{^{22}}$ Devries et al. (2011) takes into account BF 0.2 billion from special levy on public credit institutions. However, these kinds of financial transactions are excluded from this analysis

²³These estimates differ from the ones computed by Devries et al. (2011). Indeed, Devries et al. (2011) states that the program consists in BF 130 billion in expenditure cuts only. This is because in IMF Staff report p.2 the program is said to consist mainly of expenditure cuts. Hence, the aggregate of 130 billion for the entire measure is thought to consist fully of expenditure cuts. However, with a more detailed look into Table 16 of IMF Recent Economic Developments 1987, it is clear that the program contained a few tax measures that we have taken into account. Moreover, we excluded some rescheduling of interest payments.

²⁴Notice that Devries et al. (2011) neglected the fact that a small part of the fiscal consolidation package was composed by taxes.

• BF 5.3 billion from solidarity tax, which is a special levy on the income of public sector employees designed to act as a compensation for their job security

Personal taxes (5.3 announced)

• BF 5.3 billion from solidarity tax, which is a special levy on the income of public sector employees designed to act as a compensation for their job security

SPENDING: BF 117.3 billion ²⁵ Consumption (3.9 announced)

• BF 3.9 billion from the Saint Anne program decided in May 1986. (3.8% of the cumulated impact of the Saint Anne applied to the 102 billion of expenditure cuts in 1987). These measures include public administration cuts

Investments (13.7 announced)

• BF 13.7 billion from the Saint Anne program decided in May 1986. (13.5% of the cumulated impact of the Saint Anne applied to 102 billion of expenditure cuts in 1987). These measures include cuts to public investments and cuts to scientific research.

Transfers (84.7 announced)

- BF 84.4 billion from the Saint Anne program decided in May 1986. (82.7% of the cumulated impact of the Saint Anne applied to the 102 billion of expenditure cuts in 1987). These measures include cuts in social expenditures (education, unemployment and employment, pensions, health), cuts to government transfers to the local authorities (included in budget of Ministry of Interior), cuts for ministries, the post office, public enterprises, agriculture, communications and port facilities.
- BF 0.3 billion from elimination of tax deductions (elimination of the exemptions enjoyed by certain firms to pay social security taxes and the reduction in investment incentives—especially the advantages granted to the "coordination centers.")

Not yet classified (15 unexpected)

• BF 15 billion from the budget cuts decided in March 1987: "On March 13, 1987, the Government agreed on offsetting measures for a total of BF 20 billion. Out of the BF 20 billion, nearly three-fourths would come from further expenditure cuts while the remainder would stem from increased non-tax receipt" IMF Recent Economic Developments 1987 p.37-38.

Belgium 1990

Fiscal consolidation totaled 0.48 percent of GDP, with spending cuts of 0.09 percent of GDP and tax hikes of 0.39 percent of GDP. According to Devries et al. (2011), revenue measures together generated BF 25 billion (about 0.40 percent of GDP) and spending measures totaled BF 11 billion. However, we take out from the analysis the contribution of BF 5 billion from the central bank, the lottery and telephone company (1990/1991 OECD Economic Surveys, p. 50). According to 1990/1991 OECD Economic Surveys, p. 50, the decomposition goes as follows:

REVENUES: BF 25 billion

Income profits and capital gains (21 unexpected)

• BF 6 billion from the indexation of the parameters of the personal income tax system was not completely applied to the withholding tax on earned income.

²⁵We take as a reference Table 16 and 22 of IMF Recent Economic Developments 1987, which gives a clear estimate of the cumulative impact of Sint-Anna Plan for 1987 and allow us to disentangle the single components of the policies. The single components are neat out from the impact of the program already implemented in 1986. In order to do so we had to subtract the non interest expenditure savings already implemented in 1986 and represented in Table 16. Unfortunately, this computation was not possible to apply to every single expenditure component because table 16 presents the impact of the aggregated components for 1986 and 1987, while table 22 only presents details of the single components for the cumulated Plan in 1987. In order to compute our results, we assume that the shares of the components of the cumulated effect was the same for the year 1987, neat out of the aggregated effects anticipated in 1986. Indeed, "the enabling legislation for the Sint-Anna measures was only put in place over the course of the second half of the year, the measures were expected to result in savings equivalent to BF 52 billion in 1986, with a further BF 10.5 billion to come from the accelerated implementation of other measures under the program." p.34.

- BF 5 billion from withholding taxes on earned income (March 1990 measure)
- BF 10 billion from the lowering of the corporate tax from 43 to 41 per cent

Personal (11 unexpected)

- BF 6 billion from the indexation of the parameters of the personal income tax system was not completely applied to the withholding tax on earned income.
- BF 5 billion from withholding taxes on earned income (March 1990 measure)

Corporate (10 unexpected)

• BF 10 billion from the lowering of the corporate tax from 43 to 41 per cent

Indirect taxes (4 unexpected)

- BF 3 billion from additional excise-tax increases.
- BF 1 billion from the road tax on motor vehicles;

SPENDING: BF 6 billion²⁶ Investments (6 unexpected)

• departmental spending was restricted by BF 6 billion, especially in the area of public works. OECD 1990/1991 p.62

Belgium 1992

Fiscal consolidation totaled 1.87 percent of GDP, with spending cuts of 0.84 percent of GDP and tax hikes of 1.03 percent of GDP. According to Devries et al. (2011) and the 1992 IMF Recent Economic Developments Report (p. 6), the budgetary impact of the tax hikes and spending cuts amounted to BF 74 billion and BF 59.5 billion. About half of the tax hikes and half of the spending cuts were temporary (p. 6), implying a budgetary impact in the following year, 1993, of -0.89 percent of GDP (see entry for 1993 below).

REVENUES: BF 73.5 billion

Income. Profits and Capital Gains (39.5 unexpected)

- BF 29.5 billion (40-10.5 of temporary) from a number of measures which effectively increased most social security contributions by about 1 percentage point from July 1992 onward.
- BF 10.5 billion of additional revenue will result from a (one time) timing shift forward in the receipt of social contributions.

Not yet classified (34 unexpected)

• BF 34 billion of residual tax hikes that we know happened but that are not explained in the Social Security Appendix of IMF RED. Of these, 74/2-10.5=26.5 are temporary measures

Additional info for the NYC components from the OECD 1992 p.32: Revenue will be boosted mainly by the realignment of VAT and excise taxes, the selective "suspension" of investment tax credits, and increased social security contributions for employees and retired people.

SPENDING: BF 59.5 billion (IMF recent economic developments 1992 p.42)
Transfers (19 unexpected)

- BF 7 billion (19-12) of cuts from modest savings were made in the health care and unemployment areas
- BF 12 billion from a (one time) timing shift backward of expenditures on unemployment compensation. This measure has a negative impact in 1993.

Not yet classified (40.5 unexpected)

²⁶In addition, transfers to the social-security system were chopped by BF 10 billion. However Devries et al. do not take this into account may because these savings were offset by extra spending "Nearly BF 10 billion worth of new spending initiatives were announced, mainly for social-security expenditure, but also with some extra funding for R&D and public investment".

• BF 40.5 (59.5 billion) of residual expenditure cuts that we know had happened but that are not explained in the Social Security Appendix of IMF RED. Of these, 59.5/2-12=17.75 are temporary measures

Additional info for the NYC component from the OECD 1992 p.32: On the expenditure side, cuts will be widespread, but will particularly affect defense spending. Also, stricter limits will be applied to the program of part-time work to avoid full-time unemployment, and health care expenditure. As the Government has relied on a large number of measures, many of them with a relatively narrow scope, it is rather difficult to form an overall view and assessment.

Belgium 1993

Fiscal consolidation totaled 1.07 percent of GDP, with spending cuts of 0.62 percent of GDP and tax hikes of 0.45 percent of GDP. According to Devries et al. (2011), in 1993 the fiscal consolidation measures were implemented in 3 different times. First, the 1993 Budget of the summer of 1992 included spending cuts of BF 60 billion, and tax hikes worth BF 40.5 billion. Second, in October 1992, supplementary revenue measures worth BF 12 billion for 1993 were introduced. Third, at the time of the budget control exercise in April 1993, the authorities introduced a sizable additional deficit-reduction package with a full-year budgetary impact estimated by the 1993 IMF Recent Economic Developments (p. 10) at BF 105 billion. New receipts amounted to BF 75 billion (of which BF 15 billion consisted in asset sales, not considered in this analysis) and new spending cuts amounted to BF 30 billion²⁷. Since many of the measures did not become effective until July 1, however, the budgetary impact in 1993 amounted to about 30 percent of the full-year effect (OECD Economic Surveys 1994, p. 51). According to IMF RED 1992 p.8, IMF RED 1994 p.10, OECD 1994 p.50 and 92, the composition goes as follows.

REVENUES: BF 33.5 billion

Income profits and capital gains BF 32.4 billion (9.9 unexpected, 22.5 announced)

- Higher direct taxes of BF 23 billion. This measure was decided in August 1992.
- Suspension of indexation of tax brackets which is estimated to yield BF 10 billion in 1983. This measure was decided in August 1992.
- BF 9.9 billion (33*0.3) from a 3 per cent surcharge on all household and business direct taxes, expected to yield. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.
- BF -10.5 billion from the expiration of a (one time) timing shift forward in the receipt of social contributions applied in 1992.

Indirect Taxes (7.5 announced)

• indirect taxes of BF 7.5 billion as well as additional non-tax receipts of BF 21 billion (of which about BF 15 billion represents asset sales). This measure was decided in August 1992.

Not yet classified BF -6.4 billion (20.1 unexpected, -26.5 announced)

- BF 12 billion. More recently (October 1992) in view of the worsening growth prospects, the authorities announced an additional package of measures for a total amount of BF 22 billion (including BF 10 billion additional asset sales) 1992 IMF Recent Economic Developments (p. 8) and OECD 1994 p.92.
- BF 4.2 (14*0.3) billion resulting from better collection of existing taxes. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.
- BF 3.9 (13*0.3) billion of residual (75-15 of asset-33-14) of tax hikes decided in the April 1993 budget. This measure became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.
- BF -26.5 from temporary measures applied in 1992 and expired in 1993

SPENDING: BF 44.25 billion

Transfers BF 15.2 billion (7.2 unexpected, 8 announced)

²⁷Notice that Devries et al. (2011) has slightly different estimates because they roughly compute the policy maneuvre to be three-quarters due to taxes and one quarter due to spending, as reported in IMF 1997 Recent Economic Developments p.10. However, we take as a reference the estimates made by the 1994 OECD Economic Survey p.50 because more precise.

- BF 7 billion from ceilings on nominal expenditures in certain areas: (a) BF 91 billion for national defense; (b) BF 51 billion for operating subsidies to the major public enterprises (railways and the post office); and (c) BF 231 billion for transfers from the national government's budget to the social security systems for employees and the self employed. This measure was decided in August 1992.
- BF 13 billion cuts in the social security area. This measure was decided in August 1992.
- BF 7.2 billion (24*0.3 percent) reflecting savings in the social security account in general, and more particularly in health expenditure. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.
- BF -12 billion from the expiration of the shift backward of expenditures on unemployment compensation applied for 1992.

Not yet classified BF 29.05 billion (1.8 unexpected, 27.25 announced)

- BF 40 billion of residual (60-13-7) of expenditure cuts from the fiscal consolidation decided in the summer 1992. See IMF RED 1992, p.8. This measure was decided in August 1992.
- BF 1.8 billion (6*0.3) of residual (30-24) of expenditure cuts decided in April 1993. See OECD 1994 p.50. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.
- BF -17.75 billion fro the expiration of temporary measures with impact in 1992.

Belgium 1994

Fiscal consolidation totaled 1.25 percent of GDP, with spending cuts of 0.69 percent of GDP and tax hikes of 0.56 percent of GDP. In addition to the measures decided in April 1993 and described in the previous entry, new measures generated additional BF 30 billion of current spending cuts.

REVENUES: BF 42 billion

Income profits and capital gains (23.1 announced)

• BF 23.1 billion (33*0.7) from a 3 per cent surcharge on all household and business direct taxes. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.

Not yet classified (18.9 announced)

- BF 9.8 (14*0.7) billion resulting from better collection of existing taxes. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.
- BF 9.1 (13*0.7) billion of residual (75-15 of asset-33-14) of tax hikes decided in the April 1993 budget. This measure became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.

SPENDING: BF 52 billion Consumption (30 unexpected)

• Expenditure will be cut by over BF 30 billion as a result, inter alia, of a change in the timing of subsidies to public enterprises, and a reorganization of the public sector based on an in-depth study which has been carried out over the past couple of years (The so-called Radioscopie des services publics). This measure is the only unanticipated one for 1994 (OECD 1994, p.51).

Transfers (16.8 announced)

• BF 16.8 billion (24*0.7 percent) reflecting savings in the social security account in general, and more particularly in health expenditure. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.

Not yet classified (5.2 announced)

• BF 5.2 billion (6*0.7) of residual (30-24) of expenditure cuts decided in April 1993. See OECD 1994 p.50. This measure was decided in April 1993 but became effective only in July 1993, hence 30% of its impact was felt in 1993 and 70% in 1994.

Belgium 1996^{28}

Fiscal consolidation totaled 0.77 percent of GDP, with spending cuts of 0.47 percent of GDP and tax hikes of 0.76 percent of GDP.

REVENUES: BF 63.488 billion

Not yet classified BF 63.488 billion (unexpected: 63.488)

• 63.488 billion - 0.8 percent "Revenue measures in the 1996 budget amount to some 0.9 percent of GDP and include the sale of mobile phone licenses and buildings, an increase in the normal VAT rate from 20.5 percent to 21 percent, continued suspension of the indexation of income tax brackets, an increase in the tax on diesel car registration, a surcharge on workers' social security contributions, and a rise in the withholding tax on interest income from 13.39 to 15 percent. The sale of buildings amounts to 0.1 percent of GDP and is included here as a revenue measure, although under the European system of national accounts used in this section it actually reduces investment spending. IMF recent economic developments 1996 p.11

SPENDING:

Not yet classified BF 39.68 billion (unexpected: 39.68)

• 39.68 - Expenditure measures total more than 0.5 percent of GDP, and consist of reductions in subsidies to public enterprises and in departmental operating costs, cut-backs in health care (by some 0.2 percent of GDP), continued nominal freezes of defense spending, subsidies to the railroad and post office, and a tighter application of unemployment benefits (including cancellation in certain cases of lengthy unemployment).

Note that, according to IMF recent economic developments1996 (p.11), the package includes one-off measures amounting to about 0.5 percent of GDP. As we could not identify which measures had a one-off impact, we equally split them between tax and spending, following Devries et al.

Belgium 1997

Fiscal consolidation amounted to 0.38 percent of GDP, with spending cuts of 0.23 percent of GDP and tax hikes of 0.15 percent of GDP.²⁹ The 1997 budget, presented in early October 1996, includes a new package of corrective measures estimated by the authorities to represent BF 80 billion. The 1997 saving effort is split evenly between spending cuts and revenue increases. In addition one-off measures introduced in 1996 expired, generating a negative budgetary impact of -0.5 percent of GDP, which we assume to be equally split among revenues and spending.

REVENUES: BF 13.16 billion

Not yet classified BF 13.16 billion (33 unexpected, -19.84 announced)

- The BF 40 billion of new revenues stems largely from an increase in fiscal and parafiscal revenues, and to a much lesser extent from an increase in non-fiscal and miscellaneous revenues. Excise taxes on petrol and alcoholic beverages were already raised in late 1996; the fight against fiscal fraud and evasion is to be stepped up, in part by introducing a tax on the actual delivery of paper securities; and a new tax has been introduced, to be paid by banks on the amount of their deposits. Finally, revenues will be boosted by a multi-annual programme of asset sales (mainly buildings), expected to yield BF 7 billion in 1997 and somewhat less in the following years. OECD 1997 p.45
- BF -19.84 from the expiration of 1996 temporary measures

SPENDING: BF 21.16 billion

Transfers (23 unexpected)

• Cuts in social security expenditure (BF 23 billion) will mainly affect health care (BF 20 billion), with savings in a large number of areas, including general health care, pharmaceuticals and hospital expenditure. Measures reforming other social security sectors – such as unemployment and early retirement schemes, family allowances, and pensions – will have a significantly smaller yield, although their full impact will be felt only over the longer term. For instance, the reform of the pension system in the private sector, with an increase in the retirement age for women from 60 to 65 – the same as men – will start having an effect only in the second half of 1997 (According to the authorities, the global effect of the measures in the social security area should increase from BF 23 billion in 1997 to BF 34 billion in 2000 and BF 54 billion in 2005 (at 1997 prices).)

²⁸GDP1995= 7936 billion. Source OECD Economic Surveys 1996.

²⁹The amount is smaller than in Devries et al. because they forget to subtract the expiration of the one-off measures they mentioned in the entry for 1996.

Not yet classified -1.84 (17 unexpected, 19.84 announced)

- Primary expenditure of the federal authorities is to be cut by BF 17 billion, compared to baseline mainly in the areas of subsidies granted to public enterprises, international aid and military expenditure resulting in a decline in primary expenditure of 1.7 per cent in real terms.
- BF -19.84 from the expiration of 1996 temporary measures

5 Canada³⁰

Canada 1984

Fiscal consolidation totaled 0.19 percent of GDP based on 0.13 tax hikes and 0.06 cuts in transfers. The April 1983 Budget introduced tax hikes and tax credits cuts motivated by deficit reduction with a budgetary impact of C\$ 0.8 billion ³¹ in 1984, which included hikes in personal income and consumption taxes. The decomposition goes as follows (Fiscal Plan p.27-28, only positive values):

REVENUES: C\$ 0.498 billion

Direct Taxes (anticipated: C\$ 0.25 billion)

• C\$ 0.25 billion anticipated from the April 1983 Budget

Indirect Taxes (anticipated: C\$ 0.248 billion)

• C\$ 248 millions anticipated from the April 1983 Budget

SPENDING: C\$ 0.244 billion

Transfers (anticipated: C\$ 0.244 billion)

• C\$ 0.244 billion anticipated from the April 1983 Budget

Table 4.1: Budget - April 1983

	1983-84	1984-85	1985-86	1986 - 87
Maintain 1981-82 family income threshold level	40	155	260	335
for Child Tax Credit				
Repeal of the \$100 standard deduction	30	180	85	85
Maintain current level of the exemption for	5	40	85	125
dependants under 18 years of age				
Transfers	75	375	430	545
Modifications to the federal tax reduction	45	455	1530	2110
Extension of IORT suspension (Corporate tax)	190	35	0	0
Direct taxes	235	490	1530	2110
Special Recovery Tax	0	300	900	1000
Telecommunications Programming Services Tax	30	50	55	55
Total Indirect taxes	30	350	955	1055

This tables exclude the revenue-reducing measures and the extension of the Canadian Ownership Special Charge. Source: Table 3.2 p.27 of the April 1983 Budget

Changens in savings	1983-84	1984-85	1985-86	1986-87	
Transfers	75	300	55	115	-
Direct taxes	235	255	1040	580	
Indirect Taxes	30	320	605	100	
Savings in calendar year	1983	1984	1985	1986	1987
Transfers	56	244	116	100	29
Direct taxes	176	250	844	695	145
Indirect Taxes	23	248	534	226	25

³⁰Canadian Fiscal Year runs from April to March. Informations about the Budget Process (for summary: http://www.budget.gc.ca/2010/budproc/budproc-eng.html).

 $^{^{31}}$ Devries report an impact of 1.2 billions but they did not computed the change compared to the measures supposed to have impact in 1983

Canada 1985

Fiscal consolidation totaled 1 percent of GDP, with tax hikes of 0.46 percent of GDP and spending cuts of 0.54 percent of GDP.

REVENUES: C\$ 1.96 billion

Direct taxes C\$ 0.942 billion (unexpected: 0.098; announced: 0.844)

- C\$ 0.844 billion anticipated from the April 1983 Budget
- C\$ 0.098 billion from May 1985 Budget (unanticipated)

Indirect taxes C\$ 1.247 billion (unexpected: 0.713; announced: 0.534)

- C\$ 0.534 billion anticipated from the April 1983 Budget
- C\$ 0.713 billion from May 1985 Budget (unanticipated)

Not yet classified C\$ -0.229 billion (unexpected: -0.229)

• Long run tax measures measures worthing -0.229

SPENDING: C\$ 2.48 billion

Consumption C\$ 1.038 billion (unexpected: 1.038)

- C\$ 0.713 billion from the November 1984 Expenditure and Program review (unanticipated)
- C\$ 0.325 billion from May 1985 Budget (unanticipated)

Transfers C\$ 1.442 billion (unexpected: 1.326; announced: 0.116)

- C\$ 1.072 billion from the November 1984 Expenditure and Program review
- C\$ 0.254 billion from May 1985 Budget (unanticipated)
- C\$ 0.116 billion from April 1983 Budget (anticipated)

Table 4.2: Expenditure and Program Review November 1984

Millions of dollars - Fiscal Year	1985-1986
Energy research and development	60,8
Northern oil and gas action plan	8
Social housing	9,6
Departmental operations (Agriculture)	9,4
Environment services	8,7
Reduction of posts abroad of the dep of External affairs	3,1
Departmental operations (Health and welfare)	8,2
Departmental operations (Indian Affairs and Northern Development)	7,8
Research and information (Labour)	1,5
National Capital commission (public works)	10
Custom and exice operations (departmental operations)	4,1
Departmental operations (supply and services)	14,2
General industrial training program	40
Summer Canada (employment for students during summer months)	85
Young workers exchange program	3
Canertech (Energy, mines and resources)	30,6
Maritime Engineering	8
Research programs + research facilities of encironment secretariat	9,4
1986 census	17
Deferral/cancellation of Capital projects	277,8
Departmental operations (Defense)	154
Official Development Assistance	180
Government Consumption, Salaries and Investments	950,2
Dairy programs (subsidies)	6,2
Canadian Broadcasting Corporation	75
Cultural Agencies (subsidies)	7,5
Petroleum incentives programmes	250
Program for Export market development	4
Canadian Commercial Corporation	5
Grants and contributions	1
Fisheries and Oceans	11,7
Residential rehabilitation assistance program	29,4
Industrial incentives program	200
Grants and contributions from the Secretart of State	9,8
VIA rail (reinbursements to railways corpioration)	93
Cultural projects	7
Urea formaldehyde foam insulation program	1,5
Unemployment insurance	295,8
Mobility program	2,8
Program delivery (Employment and Immigration)	1,3
Canada student loans program	5
Ferry services (financial support)	16,1
CN Marine (transport - financial support)	21,5
Canagrex (agriculture)	6,6
Canda oil substitution program (substitution of oil with renewable energies)	95
Canadian home insulation progrma	84
Canada rental supply plan	7,8
Cost recovery (higher fees)	192,7
Transfers	1429,7
Total Expenditure Review	2379,9
Deferral/cancellation of Capital projects: We suppose that these were the annual quotas of	of multi-vear in

Deferral/cancellation of Capital projects: We suppose that these were the annual quotas of multi-year investments. Hence the savings persist in the following years. Unemployment insurance: Employment pension income + separation payments + employment assistance and entitlement source: Expenditure and Programme review, November 1984

Calendar year - changes	1985	1886
Government Consumption, Salaries and Investments	712,65	237,55
Transfers	$1072,\!275$	357,425
Total Expenditure Review	1784,925	594,975

Table 4.3: Budget - May 1985 - Tax measures

	1985-86	1986-87	
Modified indexation	80	570	
Surtax on basic federal tax	60	550	
Elimination of the federal tax reduction	80	490	
Elimination of the RHOSP deduction		80	
5-per-cent surtax on corporations	175	285	
Eliminate stacking of grants and credits	30	55	
Tax on chartered banks and trust companies	10	100	
Small Business bond extension		-10	
Capital gains exemption (long term)	-300	-600	
Modification to pensions and RRSP (long term)		-40	
Other long term changes	-5	-35	
Direct taxes	130	1445	
Sales tax base broadening	275	510	
1-per-cent increase in sales tax rates	80	990	
Alcohol and tobacco excise tax changes	200	240	
Motive fuels tax increase	395	930	
Indirect Taxes	950	2670	
Source: May 1985 Budget. Table 3.1 p.19			
Change	1985-86	1986-87	
Direct	130	1315	
Indirect	950	1720	
Calendar year allocation	1985	1986	1987
Direct	97,5	1018,75	328,75
Indirect	712,5	1527,5	430

Table 4.4: Expenditure Reduction and Cost Recovery - May 1985 Budget

Fiscal years - millions of C\$	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Reduced contingencies	433	446	435	423	412	400
Public service rationalization	0	150	233	315	398	480
Consumption	433	596	667	738	809	880
Cost recovery	0	65	103	140	178	215
Economic program reductions (subsidies)	303	475	563	650	738	825
Modifications of indexing for old age security and family allowance	35	335	756	1178	1599	2020
Elimination of scientific research tax credit		100	100	100	100	100
Refundability of R&D investment tax credit		-125	-125	-125	-125	-125
Transfers	338	850	1396	1943	2489	3035
Transfers to provincial governments	0	0	500	1000	1500	2000
Others	0	0	500	1000	1500	2000

Source: Table 2 p.89, Table p.30, Table p. 36 of Budget Papers 1985. Energy, Mines and Resources were excludes since, according to Devries, they were motivated by cyclical considerations. Among the Management savings only those that had an accrual impact are taken into account. Changes are assumed to be equal among missing fiscal years

Changes	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	
Consumption	$\frac{180000}{433}$	163	71	71	71	71	-
Transfers	338	512	546	546	546	546	
Others	0	0	500	500	500	500	
Calendar	1985	1986	1887	1988	1989	1990	1991
Consumption	324,75	230,5	94	71	71	71	17,75
Transfers	253,5	468,5	537,6875	$546,\!25$	$546,\!25$	$546,\!25$	136,5625
Others	0	0	375	500	500	500	125

Canada 1986

Fiscal consolidation totaled 1.4 percent of GDP, with tax hikes of 0.97 percent of GDP and spending cuts of 0.43 percent of GDP.

REVENUES: C\$ 4.449 billion

Direct taxes C\$ 2.419 billion (unexpected: 0.705; announced: 1.714)

- C\$ 0.695 billion anticipated from the April 1983 Budget
- C\$ 1.019 billion anticipated from the May 1985 Budget
- C\$ 0.705 million from the Budget 1986 (unanticipated)

Indirect taxes C\$ 2.478 billion (unexpected: 0.724; announced: 1.754)

- C\$ 0.226 billion anticipated from the April 1983 Budget
- C\$ 1.528 billion anticipated from the May 1985 Budget
- C\$ 0.724 billion from the Budget 1986 (unanticipated)

Not yet classified C\$ -0.448 billion (announced: -0.448)

• Long run tax measures introduced in 1985 and worthing -0.448

SPENDING: C\$ 1.995 billion

Consumption C\$ 0.919 billion (unexpected: 0.45; announced: 0.469)

- C\$ 0.238 billion anticipated from the November 1984 Expenditure and Program review
- C\$0.231 billion anticipated from May Budget 1985
- C\$ 0.450 billion from the Budget 1986 (unanticipated)

Transfers C\$ 0.926 billion (anticipated: 0.926)

- C\$ 0.357 billion from the November 1984 Expenditure and Program review
- C\$ 0.469 billion anticipated from May Budget 1985
- C\$ 0.1 billion anticipated from April 1983 Budget

Other C\$ 0.15 billion (unexpected: 0.15)

 \bullet C\$ 0.15 billion from the 1986 Budget

Table 4.5: 1986 Budget - Revenues

	1986-87	1987-88	1988-89	1989-90	1990-91
Change to the tax treatment of dividends	0	-160	3	167	330
3-percent surtax on personal income	560	1050	1167		1400
Corporate tax reform	380	385	285		85
3-percent surtax on corporate income	0	420	442		485
Direct Taxes	940	1695	1897		2300
1-percent increase in federal sales tax rates	815	1050	1133		1300
4-percent increase in alcohol and 6-perent increase in tobacco excise taxes	150	150	150		150
Indirect Taxes	965	1200	1283		1450
Source: Table 3.3 p.42 of the fiscal Plan 1986					
Changes					
Direct Taxes	940	755	202		2300
Indirect Taxes	965	235	83		1450
Changes in calendar	1986	1987	1988	1989	
Direct Taxes	705	801,25	340	50	=
Indirect Taxes	723,75	417,5	121,25	21	

Table 4.6: Expenditure Measures Taken in the 1986 Budget

	1986-87	1987-88	1988-89		1990-91
Special Reduction in non-statutory spending	500	610	720		940
Defense	100	185	123		
Consumption	600	7 95	843		940
Changes to marital expemption during year of marriage	0	20	20		20
Reduction of investment tax credit and elimination of inventory allowance	0	25	77		180
Transfers	0	45	97		200
Official development assistance (foreign aid)	200	205	310		520
Other	200	205	310		520
Source: Table 2.2 p.26 of Budget 1986					
Reserve reductions are excluded from the count by Devries et al. (2011).					
Change	1986-87	1987-88	1988-89		
Consumption	600	195	48		
Transfers	0	45	52		
Other	200	5	105		
Change in Calendar	1986	1987	1988	1989	
Consumption	450	296,25	85	12	
Transfers	0	34	50	13	
Other	150	54	80	26	

Canada 1987

Fiscal consolidation of 0.74 percent of GDP, 0.3 percent spending cuts and 0.44 percent of GDP tax hikes. No measures of fiscal consolidation were announced in this year. Consolidation was a consequence of spending reducing and revenues enhancing measures introduced in the 1986, 1985 and 1983 Budgets and in the November 1984 Expenditure and Program review. In addition a Tax Reform was announced in June involving changes both in direct (lower tax rates but broadening the tax base) and indirect taxes (1987 IMF Staff Report, p. 12). According to Devries et al. the reform become effective starting from 1987. However the sources we consulted, in particular The White Paper Tax Reform 1987, report that the budgetary impact of the reform was from 1988 onwards. We decided to rely on this latter source and not to include the negative long run measures reported in Devries et al. for 1987. Hence in calendar year 1987, on the revenue side fiscal consolidation consisted in (for details on measures see tables):

REVENUES: C\$ 2.148

Taxes on Income, Profits, Capital Gains and Property C\$ 1.275 billion (announced: 1.275)

- C\$ 0.801 billion from measures in the February 1986 Budget
- C\$ 0.329 billion from measures in the May 1985 Budget
- C\$ 0.145 billion from measures in the 1983 Budget

Taxes on Goods and Services C\$ 0.873 billion (announced: 0.873)

- C\$ 0.418 billion from increase in Federal Sales Tax rate and in excises, February 1986 Budget
- C\$ 0.430 billion from measures in the May 1985 Budget
- C\$ 0.025 billion from measures in the 1983 Budget

On the spending side, fiscal consolidation consisted in:

SPENDING: C\$ 1.682 billion

Government Consumption, Salaries and Investments C\$ 0.391 billion (announced: 0.391)

- C\$ 0.297 billion from measures introduced in the February 1986 Budget
- C\$ 0.094 billion from measures announced in the May 1985 Budget

Transfers C\$ 0.862 billion (announced: 0.862)

- C\$ 0.034 billion from measures in the 1986 Budget
- C\$ 0.538 billion from measures in the May 1985 Budget
- C\$ 0.29 billion from measures in April 1983

Other C\$ 0.429 billion (announced: 0.429)

- C\$ 0.375 billion from cuts to transfers to local authorities the May 1985 Budget
- C\$ 0.054 billion from the 1986 Budget

Table 4.7: June 1987 Tax Refe	orm - First Stage				
	Fiscal year - million of C\$				
	1988-89	1989-90	1990-91	1991-92	
Net personal income tax reductions (tax rate reductions + broadening the tax base)	-1705	-3840	-2345	-2410	-
Net corporate income tax increases	530	625	1165	1525	
Tax liability management					
Accelleration of source deductions and qualterly instalments of personal tax	0	1100	0	0	
Tax on Properties, Income, Profits and Capital Gains	-1175	-2115	-1180	-885	
Changes to the federal sales tax (FST)	1225	1315	1380	1450	
Tax liability management					
Acceleration of sales and excise tax payments	1600	0	0	0	
Tax on Goods and sevices	2825	1315	1380	1450	
Increase in refundable sales tax credit by \$20 per adult and \$10 per child	-120	-150	-155	-160	
Transfers	-120	-150	-155	-160	
Increased payments under Established Program Financing and Equalization	-340	-360	-385	-395	
Other	-340	-360	-385	-395	
Source: The White Paper Tax Reform 1987, Table 5.1 (p. 75)					
Changes	1988-89	1989-90	1990-91	1991-92	
Tax on Properties, Income, Profits and Capital Gains	-1175	-940	935	295	-
Personal	-1705	-1035	395	-65	
Corporate	530	95	540	360	
Tax on Goods and sevices	2825	-1510	65	70	
Transfers	-120	-30	-5	-5	
Other	-340	-20	-25	-10	
	Calendar year - millions of C\$				
Changes	1988	1989	1990	1991	1992
Tax on Properties, Income, Profits and Capital Gains	-881,25	-998,75	466,25	455	73,75
Personal	-1278,75	-1202,5	37,5	50	-16,25
Corporate	397,5	203,75	428,75	405	90
Tax on Goods and sevices	2118,75	$-426,\!25$	-328,75	68,75	17,5
Transfers	-90	-52,5	-11,25	-5	-1,25
Other	-255	-100	-23,75	-13,75	-2,5

Canada 1988

Fiscal consolidation of 0.61 percent of GDP, 0.22 percent of GDP spending cuts and 0.39 percent of GDP tax hikes. The February 1988 Budget introduced tax hikes totally consisting in an increase in the excise tax on gasoline. In addition measures implemented in the 1985 and 1986 budgets and in the November 1984 Expenditure and Program review had a budgetary effect both on the revenues and on the tax side. In addition, the June 1987 Tax reform came into operation, generating lower revenues from direct taxes, more than compensated by the proceeds generated by the reform of sales tax. Hence, in calendar year 1988, on the revenue side fiscal consolidation consisted in (for details on measures see tables):

REVENUES: C\$ 2

Taxes on Income, Profits, Capital Gains and Property C\$ -0.541 billion (announced: -0.541)

- C\$ 0.340 billion from measures in the February 1986 Budget
- C\$ -0.881 billion from June 1987 Tax reform

Taxes on Goods and Services C\$ 2.545 billion (unexpected: 0.225; announced: 2.32)

- C\$ 0.225 billion from an increase in the excise on gasoline announced in the February 1988 Budget
- C\$ 0.121 billion from increase in Federal Sales Tax rate and in excises, February 1986 Budget

• C\$ 2.199 billion from June 1987 Tax reform

On the spending side, fiscal consolidation consisted in:

SPENDING: C\$ 0.987 billion

Government Consumption, Salaries and Investments C\$ 0.156 billion (announced: 0.156)

- C\$ 0.085 billion from measures introduced in the February 1986 Budget
- C\$ 0.071 billion from measures announced in the May 1985 Budget

Transfers C\$ 0.506 billion (unexpected: 0.506)

- C\$ 0.05 billion from measures in the 1986 Budget
- C\$ 0.546 billion from measures in the May 1985 Budget
- C\$ -0.09 billion from June 1987 Tax reform

Other C\$ 0.325 billion (unexpected: 0.325)

- C\$ 0.500 billion from cuts to transfers to local authorities the May 1986 Budget
- \bullet C\$ -0.255 billion from June 1987 Tax reform
- C\$ 0.08 billion from the 1986 Budget

Table 4.8: February 1988 Budget - Revenue Measures

Total Amounts - Calendar Year (millions of dollars)	1988	1989	1990
Increase in excise tax on gasoline	225	300	300
Taxes on goods and services	225	300	300
Total February 1988 Budget	225	300	300

Source: The Budget Papers, 10 February 1988, Table V (p.27). There were some other revenue measures but they had small budgetary impact. We excluded the impact of National Strategy on Child Care since there were addicional changes of this policy after the budget release.

	1988	1989	1990	
Taxes on goods and services	225	75	0	Ī

Canada 1989

Fiscal consolidation totaled 0.56 percent of GDP, 0.33 percent of GDP spending cuts and 0.23 percent of GDP tax hikes. The April 1989 Budget contained some measure that both reduced spending and increased revenues. Moreover policies announced in the 1988 and 1986 Budgets generated some additional savings, partially offset by the implementation of the June 1987 Tax reform. In calendar year 1989, on the revenue side fiscal consolidation consisted in (for details on measures see tables):

REVENUES: C\$ 1.594 billion

Taxes on Income, Profits, Capital Gains and Property C\$ 0.187 billion (unexpected: 1.136; announced: -0.949)

- C\$ 1.136 billion from measures in the April 1989 Budget, mainly consisting in changes in unemployment benefit contribution
- C\$ 0.05 billion from measures in the February 1986 Budget
- C\$ -0.999 billion from June 1987 Tax reform

Taxes on Goods and Services C\$ 1.208 billion (unexpected: 1.538; announced: -0.33)

- C\$ 1.538 billion from measures in the April 1989 Budget, mainly consisting in changes to Federal Sales Tax
- C\$ 0.075 billion from an increase in the excise on gasoline announced in the February 1988 Budget

- C\$ 0.021 billion from increase in Federal Sales Tax rate and in excises, February 1986 Budget
- C\$ -0.426 billion from June 1987 Tax reform

Other C\$ 0.199 billion (unexpected: 0.199)

• C\$ 0.199 billion from an increase in other revenues coming from other measures in the April 1989 Budget

On the spending side, fiscal consolidation consisted in:

SPENDING: C\$ 2.126 billion

Government Consumption, Salaries and Investments C\$ 0.589 billion (unexpected: 0.506; announced: 0.083)

- C\$ 0.506 billion from measures in the April 1989 Budget
- C\$ 0.012 billion from measures introduced in the February 1986 Budget
- C\$ 0.071 billion from measures announced in the May 1985 Budget

Transfers C\$ 0.773 billion (unexpected: 0.083; announced: 0.506)

- C\$ 0.083 billion from April 1989 Budget
- C\$ -0.053 billion from June 1987 Tax reform
- C\$ 0.013 billion from measures in the 1986 Budget
- C\$ 0.546 billion from measures in the May 1985 Budget

Other C\$ 0.764 billion (unexpected: 0.338; announced: 0.426)

- C\$ 0.338 billion from cuts to transfers to local authorities and foreign governments in the April 1989 Budget
- \bullet C\$ -0.1 billion from June 1987 Tax reform
- C\$ 0.500 billion from cuts to transfers to local authorities the May 1985 Budget
- C\$ 0.026 billion from the 1986 Budget

Table 4.9: April 1989 Budget - Revenue Measures

Total amounts - Fiscal Years (millions of dollars)	1989-90	1990-91	
Increase in Personal Income surtax	590	1040	-
High income surtax	90	160	
Large corporations tax and modification to surtax	410	970	
Elimination of government financing of unemployment Insurance (increase in unemployment contributions paid by employer and employee)	425	1900	
Taxes on Income, Profits, Capital Gains and Property	1515	4070	
Changes in General Federal Sales Tax	1140	1615	
Tax on contruction materials	40	255	
Telecomunications tax	80	110	
Tax on Tobacco and alcohol	55	70	
Withdrawal of interim sales tax measures	-520	-370	
Increase of Excise levy on Gasoline	360	655	
Increase of Excise levy on Tobacco	895	970	
Taxes on Goods and Services	2050	3305	
Other tax measures	265	40	
Other	265	40	
Total April 1989 Budget - Revenue Measures	3830	7415	
Source: The Budget Papers, 27 April 1989			
Changes - Fiscal Years (millions of dollars)	1989-90	1990-91	
	1515	2555	-
Taxes on Goods and Services	2050	1255	
Other	265	-225	
Changes - Calendar Years (millions of dollars)	1989	1990	1
	1136,25	2295	6
Taxes on Goods and Services	1537,5	1453,75	3
Other	198,75	-102,5	-5

Table 4.10: April 1989 Budget - Spending Measures

Total amounts - Fiscal Years (millions of dollars)	1989-90	1990-91
Unsolicited Proposal program	10	20
Public works Canada capital deferral	20	20
Newfoundland prison	7	14
Conservation and Renewable Energy Offices	10	9
Tourism marketing	0	5
Automated cheque deposit (cost of printing and mailing)	0	3
Canada Oil and Gas Lands Administration (areas of federal responsibility)	2	2
Branchline Rehabilitation Program	46	2
National Capital Commission	5	5
Defense	575	611
Government Consumption, Salaries and Investments	675	691
Repayment of social transfers	0	215
At and East subsidies	20	40
Prairie Grain Advance Payment	27	27
Canadian Explorationa and Development incentive program	80	0
Grants and Contributions from the Secretary of State	10	16
Dairy export subsidy	5	7
VIA Rail	50	75
Residential Rehabilitation Assistance Program	21	49
Publications distribution assistance	10	45
Canadian Broadcasting Corporation	0	20
Federal Business Development Bank	13	13
Commodity-based loans	6	9
Canadian Dairy commission	3	7
Increase in Refundable sales tax credit	-135	-465
Transfers	110	58
Established programs financing (transfers to provinces)	0	200
Crop-insurance cist sharing (with provinces)	90	110
Official Development assistance (to foreing governments)	360	360
Other	450	670
Total April 1989 Budget - Spending Measures	1235	1419

Source: The Budget Papers, 27 April1989, Table A-2 (p.8). We excluded the impact of the Chicld Care bill since it was never implemented.

Changes - Fiscal Years (millions of dollars)	1989-90	1990-91
Government Consumption, Salaries and Investments	675	16
Transfers	110	-52
Other	450	220
Changes - Calendar years (millions of dollars)	1989	1990
Changes - Calendar years (millions of dollars) Government Consumption, Salaries and Investments	$\frac{1989}{506,25}$	1990 180,75
Government Consumption, Salaries and Investments	506,25	180,75

Canada 1990

Fiscal consolidation of 0.84 percent of GDP, 0.41 percent of GDP spending cuts and a tax hikes of 0.43 percent of GDP. Fiscal consolidation in 1990 was, as usual, a combination of new spending reduction measures introduced in the December 1989 *Update* and in the February 1990 Budget and of policy initiatives both on the revenues and on the expenditure side undertaken in April 1989 Budget. Additional measures motivated by long-run considerations and introduced in previous years yielded some additional saving. The principal of these was the phase-in of the Sales Tax Reform (second stage of the Tax Reform). Hence, on the revenue side fiscal consolidation consisted in (for details on measures see tables):

REVENUES: C\$ 2.593

Taxes on Income, Profits, Capital Gains and Property C\$ 2.779 billion (unexpected: 0.038; announced: 2.741)

- C\$ 0.038 billion from 1990 Sales Tax reform
- C\$ 2.295 billion from measures in the April 1989 Budget, mainly consisting in changes in unemployment benefit contribution
- C\$ 0.446 billion from June 1987 Tax reform

Taxes on Goods and Services C\$ -0.083 billion (unexpected: -1.208; announced: 1.125)

- C\$ -1.208 billion from 1990 Sales Tax reform
- C\$ 1.454 billion from measures in the April 1989 Budget, mainly consisting in changes to Federal Sales Tax
- C\$ -0.329 billion from June 1987 Tax reform

Other C\$ -0.103 billion (announced: -0.103)

• C\$ -0.103 billion from a decrease in revenues coming from other measures in the April 1989 Budget

On the spending side fiscal consolidation consisted in (for details on measures see tables):

SPENDING: C\$ 2.465 billion

Government Consumption, Salaries and Investments C\$ 0.54 billion (unexpected: 0.288; announced: 0.252)

- C\$ 0.299 billion from measures in the February 1990 Budget
- C\$ -0.011 billion from 1990 Sales Tax reform
- C\$ 0.181 billion from measures in the April 1989 Budget
- C\$ 0.071 billion from measures announced in the May 1985 Budget

Transfers C\$ 0.179 billion (unexpected: -0.344; announced: 0.27)

- C\$ 0.106 billion from measures in the February 1990 Budget
- C\$ -0.450 billion from 1990 Sales Tax reform
- C\$ -0.012 billion from April 1989 Budget
- C\$ -0.011 billion from June 1987 Tax reform
- C\$ 0.546 billion from measures in the May 1985 Budget

Not Yet Classified C\$ 0.185 billion (unexpected: 0.185)

• C\$ 0.185 billion from spending measures in the December 1989 Update (not clear what kind of spending)

•

Other C\$ 1.561 billion (unexpected: 0.807; announced: 0.754)

- C\$ 0.807 billion from cuts to transfers to local authorities and foreign governments in the February 1990 Budget
- C\$ 0.278 billion from cuts to transfers to local authorities and foreign governments in the April 1989 Budget
- C\$ -0.024 billion from June 1987 Tax reform
- C\$ 0.500 billion from cuts to transfers to local authorities the May 1986 Budget

Table 4.11: December 1989 Update/ February 1990 budget - Spending Measures

Total amounts - Fiscal Years (millions of dollars)	1990-91	1991-92	1992-93	1993-94	1994-95
Science and Technology grants and contributions (National Research Council)	38	1	0	0	0
Indian and Inuit Programs for economic development	50	50	0	0	0
Defense	210	270	59	59	59
Small craft harbors (federally owned)	4	5	7	7	7
Icebreaking program (Polar 8)	84	62	76	76	76
OSLO (Other Six Leases Operations) program for development of oil sands deposits	0	46	185	185	185
Management efficiencies	12	24	173	173	173
Government Consumption, Salaries and Investments	398	458	500	500	500
Canadian Broadcasting corporation	5	15	0	0	0
Telefilm Canada	6	7	0	0	0
Export Development Corporation	25	50	8	8	8
Marine Atlantic (subsidies for ferry services)	4	5	5	5	5
Grants and contributions from the Secretary of State	23	23	22	22	22
Grants and contributions from the Department of National Health and Welfare	12	12	7	7	7
Social Housing (Canada Mortgage and Housing Corp.)	16	35	38	38	38
Canadia Exploration Incentives Program	50	125	212	212	212
Transfers	141	272	292	292	292
December 1989 expenditure reductions and management improvements	246	450	703	703	703
Not Yet Classified	246	450	703	703	703
Canada Assistance Plan to non-equalization-receiving provinces	75	80	0	0	0
Official Development Assistance (Transfers to foreign governments)	116	190	84	84	84
Established Programs Financing (Transfers to provinces)	869	1541	1651	1651	1651
Public Utilities Income Tax Transfer act (Transfer to provinces)	16	34	0	0	0
Other	1076	1845	1735	1735	1735
Total Expenditure Reductions and Management Initiatives	1861	3025	3230	3230	3230

Total Expenditure Reductions and Management Initiatives 1861 3025 3230 3230 3230 Source: The Budget Plan, 20 February 1990. Budgetary impact for F.Y.s 1992-93 to 1994-95 are calculated assuming that the cuts where distributed evenly across these fisca years. Crown corporations and agencies" are not included since they consist in sales of state assets. "Enahanced collection of accounts receivable" and "accelleration of Bank of Canada remittances" are not included sinche they had no impact under accrual accounting.

Changes - Fiscal Years (millions of dollars)	1990-91	1991-92	1992-93	1993-94	1994-95	
Government Consumption, Salaries and Investments	398	60	42	0	0	
Transfers	141	131	20	0	0	
Not Yet Classified	246	204	253	0	0	
Other	1076	769	-110	0	0	
Changes - Calendar Year (millions of dollars)	1990	1991	1992	1993	1994	1995
Government Consumption, Salaries and Investments	298,5	144,5	46,5	10,5	0	0
Transfers	105,75	133,5	47,75	5	0	0
Not Yet Classified	184,5	214,5	240,75	63,25	0	0
Other	807	845.75	109.75	-27.5	0	0

Table 4.12: Tax Reform - Second stage - Sales Tax Reform (Announced in 1990 Budget)

Fiscal year - millions of C\$	1990-91	1991-92	1992-93	
Revenue measures				
Personal				
Increase in high income surtax	35	160	190	
Corporate				
Increase in large corporations tax	15	155	160	
Taxes on Income, Profits and Capital Gains	50	315	350	
Net GST Revenues	2700	20755	21935	
Elimination of existing FTS and miscellaneous excise taxes	-3110	-18970	-20430	
Transitional Impacts				
FTS inventory rebates	-1200	-1100	0	
Small business transitional grants	0	-900	0	
Taxes on Goods and Services	-1610	-215	1505	
Expenditure measures				
Administration costs	-260	-365	-380	
Expenditure reductions	246	450	700	
Consumption	-14	85	320	
Enhanced GST credit	0	-1270	-1290	
Transitional Impacts				
Prepayment of GTS credit	-600	0	0	
Transfers	-600	-1270	-1290	
Source: The Budget, February 1990, Table A.5.1 (p.135)				
Changes	1990-91	1991-92	1992-93	
Taxes on Income, Profits and Capital Gains	50	265	35	
Taxes on Goods and Services	-1610	1395	1720	
Consumption	-14	99	235	
Transfers	-600	-670	-20	
Calendar year allocation	1990	1991	1992	1993
Taxes on Income, Profits and Capital Gains	37,5	211,25	92,5	8,75
Taxes on Goods and Services	-1207,5	643,75	1638,75	430
Consumption	-10,5	70,75	201	58,75
Transfers	-450	-652,5	-182,5	-5
	100	002,0	102,0	9

Canada 1991

Fiscal consolidation totaled 0.65, 0.28 percent of GDP spending cuts, 0.37 of GDP revenue increase.

New measures of spending restraint were introduced in the February 1991 Budget. Additional savings in the year came from policy changes announced in the April 1989 Budget and in the December 1989 Update/ February 1990 Budget. Finally during the year the Sales Tax Reform came into operation generating some spending increase. Hence in calendar year 1991,

On the revenue side fiscal consolidation consisted in (for details on measures see tables):

REVENUES: C\$ 2.276 billion

Taxes on Income, Profits, Capital Gains and Property C\$ 1.306 billion (announced: 0.1.306)

- C\$ 0.212 billion from 1990 Sales Tax reform
- C\$ 0.639 billion from measures in the April 1989 Budget, mainly consisting in changes in unemployment benefit contribution
- \bullet C\$ 0.455 billion from June 1987 Tax reform

Taxes on Goods and Services C\$ 1.026 billion (announced: 1.026)

- C\$ 0.644 billion from 1990 Sales Tax reform
- C\$ 0.314 billion from measures in the April 1989 Budget, mainly consisting in changes to Federal Sales Tax
- C\$ 0.069 billion from June 1987 Tax reform

Other C\$ -0.056 billion (announced: -0.056)

• C\$ -0.056 billion from a decrease in revenues coming from other measures in the April 1989 Budget

On the spending side, fiscal consolidation consisted in (for details on measures see Tables):

SPENDING: C\$ 1.828 billion

Government Consumption, Salaries and Investments C\$ 0.945 billion (unexpected: 0.725; announced: 0.22)

- C\$ 0.707 billion from measures in the February 1991 Budget
- C\$ 0.145 billion from measures in the February 1990 Budget
- C\$ 0.071 billion from 1990 Sales Tax reform
- \bullet C\$ 0.004 billion from measures in the April 1989 Budget
- C\$ 0.018 billion from measures announced in the May 1985 Budget (unexpected since more than 5 years)

Transfers C\$ billion C\$ -0.344 billion (unexpected: 0.193; announced: -0.537)

- C\$ 0.056 billion from measures in the February 1991 Budget
- C\$ 0.134 billion from measures in the February 1990 Budget
- C\$ -0.653 billion from 1990 Sales Tax reform
- C\$ -0.013 billion from measures in the April 1989 Budget
- \bullet C\$ -0.005 billion from June 1987 Tax reform
- C\$ 0.137 billion from measures in the May 1985 Budget (unexpected since more than 5 years)

Not Yet Classified C\$ 0.215 billion (announced: 0.215)

• C\$ 0.215 billion from spending measures in the December 1989 Update (not clear what kind of spending)

•

Other C\$ 1.012 billion (unexpected: 0.125; announced: 0.887)

- C\$ 0.846 billion from cuts to transfers to local authorities and foreign governments in the February 1990 Budget
- C\$ 0.055 billion from cuts to transfers to local authorities and foreign governments in the April 1989 Budget
- C\$ -0.014billion from June 1987 Tax reform
- C\$ 0.125 billion from cuts to transfers to local authorities the May 1986 Budget (unexpected since more than 5 years)

Total amounts - Fiscal Years (millions of dollars)	1991-92	1992-93	1993-94	1994-95	1995-96
Operating Budgets (government management of human and financial resources)	685	720	745	745	745
Canadian Jobs Strategy (expenditures in training)	100	0	0	0	0
Canada Mortgage and Housing (social housing contruction)	32	71	102,7	102,7	102,7
Green Plan funding from 5 to 6 years	125	100	125	125	125
Government Consumption, Salaries and Investments	942	891	972,7	972,7	972,7
Canadian Film Development Corporation	0	7	7	7	7
Export Development Corporation	0	25	25	25	25
Grants and Contributions	75	125	125	125	125
Transfers	75	157	157	157	157
Cananda Assistance Plan for non-equalization-receiving provinces	0	365	590	590	590
Official Development Assistance (Transfers to foreign governments)	0	262	449,4	449,4	449,4
Established Programs Financing (Transfers to provinces)	0	338	667,4	667,4	667,4
Public Utilities Income Tax Tranfer act (Transfer to provinces)	0	48	87,7	87,7	87,7
Other	0	1013	1794,5	1794,5	1794,5
Total Expenditure Control Plan Savings	1017	2061	2924,2	2924,2	2924,2

Source: The Budget Plan, 26 February 1991. Budgetary impact for F.Y.s 1993-94 to 1995-96 are calculated assuming that the cuts where distributed evenly across fiscla years. For details on Green Plan see "Canada's Green Plan" by Robert J. P. Gale.

Changes - Fiscal Years (millions of dollars)	1991-92	1992-93	1993-94	1994-95	1995-96	
Government Consumption, Salaries and Investments	942	-51	81,7	0	0	_
Transfers	75	82	0	0	0	
Other	0	1013	781,5	0	0	
Changes - Calendar Years (millions of dollars)	1991	1992	1993	1994	1995	1996
Government Consumption, Salaries and Investments	706,5	197,25	48,525	20,425	0	0
Transfers	$56,\!25$	80,25	20,5	0	0	0
Other	0	759,75	839,375	$195,\!375$	0	0

Canada 1992

Fiscal consolidation of 0.42 percent of GDP, 0.16 percent of GDP spending cuts, 0.26 tax hikes. In this year fiscal consolidation exclusively consisted in measures announced in previous budgets. Namely the December 1989 Update, the February 1990 Budget and the February 1991 budget contained policy changes for fiscal year 1991-92 and 1992-93 that reduced the size of the spending. In addition the 1991 Sales Tax reform generated some budgetary saving. However in the same year a reform of the tax credit system was introduced, entailing an increase in spending (transfers). Thus, in calendar year 1992, on the revenues side the following measures came into operation:

REVENUES: C\$ 1.824 billion

Income, Profits and Capital Gains C\$ 0.167 billion (announced: 0.167)

- C\$ 0.093 billion from 1990 Sales Tax reform
- C\$ 0.074 billion from June 1987 Tax reform

Taxes on goods and services C\$ 1.657 billion (announced: 1.657

- C\$ 1.639 billion from 1990 Sales Tax reform
- C\$ 0.018 billion from June 1987 Tax reform

On the spending side fiscal consolidation consisted in (for detail see tables ?? and ??):

SPENDING: C\$ 1.343 billion

Government Consumption, Salaries and Investments C\$ 0.446 billion (announced: 0.446)

- C\$ 0.198 billion from measures in the February 1991 Budget
- C\$ 0.047 billion from measures in the February 1990 Budget
- C\$ 0.201 billion from 1990 Sales Tax reform

Transfers C\$ billion -0.457 (unexpected: -0.401; announced: -0.056)

- C\$ -0.401 billion from 1992 Unified tax credit act
- C\$ 0.080 billion from measures in the February 1991 Budget
- C\$ 0.048 billion from measures in the February 1990 Budget

- C\$ -0.183 billion from 1990 Sales Tax reform
- C\$ -0.001 billion from June 1987 Tax reform

Not Yet Classified C\$ 0.487 billion (announced: 0.487)

• C\$ 0.241 billion from spending measures in the December 1989 Update (not clear what kind of spending)

Other C\$ 0.87 billion (announced: 0.87)

- C\$ 0.76 billion from cuts to transfers to local authorities and foreign governments introduced in the February 1991 Budget for fiscal year 1992-93
- C\$ 0.11 billion from cuts to transfers to local authorities and foreign governments in the February 1990 Budget
- C\$ -0.003 billion from June 1987 Tax reform

Table 4.14:1992 Unified Child Tax Credit - Budget

Fiscal years - Millions of C\$	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	5 year impact
D		215	000	200	200	2000
Restructuring child benefits	-520	-645	-308	-308	-308	-2090
Increase child care expense deduction	0	-10	-42	-42	-42	-135
Treat common Law as married -Income tax Act	0	180	268	268	268	985
Tax assistance for education	-10	-25	-25	-25	-25	-110
Measures for the disabled	-5	-15	-18	-18	-18	-75
Transfers	-535	-515	-125	-125	-125	-1425
source: The Budget Papers, Table 3.8, p. 93						
Changes	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	
Transfers	-535	20	390	0	0	-
Calendar year allocation	1992	1993	1994	1995	1996	1997
Transfers	-401,25	-118,75	297,5	97,5	0	0

Canada 1993

Fiscal consolidation totaled 0.43 percent of GPD, 0.37 percent of GDP spending cuts and 0.06 tax hikes. In December 1992 new measures of fiscal consolidation on the spending side were announced in the Economic Statement and the April 1993 Budget contained some additional spending cuts. Moreover policies announced in the 1991 and 1990 budget had some impact in fiscal years 1992-93 and 1993-94. Finally the introduction of the Unified Child Tax Benefit in February 1992 implied in the year a reduction in spending. Thus in calendar year 1993, on the revenues side the following measures came into operation:

REVENUES: C\$ 0.439 billion

Income, Profits and Capital Gains C\$ 0.009 billion (announced: 0.009)

 \bullet C\$ 0.009 billion from 1990 Sales Tax reform

Goods and services C\$ 0.430 billion (announced: 0.43)

• C\$ 0.430 billion from 1990 Sales Tax reform

On the spending side, fiscal consolidation consisted in (for details on measures see tables):

SPENDING: C\$ 2.586 billion

Government Consumption, Salaries and Investments C\$ 0.897 billion (unexpected: 0.778; announced: 0.119)

- C\$ 0.778 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ 0.049 billion from measures in the February 1991 Budget
- C\$ 0.011 billion from measures in the February 1990 Budget

• C\$ 0.059 billion from 1990 Sales Tax reform

Transfers C\$ 0.662 billion (unexpected: 0.76; announced: -0.098)

- C\$ 0.76 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ -0.119 billion from 1992 Unified tax credit act
- C\$ 0.021 billion from measures in the February 1991 Budget
- C\$ 0.005 billion from measures in the February 1990 Budget
- C\$ -0.005 billion from 1990 Sales Tax reform

Not Yet Classified C\$ 0.063 billion (announced: 0.063)

• C\$ 0.063 billion from spending measures in the December 1989 Update (not clear what kind of spending)

•

Other C\$ billion 0.964 (unexpected: 0.153; announced: 0.811)

- C\$ 0.153 from cuts to regional development funding introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ 0.839 billion from cuts to transfers to local authorities and foreign governments introduced in the February 1991 Budget for fiscal year 1992-93 and 1993-94
- C\$ -0.028 billion from lower cuts to transfers to local authorities and foreign governments in the February 1990 Budget

Table 4.15: December 1992 Economic Statement- April 1993 Budget - Spending Measures

Total amounts - Fiscal Years (millions of dollars)	1993-94	1994-95	1995-96	1996-97	1997-98
Departmental operating budget cuts	998	1217	1772	1772	2072
University research councils	39	73	136	136	166
Government Consumption, Salaries and Investments	1037	1290	1908	1908	2238
Transportation subsidies	66	98	106,5	106,5	109
Cultural subsisdies	33	33	57	57	66
Reduction in other grants and contributions	356	386	527	527	598
VIA Rail	0	0	75	75	100
Canadian Broadcasting Corporation	0	0	75	75	100
Social Housing (Canada Mortgage and Housing Corp.)	8	59	153	153	227
Unemployment insurance benefits	550	1000	1000	1000	1000
Transfers	1013	1576	1993,5	1993,5	2200
Regional development funding	204	230	285,5	285,5	415
Other	204	230	285,5	285,5	415
Total Dec 1992 Econ statement/April 1993 Budeget	2254	3096	4187	4187	4853
Source: The Budget Plan, 23 April 1993 (p. 51). Budgetary impact for	F.Y.s 1995-9	6 to 1996-97	are calculat	ed assuming	that cuts were distributed evenly across the two fiscal years.
Changes - Fiscal Years (millions of dollars)	1993-94	1994-95	1995-96	1996-97	1997-98
Government Consumption, Salaries and Investments	1037	253	618	0	330
Transfers	1013	563	417,5	0	206,5

Changes - Fiscal Years (millions of dollars)	1993-94	1994-95	1995-96	1996-97	1997-98
Government Consumption, Salaries and Investments	1037	253	618	0	330
Transfers	1013	563	417,5	0	206,5
Other	204	26	55,5	0	129,5
Changes - Calendar Years (millions of dollars)	1993	1994	1995	1996	1997
Government Consumption, Salaries and Investments	777,75	449	526,75	154,5	247,5
Transfers	759,75	675,5	$453,\!875$	$104,\!375$	154,875
Other	153	70,5	48,125	13,875	97,125

Canada 1994

Fiscal consolidation of 0.52 percent of GDP, 0.46 percent of GDP spending cuts, 0.06 percent of GDP tax hikes. In February 1994 the new budget for fiscal year 1994-95 introduced a new plan of spending cuts and tax increases over a five year period. In addition measures announced in the 1991 and 1993 budgets and the 1992 unified child benefit act generated some additional savings. Hence, in calendar year 1994, fiscal consolidation consisted in, on the revenues side, consolidation consisted in (for details see tables):

REVENUES: C\$ 0.431 billion

Taxes on Income, Profits, Capital Gains and Properties C\$ 0.431 (unexpected: 0.431)

• C\$ 0.431 billion from personal and business tax hikes introduced in the February 1994 Budget

On the spending side (for details see tables):

SPENDING:C\$ 3.284 billion

Government Consumption, Salaries and Investments C\$ 1.379 billion (unexpected: 0.91; announced: 0.469)

- C\$ 0.91 billion from measures introduced in the February 1994 budget
- C\$ 0.449 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ 0.020 billion from measures in the February 1991 Budget

Transfers C\$ 1.639 billion (unexpected: 0.665; announced: 0.974)

- C\$ 0.665 billion from measures introduced in the February 1994 budget
- C\$ 0.676 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ 0.298 billion from 1992 Unified tax credit act

Other C\$ billion 0.334 (unexpected: 0.068; announced: 0.266)

- C\$ 0.068 from cuts to international assistance and to transfers to provinces contained in the February 1994 Budget
- C\$ 0.071 billion from cuts to regional development funding introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ 0.195 billion from cuts to transfers to local authorities and foreign governments introduced in the February 1991 Budget for fiscal year 1993-94

Table 4.16: February 1994 Budget - Tax base broadening measures

Millions of dollars - Fiscal year	1994-95	1995-96	1996-97	
A. Personal income tax measures				
Tax employer-paid private group life insurance premiums	120	200	200	
Eliminate \$100,000 Lifetime Capital Gains Exemption	30	415	340	
Income-tested age credit	20	170	300	
B. Business income tax measures				
Business meals and entertainment expenses	235	245	260	
Eliminate preferential tax rate for large private corporations	15	40	40	
Securities held by financial institutions	60	60	60	
Regional Investment Tax Credits	0	80	95	
Private Corporations Dividends	0	40	40	
Reserves of insurance companies	30	35	35	
Energy conservation and pollution abatement equipment	10	25	45	
Other tightening measures	55	85	95	
Taxes on Income, Profits, Capital Gains and Properties	575	1395	1510	
Source: The budget plan February 1994, Table 10 (p. 43)				
Changes (millions of dollars) - Fiscal Years	1994-95	1995-96	1996-97	
Taxes on Income, Profits, Capital Gains and Properties	575	820	115	•
Changes (millions of dollars) - Calendar Year	1994	1995	1996	1997
Taxes on Income, Profits, Capital Gains and Properties	431,25	758,75	291,25	28,75

Table 4.17: February 1994 Budget - Restructuring government programs

Fiscal years -(millions of dollars)	1994-95	1995-96	1996-97	-
Cut in operating budgets	400	620	620	
Cuts in budgets for Ministerial staff/PMO	13	13	13	
Cuts in budgets for Parliament (proposed)	5	5	5	
Reduction in wage bill	50	510	940	
Cancellation of EH-101 helicopters	395	654	657	
Additional defense cuts	350	425	759	
Government Consumption, Investment and Salaries	1213	2227	2994	
Business transfers to Regional agencies/indutry Canada	69	141	140	
Business transfers to other departments	48	59	54	
Reduction in other grants and contributions	45	49	42	
Unemployment insurance	725	2400	2400	
Transfers	887	2649	2636	
International assistance	91	132	173	
Social security transfers to provinces	0	466	1540	
Other	91	598	1713	
Total February 1992 Budget - Spending measures	2191	5474	7343	
Source: The budget plan February 1994, Table 8 (p.34)				
Changes (millions of dollars) - Fiscal years	1994-95	1995-96	1996-97	
Government Consumption, Investment and Salaries	$\frac{1994-95}{1213}$	1014	767	
Transfers	887	1762	-13	
Other	91	507	-13 1115	
Other	91	301	1110	
Changes (millions of dollars) - Calendar year	1994	1995	1996	1997
Government Consumption, Investment and Salaries	909,75	1063,75	828,75	191,75
Transfers	$665,\!25$	$1543,\!25$	430,75	-3,25
Other	$68,\!25$	403	963	278,75

Canada 1995

Fiscal consolidation of 1.12 percent of GDP, 0.93 percent of GDP spending cuts, 0.19 percent of GDP tax hikes. Measures implemented in the year were motivated by the necessity to reduce the "dangerous" deficit, as explained in the 1995 Budget Speech. The 1995 Budget contained a new plan of fiscal consolidation worthing C\$ 4.8 billion in the fiscal year 1995-1996 (3.9 spending cuts, 0.9 tax hikes). In addition, during the fiscal year measures announced in the previous budgets become effective. Thus, in calendar year 1995, On the revenues side, consolidation consisted in (for details see tableS):

REVENUES: C\$ 1.464 billion

Taxes on Income, Profits, Capital Gains and Properties C\$ 1.04 billion (unexpected: 0.281; announced: 0.759)

- \bullet C\$ 0.281 billion from personal and business tax hikes (and lower tax credit) introduced in the February 1995 Budget
- C\$ 0.759 billion from personal and business tax hikes introduced in the February 1994 Budget

Taxes on Goods and Services C\$ 0.424 billion (unexpected: 0.424)

• C\$ 0.424 from increase in excises on Tobacco and Gasoline introduced in the February 1995 Budget

On the spending side fiscal consolidation consisted in (for details see tables)

SPENDING: C\$ 7.038 billion

Government Consumption, Salaries and Investments C\$ 2.427 (unexpected: 0.836; announced: 1.591)

• C\$ 0.836 billion from measures introduced in the February 1995 Budget

- C\$ 1.064 billion from measures introduced in the February 1994 budget
- C\$ 0.527 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget

Transfers C\$ 3.642 billion (unexpected: 1.547; announced: 2.095)

- C\$ 1.547 billion from measures introduced in the February 1995 Budget
- \bullet C\$ 1.543 billion from measures introduced in the February 1994 budget
- C\$ 0.454 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ 0.098 billion from 1992 Unified tax credit act

Other C\$ billion 0.969 (unexpected: 0.518; announced: 0.451)

- C\$ 0.518 billion from cuts in transfers to provinces and to foreign countries introduced in the February 1995 Budget
- \bullet C\$ 0.403 billion from cuts to international assistance and to transfers to provinces contained in the February 1994 Budget
- C\$ 0.048 billion from cuts to regional development funding introduced in the December 1992 Economic Statement/ April 1993 budget

Table 4.18: 1995 Budget - Total impact of tax measures

Fiscal year - (millions of dollars)	1995-96	1996-97	1997-98	
Measures to increase fairness and tighten the tax system				-
Improving fairness in tax-assisted retirement saving	15	95	160	
Additional tax on investment income of private corporations	40	120	120	
Eliminate deferral of tax on business income	0	170	300	
Restrict SR&ED tax incentives	0	15	15	
Increases in tax rates:				
Corporate				
Large corporations tax	145	155	160	
Corporate surtax	115	115	120	
Temporary capital tax increase for large deposit-taking institutions	60	40	0	
Taxes on Income, Profits, Capital Gains and Properties	375	710	875	
Tobacco	65	65	65	
Gasoline	500	500	500	
Taxes on Goods and Services	565	565	565	
Total	940	1275	1440	
Source: Budget plan 1995, Table 4.5, p. 64				
Changes - Fiscal year	1995-96	1996-97	1997-98	
Taxes on Income, Profits, Capital Gains and Properties	375	335	165	-
Taxes on Goods and Services	565	0	0	
Changes - Calendar year	1995	1996	1997	1998
Taxes on Income, Profits, Capital Gains and Properties	281,25	345	207,5	41,2
Taxes on Goods and Services	423,75	$141,\!25$	0	0

Table 4.19: February 1995 Budget- Spending Measures

Millions of dollars - Fiscal year	1995-1996	1996-1997	1997-1998	
General Government Services	232	391	523	-
Expenditure Management System	150	150	150	
Defense/Emergency Preparedness	350	557	1033	
Parliament/Governor General	3	8	15	
Justice and Legal Programs	32	59	75	
Infrastructure	200	0	0	
Indian Affairs and Northern Development	5	97	177	
Heritage and Cultural Programs	142	274	387	
Government Consumption, Salaries and investments	1114	1536	2360	
Human Resources Development	600	1100	1100	
Veterans Affairs	59	61	62	
Subsidies to Natural Resource Sector	328	380	581	
Transport	555	953	1111	
Subsidies to Industry	93	148	212	
Science and Technology Agencies	71	108	142	
Regional Agencies	144	220	227	
Citizenship and Immigration	100	69	103	
Health	49	138	201	
Canada Mortgage and Housing	64	115	128	
Transfers	2063	3292	3867	
PUITTA	200	276	280	
Foreign Affairs and International Assistance	490	515	711	
Other Program Review (unallocated)		250		
Other	690	1041	991	
Total February 1995 Budget	3867	5869	7218	
Source: Budget Plan February 1995, Table 4.1 (p. 35)				
Changes (millions of dollars)- Fiscal year	1995-1996	1996-1997	1997-1998	
Government Consumption, Salaries and investments	1114	422	824	•
Transfers	2063	1229	575	
Other	690	351	-50	
Changes (millions of dollars)- Calendar year	1995	1996	1997	1998
Government Consumption, Salaries and investments	835,5	595	723,5	206
Transfers	$1547,\!25$	1437,5	738,5	143,75
Other	517,5	435,75	50,25	-12,5

Canada 1996

Fiscal consolidation totaled 0.67 percent of GDP, spending cuts 0.57 percent of GDP, tax hikes 0.1 percent of GDP. Measures of fiscal consolidation in 1996 were mostly announced in the previous years budgets. The 1996 budget introduced additional spending cuts of C4 0.056 billion (1996 Budget Plan, p. 18) but at the same time high priorities expenditures were raised of C\$ 0.160, in fiscal year 1996-97³². The budgetary impact of measures already announced was C\$ 7.8 billion in fiscal year 1996-97. In addition the 1997 Budget introduced some expansionary measures to promote long-run employment. This measures had an impact also on 1996. On the revenues side, consolidation consisted in (for details see table ???):

REVENUES: C\$ 0.777 billion Taxes on Income, Profits, Capital Gains and Properties C\$ 0.636 billion (announced: 0.636)

- \bullet C\$ 0.345 billion from personal and business tax hikes (and lower tax credit) introduced in the February 1995 Budget
- C\$ 0.291 billion from personal and business tax hikes introduced in the February 1994 Budget

³²According to 1996 Budget plan (table 1.4, p.19) in fiscal 1996 new tax measures were also introduced, for a total C\$ 0.07 billion.

Taxes on Goods and Services C\$ 0.141 billion (unexpected: 0.141)

• C\$ 0.141 from increase in excises on Tobacco and Gasoline introduced in the February 1995 Budget

Taking the impact for fiscal year from 1995 Budget Plan (table 4.1, p. 35), 1994 (table 8, p.34), 1996 (table 1.3, p.18) and the 1997 Budget Plan (see Table), and calculating the impact for calendar year, in 1996 fiscal consolidation consisted in, on the spending side:

SPENDING: C\$ 4.287 billion

Government Consumption, Salaries and Investments C\$ 1.579 billion (announced: 1.579)

- C\$ 0.595 billion from measures introduced in the February 1995 Budget
- C\$ 0.829 billion from measures introduced in the February 1994 budget
- C\$ 0.155 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget

Transfers C\$ 1.373 billion (unexpected: -0.6; announced: 1.973)

- C\$ 1.438 billion from measures introduced in the February 1995 Budget
- C\$ 0.431 billion from measures introduced in the February 1994 budget
- C\$ 0.104 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget
- C\$ -0.6 billion from measures to promote Long-run employment introduced in the 1997 Budget

Not Yet Classified C\$ -0.078 billion (unexpected: -0.078)

- C\$ 0.042 from Program Review measures introduced in the March 1996 Budget (not clear what kind of spending)
- C\$ -0.120 billion from increase in high priority expenditures (long-run) in the March 1996 Budget

Other C\$ billion 1.413 (announced: 1.413)

- C\$ 0.436 billion from cuts in transfers to provinces and to foreign countries introduced in the February 1995 Budget
- C\$ 0.963 billion from cuts to international assistance and to transfers to provinces contained in the February 1994 Budget
- C\$ 0.014 billion from cuts to regional development funding introduced in the December 1992 Economic Statement/ April 1993 budget

Table 4.20 : 1996 Budget

	1996-97	1997-98
Program review savings	56	368
Reallocation of high priorities expenditures	-160	-210
changes	1996-97	1997-98
Program review savings	56	0
Reallocation of high priorities expenditures	-160	-50
changes	1996	1997
Program review savings	42	14
Reallocation of high priorities expenditures	-120	-77,5
Note that we could not retrieve the decomposition of 1996 measures, her	nce we consid	der them
Not yet classified. Source: 1996 Budget Plan		
Detailed measures for f.y. 1997-98		
Fiscal Year - Millions of C\$	1997-98	
Defense/ Emergency preparedness	200	•
Indian and Northern Affairs	37	
Government Consumption, Salaries and Investments	237	
Natural resource-based programs	19	
Transport	34	
Canada Mortgage and Housing	78	
Transfers	131	
Total	368	
Changes - FY	1997-98	
Government Consumption, Salaries and Investments	237	•
Transfers	131	
Changes - CY	1997	1998
Government Consumption, Salaries and Investments	177,75	59,25
Transfers	$98,\!25$	32,75
	1996	1997
Not yet classified -Spending	-78	-63,5

Table 4.21: Long Run Measures - 1997 Budget

Fiscal Year - millions of C\$	1996-97	1997-98	1998-99	1999-2000	_
Investing in long-term job creation					
Investing in higher education and skills					
Increase in education credit	0	5	45	80	
Extend tuition credit to ancillary fees	0	5	30	30	
Carry-forward of unused tuition and education credits	0	0	10	25	
Student loan interest relied	0	20	20	20	
Registered Education Savings Plans	0	10	25	40	
National Literacy Secretariat	0	7	7	7	
Investing in Innovation					
Establishment of Canada Foundation for Innovation	800	0	0	0	
Networks of Centres of Excellence	0	0	18	19	
industrial Research Assistance Program	0	0	13	13	
Investing in a stronger society					
Sustaining and improving Canada's health care system					
Health Transition Fund/Canada heath information System	0	50	75	75	
Community Action Program for Children and Canada Prenatal Nutrition Program	0	33	33	33	
Toward a National Child Benefit System	•	00	00	33	
Canada Child Tax Benefit	0	501	470	600	
Helping Canadians with disabilities	Ü	001	410	000	
Broadening the medical expense tax credit/removing limit on attendant care deduction	n 0	5	30	30	
Refundable medical expense supplement for earners	0	5	30	40	
Opportunities Fund	0	30	30	30	
Support for charitable giving	U	30	30	30	
	0	20	90	90	
Reduced inclusion rate on capital gains	0				
Net income limit/CCA recapture changes	0	5	5	5	
Increased resources for Revenue Canada	0	5	5	5	
Transfers	800	701	936	1142	
source: The Budget Plan 1997, pp. 19, 100 and 120. In Table 4.1 at p. 100 we consider only the measures.	sures related to	o long-term j	ob creation.	Positive sign means extra spending	
Changes - Fiscal Year - millions of C\$	1996-97	1997-98	1998-99	1999-2000	
Transfers	800	-99	235	206	_
Calendar year allocation	1996	1997	1998	1999	200
Transfers	600	125,75	151,5	213,25	51,5

Canada 1997

Fiscal consolidation amounted to 0.34 percent of GDP, 0.33 percent of GDP spending cuts, 0.01 percent of GDP tax hikes. Fiscal consolidation in the year was entirely due to measures announced in previous budgets, that generated a budgetary impact of C\$ 2.962 billion³³ in fiscal year 1997-98. The 1997 Budget included some expansionary initiatives motivated by long run considerations (including increase in investment in education and innovation, reduction in taxes for small businesses and higher children allowances). Thus, on the revenues side, consolidation consisted in (for details see tables):

REVENUES: C\$ 0.042 billion

Taxes on Income, Profits, Capital Gains and Properties C\$ 0.042 billion (unexpected: -0.195; announced: 0.237)

- C\$ -0.195 billion from a series of measure reducing the tax burden on households and corporations, introduced in the February 1997 Budget (for details see Table A6.1, p. 178).
- C\$ 0.208 billion from personal and business tax hikes (and lower tax credit) introduced in the February 1995 Budget
- C\$ 0.029 billion from personal and business tax hikes introduced in the February 1994 Budget

Taking the impact for fiscal year from 1995 Budget Plan (table 4.1, p. 35), 1994 (table 8, p.34), 1996 (table 1.3, p.18) and 1997 (table 4.1, p. 100), and calculating the impact for calendar year, on the spending side fiscal consolidation consisted in:

SPENDING: C\$ 2.567 billion

Government Consumption, Salaries and Investments C\$ 1.342 billion (announced: 1.342)

- C\$ 0.178 billion from measures introduced in the March 1996 Budget
- C\$ 0.724 billion from measures introduced in the February 1995 Budget

³³3,690 according to Devries et al. (2011).

- C\$ 0.192 billion from measures introduced in the February 1994 budget
- C\$ 0.248 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget

Transfers C\$ 0.863 billion (announced: 0.863)

- C\$ -0.126 billion from measures to promote long-run employment
- C\$ 0.098 billion from measures introduced in the March 1996 Budget
- C\$ 0.739 billion from measures introduced in the February 1995 Budget
- C\$ -0.003 billion from measures introduced in the February 1994 budget
- C\$ 0.155 billion from measures introduced in the December 1992 Economic Statement/ April 1993 budget

Not Yet Classified C\$ -0.064 billion (announced: -0.064)

•

• C\$ -0.064 billion from increase in high priority expenditures (long-run) and program review savings introduced in the March 1996 Budget

Other C\$ billion 0.426 (announced: 0.426)

- C\$ 0.05 billion from cuts in transfers to provinces and to foreign countries introduced in the February 1995 Budget
- C\$ 0.279 billion from cuts to international assistance and to transfers to provinces contained in the February 1994 Budget
- C\$ 0.097 billion from cuts to regional development funding introduced in the December 1992 Economic Statement/ April 1993 budget

6 Denmark

Denmark 1983

Fiscal consolidation totaled 3.07 percent of GDP, 2.05 percent of GDP spending cuts, 1.02 percent of GDP tax hikes. Measures aimed at reducing the deficit were announced by the new government and approved by the parliament in October 1982 (OECD Economic Surveys 1983, p. 47). These measures were designed to have an effect in 1983 and 1984 and included spending cuts (DKr 10 billion in 1983 and DKr 6 billion in 1984) and tax increases (DKr 5 billion in 1983 (IMF Recent Economic Developments 1984, p. 40). Thus, according to IMF Recent Economic Developments 1984 (p. 39), on the revenues side fiscal consolidation consisted in:

REVENUES: DKr 5 billion

Income, Profits and Capital Gains DKr 2.2 billion (unexpected: 2.2)

• DKr 2.2 from the increase in employee contribution to unemployment insurance and in local income tax rates³⁴

Property DKr 2.8 billion (unexpected: 2.8)

- DKr 2.8 billion from a temporary wealth tax raised on pension and insurance funds³⁵
 - Private DKr 2.2 billion (unexpected: 2.2)
- DKr 2.2 from the increase in employee contribution to unemployment insurance and in local income tax rates³⁶
 Corporate DKr 2.8 billion (unexpected: 2.8)

³⁴Calculated as residual

³⁵This temporary tax was replaced by a real interest rate permanent tax introduced later in 1983 (IMF Recent Economic Developments 1985, p. 45).

³⁶Calculated as residual.

• DKr 2.8 billion from a temporary wealth tax raised on pension and insurance funds³⁷

According to IMF Recent Economic Developments 1984 (p. 39) and 1982 (p. 34), over the year on the spending side fiscal consolidation consisted in:

SPENDING: DKr 10 billion

Transfers DKr 0.5 billion (announced: 0.5)

• DKr 0.5 billion from the expiration of the negative income tax implemented in 1981-82

Not yet classified DKr 6.5 billion (unexpected: 6.5)

DKr 6.5 billion savings from a variety of measures including freeze of indexation of social benefits, measures
regarding duration and financing of sickness benefits, ceiling on public sector wages and charges on transport
services

Other DKr 3 billion (unexpected: 3)

• DKr 3 billion from the reduction of Central Government's grants to local government

Denmark 1984

Fiscal consolidation amounted to 1.78 percent of GDP, 2 percent of GDP spending cuts, -0.22 percent of GDP tax hikes. In 1984 spending cuts in the 1983 budget had a budgetary effect of DKr 6 billion. In addition the government proposed in October 1983 a new plan to cut deficit including spending and tax measures (IMF Recent Economic Developments 1984, pp.44-45). Political parties didn't support this plan and a compromise was reached in November reducing the measures' impact, now amounting to DKr 3.1 billion on the spending side and DKr 3.7 billion on the revenues side. However, because of disagreements on small saving measures, the bill was rejected by the parliament in December. Consequently the parliament was dissolved and elections were called in January 1984 (IMF Recent Economic Developments 1985, pp. 45-46). The new parliament approved the budget almost in the same form it was presented in December. An additional consolidation was announced by the new government in April consisting in additional spending cuts of DKr 1.1 billion and increased revenues of DKr 0.3 billion. Finally the settlement by taxpayers of underpayment of PAYE-taxes was deferred by one year (IMF Recent Economic Developments 1985, p. 48). This generated in 1985 extra temporary revenues of DKr 5 billion in 1985 and had a budgetary impact of DKr -5 in 1984. Thus, on the revenues side, according to IMF Recent Economic Developments 1984 (pp. 44) and 1985 (p.45-46) and OECD Economic Surveys 1984 (p. 51), the following measures were implemented:

REVENUES: DKr -1.2 billion

Taxes on Income, Profits and Capital Gains DKr -1.5 billion (unexpected: -1.5)

- DKr 1.4 billion from the introduction of contributions of employees and employers to the Fund for Labor Market Education
- DKr -5 billion from the deferral to 1985 of the settlement by taxpayers of underpayment of PAYE taxes
- DKr 2.1 billion from the increase in contribution to sickness benefits

Corporate Taxes DKr 0.7 billion (unexpected: 0.7)

• DKr 0.7 billion from the introduction of contributions of employees and employers to the Fund for Labor Market Education³⁸

Personal Taxes DKr -2.2 billion (unexpected: -2.2)

- DKr 2.1 billion from the increase in contribution to sickness benefits³⁹
- DKr 0.7 billion from the introduction of contributions of employees and employers to the Fund for Labor Market Education

³⁷This temporary tax was replaced by a real interest rate permanent tax introduced later in 1983 (IMF Recent Economic Developments 1985, p. 45).

³⁸The contribution is paid half by the employer and half by the employee (IMF Recent Economic Developments 1984, p. 44).

³⁹Since it's calculated on taxable income (IMF Recent Economic Developments, 1984, p. 42).

• DKr -5 billion from the deferral to 1985 of the settlement by taxpayers of underpayment of PAYE taxes

Not yet classified, All DKr 0.3 billion (unexpected: 0.3)

• DKr 0.3 billion from the additional tax hike introduced in April, including an increase in indirect taxation of alcohol and tobacco and increased social security contributions

According to IMF Recent Economic Developments 1984 (pp. 39 and 44-45) and 1985 (pp.45-46) and OECD Economic Surveys 1984 (p. 11), on the spending side measures of fiscal consolidation consisted in:

SPENDING: DKr 10.2 billion

Not yet classified DKr 7.1 billion (unexpected: 1.1; announced: 6)

- DKr 1.1 billion from spending cuts implemented in the additional consolidation, including the extension of the suspension of automatic indexation until 1987 and a freeze of maximum unemployment benefits
- DKr 6 billion savings from a variety of measures including freeze of indexation of social benefits, measures
 regarding duration and financing of sickness benefits, ceiling on public sector wages and charges on transport
 services (1983 Budget)

Other DKr 3.1 billion (unexpected: 3.1)

- DKr 1.7 billion from other spending cuts included in the 1984 budget
- DKr 1.4 billion from cuts in grants to local governments

Denmark 1985

Fiscal consolidation of 1.84 percent of GDP, 0.92 percent of GDP spending cuts, 0.92 percent of GDP tax hikes. During the year measures implemented in April-May 1984 had a budgetary impact of DKr 5 billion (OECD Economic Surveys 1986, p. 77) due to a freeze on real public expenditures. An additional measure on the tax side was the deferral by one year of the settlement by taxpayers of underpayment of PAYE-taxes (IMF Recent Economic Developments 1985, p. 48). This generated in 1985 extra revenues of DKr 5 billion. Thus over the year, on the revenues side, according to IMF Recent Economic Developments 1985 (p. 48) it consisted in:

REVENUES: DKr 5 billion

Taxes on Income, Profits and Capital Gains DKr 5 billion (announced: 5)

- DKr 5 billion from the deferral of the settlement by taxpayers of underpayment of PAYE taxes Personal taxes DKr 5 billion (announced: 5)
- DKr 5 billion from the deferral of the settlement by taxpayers of underpayment of PAYE taxes

According to OECD Economic Surveys 1986 (p. 77), on the spending side consolidation consisted in:

SPENDING: DKr 5 billion

Not yet classified DKr 5 billion (announced: 5)

• DKr 5 billion from the freeze in real government spending (April 1984)

Denmark 1995

Fiscal consolidation totaled 0.16 of GDP, 0.12 spending cuts, 0.04 tax hikes. According to IMF Staff report 1995, after a year (1994) of fiscal stimulus, "the focus of fiscal policy had now switched back to consolidation" (p. 11). "Thus, in accordance with the original intentions of the strategy, a withdrawal of fiscal stimulus equivalent to 0.3 percent of GDP had been targeted for 1995. This was to be obtained mainly through increases in indirect taxes and social security contributions and a reduction in public investment". According to The Danish Budget,

⁴⁰As Devries et al. (2011) did, we attribute all the DKr 5 billion impact to savings in spending, since IMF Recent Economic Developments 1986 (p. 46) reports that in April the government agreed with the majority party to leave the total tax burden unchanged, even if a number of policy initiatives were taken.

Quarterly Review (December 1994, p. 7), the Budget Agreement for 1995 generated an improvement in the central government balance of DKr 3.9 billion. On the revenues side measures consisted in:

REVENUES: DKr 0.4 billion⁴¹

Taxes on Income, Profits and Capital Gains DKr 0.4 billion (announced: 0.4)

• DKr 0.4 billion from "social security" measures. Presumably these measures consisted in increase in social security contributions as mentioned by IMF Staff Report 1995 and reported in The Danish Budget, Quarterly review (December 1994, p. 18). The increased is part of the 1994 Tax reform (The Danish Budget '95, p. 8), hence it should be considered announced

On the spending side measures consisted in:

SPENDING: DKr 1.2 billion

Transfers DKr 0.9 billion (unexpected: 0.9)

- DKr 0.7 billion from the reduction in subsidy programs
- DKr 0.2 billion from labor market measures

Not yet classified DKr 0.3 billion (unexpected: 0.3)

- DKr 0.7 billion from outstanding amounts, erroneous disbursements etc.
- DKr -0.4 billion from higher expenditures in research, business policy, infrastructure and lower taxes proceeds

7 France

France 1979

Fiscal consolidation amounted to 0.97 percent of GDP completely based on tax hikes. Since social security spending was the major treat to France fiscal stability (IMF Staff Report 1979, p. 6), the government decided to raise social security contribution rate three times during the year, in January, April and August, collecting a total F 22 billion extra revenues (OECD Economic Surveys 1980, p.43)⁴². Thus consolidation in the year consisted in:

REVENUES: F 22 billion

Taxes on Income, Profits and Capital Gains F 22 billion (unexpected: 22)

• F 22 billion from the increase of social security contribution rates. Sickness insurance rate was raised in January and August (temporary increase until December 1980) and unemployment contributions were raised in April.

Corporate taxes F 17.34 billion (unexpected: 17.34)

• F 17.34 billion from the increase of social security contribution rates⁴³

Personal taxes F 4.65 billion (unexpected: 4.65)

• F 17.34 billion from the increase of social security contribution rates

France 1987

Fiscal consolidation of 0.23 percent of GDP, spending cuts of 0.69 percent partly offset by a net tax cut of 0.46 percent of GDP. The conservative government in office from March 1986 reaffirmed the necessity to bring the fiscal deficit under control in order to lower the tax burden (IMF Recent Economic Developments 1988, p. 29-30). On the spending side, in the 1987 budget, it promoted the increase in efficiency of the government sector, reducing government payroll and transfers to enterprises for a total F 30 billion. Additional F 10 billion were

⁴¹In the 1995 an improvement of government balance of DKr 2.5 billion was expected to come from the reorganization of state enterprises. For the purposes of our analysis we don't take into account these proceeds.

⁴²In addition the government promoted measures to support private investments, encourage activity in building and civil engineering industries and benefits for old people and large families (OECD Economic Surveys 1980, p. 43). We do not take into account these measures as they seem to be motivated by cyclical considerations.

⁴³Corporate and private share are calculated using the social security contribution rates for employers (37.41) and employees (10.04) in Simanis, J. G. (1980), "Worldwide Trends in Social Security, 1979", p. 8, table 2.

expected to came from rationalization of the Health sector ("Plan Seguin"). At the same time the government continued the plan of tax cuts started in 1986 and aimed at meeting the tax harmonization targets of the EEC. New tax exemptions were added to the ones already scheduled for 1987, totaling F 37.6 billion tax relief (more than originally predicted in the 1987 budget). However in May, given the worsening situation of Social Security ("Régime Général") deficit, the government was forced to announce a plan of temporary tax hikes ("Plan d'urgence") starting from July and effective until July 1988. This included increases in health care and pension contribution, the extension of a special surcharge on income and an increase in VAT on tobacco products, for a total F 21.3 billion extra revenues (IMF Recent Economic Developments 1988, p. 35). Thus, according to IMF Recent Economic Developments 1986 (pp.31-32), 1987 (pp.37-40) and 1988 (p.45) for the tax cuts and to IMF Recent Economic Developments 1987 (p. 44) and 1988 (p. 35) for the temporary tax hikes⁴⁴, on the revenues side the measures implemented were:

REVENUES: F -26.4 billion

Taxes on Income, Profits and Capital Gains F -19.45 billion (unexpected: -10.45; announced: -9)

- F 0.85 billion from temporary levy of 1 percent on unearned income from stocks, bonds and property
- F -10.3 billion from measures to lower tax pressure on enterprises including a reduction in employment tax (tax professionelle), an increase in deductibility of VAT for expenditures on telecommunications, a reduction in the general expenditure tax and reduction in the tax paid on the industrial use of heavy fuel oil and natural gas
- F -9 billion from the reduction in corporate tax rate from 50 to 45 percent (Announced in April 1986⁴⁵)
- F -8.7 billion from measures in income taxes including a reduction in the marginal tax rate from 65 to 58 percent, a cut in top income tax rate
- F 4 billion from increase of 0.4 percentage point in the health care contributions paid by employees (temporary)
- F 1.2 billion from increase of 0.2 percentage points in the pension contribution rates by employees (temporary)
- F 2.5 billion from the extension into 1988 of the temporary 0.4 percent income tax surcharge introduced in July 1986 (temporary)

Property taxes F -4 billion (announced: -4)

- F -4 billion from the the abolition of wealth tax (announced in April 1986)

 Corporate taxes F -19.3 billion (unexpected: -10.3; announced: -9)
- F -10.3 billion from measures to lower tax pressure on enterprises including a reduction in employment tax (tax professionelle), an increase in deductibility of VAT for expenditures on telecommunications, a reduction in the general expenditure tax and reduction in the tax paid on the industrial use of heavy fuel oil and natural gas
- F -9 billion from the reduction in corporate tax rate from 50 to 45 percent (Announced in April 1986)

 Private taxes F -5 billion (unexpected: -1; announced: -4)
- F -8.7 billion from measures in income taxes including a reduction in the marginal tax rate from 65 to 58 percent, a cut in top income tax rate
- F 4 billion from increase of 0.4 percentage point in the health care contributions paid by employees (temporary)
- F 1.2 billion from increase of 0.2 percentage points in the pension contribution rates by employees (temporary)
- F 2.5 billion from the extension into 1988 of the temporary 0.4 percent income tax surcharge introduced in July 1986 (temporary)
- F -4 billion from the the abolition of wealth tax (announced in April 1986)

Taxes on Goods and Services F -1.35 billion (unexpected: -1.35)

 $^{^{44}}$ As in Devries et al. (2011), we attribute to 1987 half of the revenues coming from the tax hike, since it was effective only in July. 45 OECD Economic Surveys 1987, p.74 (announcement) and IMF Recent Economic Developments 1986, p.32 (amount).

- F -1.6 billion from reduction in VAT rate on automobiles and on records
- F 0.25 billion from the increase of 2 percent in the tax of tobacco products (temporary)

Not yet classifies, All F 1.6 billion (unexpected: 1.6), according to Corporate vs. Private F 2.45 billion (unexpected: 2.45)

- F 1.6 billion from the budgetization by the state of certain costs associated with psychiatric care (temporary)
- F 0.85 billion from temporary levy of 1 percent on unearned income from stocks, bonds and property (only according to C vs. P)

According to IMF Recent Economic Developments 1988 (p. 30 and 35) and 1987 (pp. 42 and 61), on the spending side, fiscal consolidation consisted in:

SPENDING: F 36.25 billion

Government Consumption F 10.25 billion (unexpected: 10.25)

- F 10 billion from rationalization of Health Care system ("Plan Seguin"), mainly consisting in reduction of reimbursement rate on non essential drugs and changes in coverage of selected treatments
- F 0.25 billion savings for the health care scheme from the reduction in VAT on drugs (temporary)

Salaries F 14 billion (unexpected: 14)

• F 14 billion from measures to increase the efficiency of the government sector reducing government payroll⁴⁶

Transfers F 12 billion (unexpected: 12)

- F 16 billion from reduction in subsidies to enterprises including General (employment, investment, exports, research, firms in difficulty) and Specific (steel, shipyards, machine tools, cars, coal, primary products aircraft, electronic industry)
- F -4 billion from the extension to income tax deduction (décote) to married couples⁴⁷

France 1989⁴⁸

Temporary tax hikes and tax credits reductions introduced in 1987 expired generating a budgetary impact of -0.2 percent of GDP, -0.19 on the tax side and 0.01 on the spending side. According to IMF Recent Economic Developments 1987 (p. 44) and 1988 (p. 35), during the year the following temporary tax hikes implemented in July 1987 expired:

SPENDING: F -0.25 billion

Government Consumption F -0.25 billion (announced: -0.25)

• F -0.25 billion savings for the health care scheme from the reduction in VAT on drugs

REVENUES: F -10.65 billion

Taxes on Income, Profits and Capital gains F -8.55 billion (announced: -8.55)

- F -4 billion from expiration of increase of 0.4 percentage point in the health care contributions paid by employees
- F -1.2 billion from expiration of increase of 0.2 percentage points in the pension contribution rates by employees
- F -0.85 billion from expiration of temporary levy of 1 percent on unearned income from stocks, bonds and property

⁴⁶We take the total amount of savings from the 1987 budget as in IMF Recent Economic Developments 1988 (p. 30) and we subtract the reduction in subsidies as in Table 27, IMF Recent Economic Developments 1987 (p. 61). Since the two types of measures listed are reduction in subsidies and cuts to government payroll, we classify the residual as savings from the latter.

⁴⁷source: IMF Recent Economic Developments 1987, p. 38.

⁴⁸Note on 1988: consistently with Devries et al., as the tax hikes were effective for 12 months, from July 1987 to July 1988, we attribute half the impact to 1987 and half to 1988. However the latter is off-set by the expiration of half the measures. Hence in 1988 there was no net consolidation.

- F -2.5 billion from the expiration of the temporary 0.4 percent income tax surcharge introduced in July 1986 Personal taxes F -7.7 billion (announced: -7.7)
- F -2.5 billion from the expiration of the temporary 0.4 percent income tax surcharge introduced in July 1986
- F -4 billion from expiration of increase of 0.4 percentage point in the health care contributions paid by employees
- F-1.2 billion from expiration of increase of 0.2 percentage points in the pension contribution rates by employees

Taxes on Goods and Services F -0.25 billion (announced: -0.25)

• F 0.25 billion from the expiration of 2 percent increase in the tax of tobacco products

Not yet classifies, All F 1.6 billion (unexpected: 1.6), according to Corporate vs. Private F 2.45 billion (unexpected: 2.45)

- F -1.6 billion from the budgetization by the state of certain costs associated with psychiatric care
- F -0.85 billion from the expiration of temporary levy of 1 percent on unearned income from stocks, bonds and property (only according to C vs. P)

France 1991

Fiscal consolidation amounted to 0.31 percent of GDP, 0.22 spending cuts, 0.09 tax hikes. Fiscal consolidation consisted in two rounds of measures implemented in March and late May. The first package called for spending cuts of F 10.2 billion⁴⁹, reducing current and capital expenditure of few government departments such as urban development and housing and transportation (IMF Recent Economic Developments 1991, p. 10 and Les Echos, 1991a), the second one called for additional measures of F 17 billion both on the spending and the tax (VAT) side⁵⁰, (Les Echos, 1991b) including F 6 billion taken from the budget of various state owned institutions that should not take into account according to our methodology (see footnote). During the year the Gulf war was expected to lead to an extra F 10 billion spending. However these extra expenditures were almost entirely financed by transfers from Germany, Qwait and Belgium (IMF Recent Economic Developments 1991, p. 10 footnote 3 and OECD Economic Surveys, 1992, p. 41 and also Les Echos, 1991a).⁵¹ Thus, according to Les Echos (1991b and 1991c) and Le Monde (1991), on the tax side fiscal consolidation consisted in

REVENUES: F 6 billion

Taxes on goods and services F 2 billion (unexpected: 2)

• F 2 billion were expected to originate from increasing the VAT rate on certain goods and services and from the abolishment of some VAT exemptions (May consolidation)

Not yet classified, All F 4 billion (unexpected: 4)

• F 4 billion from the anticipation of the restitution of taxes on private investments and insurance services by insurance and financial companies (May consolidation) (Temporary)

According to IMF Recent Economic Development 1991 (p. 10), Les Echoes (199a and 199b) and Le Monde (1991) on the spending side consolidation consisted in:

SPENDING: F 15.2 billion⁵²

Government Consumption F 0.522 billion (unexpected: 0.522)

- F 0.250 billion cuts in expenditures for education (March Consolidation)
- F 0.165 billion cuts in expenditures of the Ministry of Culture (March consolidation)

⁴⁹According to Les Echos (1991a), this additional consolidation was justified by the need to finance the military operations in the Gulf war and to compensate for lower growth than expected.

⁵⁰Of these, F 7 billion had a temporary nature, according to IMF Recent Economic Developments 1991 (p. 10).

⁵¹In Devries et al. (2011) they don't take into account this extra financing source that offset the military spending.

⁵²We exclude F 6 billion taken from the budget of various state owned institutions: F 3 billions came from the CACOM ("Caisse de consolitation et de mobilisation des crédits à moyen terme) that was shut down and its remaining budget was taken by the State, the rest came from the EPAD, from the "Caisse d'aide au départ", PMU and from the national institut of industrial property. This measures was contained in the May consolidation and had a temporary nature.

• F 0.107 billion cuts to the budget of the Ministry of Justice (March consolidation)

Investments F 3.055 billion (unexpected: 3.055)

• The budget of the Ministry of housing and transportation was cut by F 3.055 billion, implying a reduction in research and constructions (March consolidation)

Transfers F 3.7 billion (expected: 3.7)

- The budget of the Ministry of Employment was cut by F 2.5 billion, including lower expenditures for training and reinsertion of unemployed adults (March consolidation)
- F 1.2 billion from the reduction of subsidies for housing (May consolidation)

Not yet classified F 3.8 billion (unexpected: 3.8)

• F 3.8 billion of new saving measures⁵³ ("economies nouvelles") (May consolidation)

Other F 4.123 billion (unexpected: 4.123)

• F 4.123 billion from other expenditure restraints⁵⁴ ("économies budgétaires") (March consolidation)

France 1992

Expiration of the temporary tax hikes introduced in 1991 that had a budgetary impact of -0.06 percent of GDP. The negative consolidation is due to the expiration of 1991 temporary measures: anticipation of taxes for F 4 billion and extra proceeds from the budgets of various state owned institutions. For the purpose of our analysis we do not consider the latter, as it is nor a spending increase neither a tax reduction, but an operation of State Assets management. Hence, we only record the expiration of the tax anticipation.

REVENUES: F -4

Not yet classified, All F -4 billion (expected: 4)

• F -4 billion from the anticipation of the restitution of taxes on private investments and insurance services by insurance and financial companies (May consolidation)

France 1995

Fiscal consolidation of 0.29 percent of GDP, 0.41 percent of GDP tax hikes partly offset by a net spending increase of 0.12 percent of GDP. Reducing the deficit still remained the key issue for french governments, in particular to meet the deficit convergence criteria for the European Monetary Union (IMF Recent Economic Developments 1996, p.12). The new government that took office in May announced a plan to restrain the deficit in 1995 and to reduce it in 1996 and 1997. The first set of measures was the "Supplementary Budget", introduced in end June/beginning of July. It included tax hikes estimated to generate additional F 30 billion (rise in VAT standard rate, surcharge on corporate and wealth \tan^{55})⁵⁶, cuts to lower priority spending (more than half military spending) for F 19 billion (Le Monde, 1995a) and increase in spending of F 32 billion (IMF) (mainly labor market and social measures), totaling a net spending increase of F 13 billion. However expenditures increased more than expected, due to disaster relief provided to the Netherlands Antilles, the participation in security operations in the Balkans, the introduction of an higher back-to-school allowance ⁵⁷ and other small measures. To finance these additional expenditures and to cover the shortfall in tax revenues, the government announced a new supplementary budget in November⁵⁸. It called for an additional restraint in expenditure for F 20 billion, including cuts

⁵³5 billions "economies nouvelles"- 1.2 for lower social housing.

 $^{^{54}\}mathrm{Calculated}$ as residual of the other measures listed.

⁵⁵The wealth tax, abolished in 1987, was then reintroduced in 1989 (OECD Economic Surveys 1989, p. 78).

⁵⁶According to OECD Economic Surveys 1995 (p. 35) these tax hikes had a temporary nature, but their expiration was linked to the fulfillment of Maastricht criteria.

⁵⁷As they did in Devries et al. (2011), we take into account this extra spending since it was not "a response to domestic economic activity".

^{58&}quot;Following the adoption of the supplementary budget in July, the economy weakened further, and an additional shortfall in tax revenue, which ultimately amounted to about F 25 billion (l/3 percent of GDP), began to emerge. [...] Moreover, spending was higher than envisaged in the July supplementary budget, with a back-to-school allowance (F 4.6 billion), disaster relief for the Netherlands Antilles, and participation in security operations in the Balkans accounting for much of the difference" IMF Recent Economic Developments 1996, p. 13. As explained, the second supplementary budget become necessary partly for exogenous reasons (relief to Antilles and Balkans), partly to the worsening of the economy. The new adjustment was announced to meet the deficit reduction target already decided for the year.

to military procurement, housing subsidies and cultural activities. Thus over the year, according to IMF Recent Economic Developments 1996 (pp. 13), OECD Economic Surveys 1995 (p. 35), Le Monde (1995), the tax hike consisted in:

REVENUES: F 31.16 billion

Taxes on Income, Profits and Capital Gains F 12.88 billion (unexpected: 12.88)

• F 12.88 billion from the increase of the tax on the profits of enterprises⁵⁹

Property taxes F 0.88 billion (unexpected: 0.88)

- F 0.88 billion from the introduction of a solidarity surcharge on wealth (July supplementary budget)

 Corporate taxes F 12.88 billion
- F 12.88 billion from the increase of the tax on the profits of enterprises

Personal taxes F 0.88 billion

• F 0.88 billion from the introduction of a solidarity surcharge on wealth (July supplementary budget)

Taxes on Goods and services F 17.4 billion (unexpected: 17.4)

• F 17.4 billion from the increase of the standard VAT tax rate from 18.6 to 20.6 percent effective in August (July supplementary Budget)⁶⁰

According to IMF Recent Economic Developments 1996 (pp. 13-14), OECD Economic Surveys 1995 (p.34-35), Le Monde (1995a, 1995b, 1995c) and Les Echos (1995), on the spending side the following measures were implemented: **SPENDING: F -9.2**

Government Consumption F 11.1 billion (unexpected: 11.1)

- F 8.4 billion cuts to military spending (July supplementary Budget)⁶¹
- F 3.5 billion cuts to military procurement (November supplementary Budget)
- F 0.7 billion savings from cuts in cultural activities (November supplementary Budget)
- F 0.6 billion saving in prime minister general services ("services généraux du premier ministre") (November supplementary budget)
- F -2.1 billion for external military operations

Transfers F -40.6 billion (unexpected: -40.6)

- F -11.4 billion for new labor market measures (July supplementary Budget)
- F -2.4 billion for new social housing measures (July supplementary Budget)
- F -0.5 billion for measure to support the poor (July supplementary Budget)
- F -17.7 billion for new measures regarding in particular the labor market, housing and aids to young workers⁶² (July supplementary Budget)
- F 4.6 billion for increased back-to-school allowance (November supplementary Budget)
- F -1.7 billions for higher personal aids for housing (November supplementary Budget)

 $^{^{59}}$ Calculated as residual: 30-17.4-0.88=11.72 (source: Le Monde, 1995).

⁶⁰"The till-year effect in 1996 of the measures taken in connection with the supplementary budget of July 1995 is estimated at F 70 billion, of which more than 80 percent is attributable to the increase in the standard VAT rate in August 1995" IMF Recent Economic Developments 1996 (p. 15). We assume that in 1995 the VAT increase had the share of revenues as in 1996. Thus we calculate the extra VAT proceeds as 33*80%=26.4.

⁶¹Le Monde (1995b).

⁶²Since these extra spending were still part of the plan to promote employment, we can classify them as transfers. A possible classification, based on Le Monde (1995a) may be: "contrait initiative-emploi" 7 (14 in a full year); lower charges on low salaries 9.5 (19 in a full year); aids to young worker 2.4. The total it's higher so I'm not sure whether to use this classification or not.

- F -7.8 billion for other small measures, probably including disaster relief to the Netherlands Antilles ⁶³ (November supplementary Budget)
- F 1.1 billion cuts in housing subsidies (November supplementary budget)
- F 3.4 billion from reduction in export credits (November supplementary budget)
- F 1 billion from lower transfers to the public institution in charge of financing health insurance and family aids to self-employed in the agriculture sector.

Not yet classified F 20.3 billion (unexpected: 20.3)

- F 10.6 billion from other spending cuts (July supplementary Budget)
- F 9.7 billion from other spending cuts⁶⁴ (November supplementary Budget)

France 1996

Fiscal consolidation amounted to 1.36 percent of GDP, 0.41 percent of GDP spending cuts, 0.95 percent of GDP tax hikes. In 1996 french government continued pursuing deficit reduction to meet the Maastricht criteria. Tax hikes introduced in July 1995 had a full year budgetary impact of F 70 billion (IMF Recent Economic Developments 1996, p. 15). Since an impact of F 30 billion was registered in 1995, the change in revenues was of F 40 billion. New measures were taken both on the spending side (F 20 billion spending freeze) and on the tax side (F 10 billion from increase in tax on gasoline, tobacco and alcohol). In addition in November 1995 the government announced a plan to reform the social security system. The plan envisaged increases in contribution rates and spending cuts in three main areas: health care, families and pensions. The measures become effective in 1996 and 1997 with a budgetary impact of F 35.2 billion and F 22.2 billion respectively⁶⁵. Thus, according to IMF Recent Economic Development 1996 (p. 15 and 17-20), on the revenues side measures implemented in the year were:

REVENUES: F 72.85

Taxes on Income, Profits and Capital Gains F 22.95 billion (unexpected: 22.95)

- F 0.85 billion from raising employer contribution rates paid by the state and public enterprises
- F 2.5 billion from an exceptional contribution levied on pharmaceutical industry (social security reform)
- F 7.1 billion from higher health insurance premium for retired persons (social security reform)
- F 12.5 billion from a special income tax (RDS "Remboursement de la dette sociale"), used to finance the pension fund via the CADES ("Caisse d'amortissement de la dette sociale") (social security reform)

Corporate Taxes F 2.5 billion (unexpected: 2.5)

 \bullet F 2.5 billion from an exceptional contribution levied on pharmaceutical industry (social security reform)

Personal Taxes F 19.6 (unexpected: 19.6)

- F 7.1 billion from higher health insurance premium for retired persons (social security reform)
- F 12.5 billion from a special income tax (RDS "Remboursement de la dette sociale"), used to finance the pension fund via the CADES ("Caisse d'amortissement de la dette sociale")⁶⁶ (social security reform)

Taxes on Goods and Services F 49.9 billion (unexpected: 10.5; announced: 39.4)

- F 10.5 billion from increase in tax on gasoline, tobacco and alcohol
- F 39.4 billion from the increase of the standard VAT tax rate from 18.6 to 20.6 percent in August 1995 (July 1995 supplementary Budget)⁶⁷

 $^{^{63}}$ Le Monde (1995c) cites the residual amount and IMF mentions the aids to the Antilles.

⁶⁴Calculated as residual of all the measures listed above.

⁶⁵As in Devries et al. (2011), we take the changes from year to year. Since the effect of the reform in 1997 was 57.4 the change from 1996 was 57.4-35.2=22.2.

⁶⁶Total revenues of this measures were expected to be 25 billion in 1996 (IMF Recent Economic Developments 1996, p. 19).

⁶⁷Calculated as variation: proceeds in 1996 - proceeds in 1995 = 56.6-17.4=39.4 (source Le Monde, 1995a).

Not yet classified, C vs. P F 0.85 billion (unexpected: 0.85)

• F 0.85 billion from raising employer contribution rates paid by the state and public enterprises (only according to C. vs P.)

According to IMF Recent Economic Development 1996 (pp. 15-20), on the spending side measures implemented in the year were:

SPENDING: F 32.25

Government Consumption F 8.2 billion (unexpected: 8.2)

• F 8.2 billion from virtual freeze in real terms of spending on physician service and hospitalization, including adjustment of physician remuneration, sanctions on physicians who prescribe unnecessary treatments and changes in the management of hospitals (social security reform)⁶⁸

Transfers F 4.05 billion (unexpected: 4.05)

- F 2.6 billion from the freezing of family allowances in nominal terms in 1996 (social security reform)
- F 1 billion from the freezing of pensions in real terms in 1996 (social security reform)
- F 2.25 billion from other spending cuts in social security, Family branch (social security reform)⁶⁹
- F -1.8 billion from social security reform, pension branch (social security reform)

Not yet classified F 20 billion (unexpected: 20)

• F 20 billion from an expenditure freeze⁷⁰

France 1997

Fiscal consolidation totaled 0.62 percent of GDP, tax hikes of 0.37 percent of GDP, spending cuts of 0.25 percent of GDP. The newly elected socialist government, as soon as it took office, announced a spending increase of 0.1 percent of GDP. (IMF Staff Report 1997, p. 11). However after the presentation of the Bonnet-Nasse Report on public finances in July ("Rapport d'audit sur les finances publiques"), that forecasted a deficit amounting to 3.5-3.7 percent of GDP in 1997, definitely higher than the Maastricht ceiling, the government decided to implement a plan to cut the deficit of 0.4 percent of GDP (Banque de France Rapport Annuel 1997, p.44). It comprised corrective measures on the spending side (F 10 billion expenditure cuts) and on the tax side (a temporary 15 percent surcharge on tax for companies that have a turnover of more than F 50 million, including long-term capital gains). In addition the 1996 social security reform had a budgetary effect of F 22.2 billion. Thus, according to IMF Staff Report 1997 (p. 11) and Banque de France, Rapport Annuel 1997 (p.44) for the 1997 new measures and IMF Recent Economic Developments 1996 (pp. 17-20) for the social security reform, over the year, on the revenues side, fiscal consolidation consisted in:

REVENUES: F 29.3 billion

Taxes on Income, Profits and Capital Gains F 29.3 (unexpected:24; announced: 5.3)

- F 24 billion from the temporary 15 percent surcharge on corporate tax for enterprises that have a turnover of more than F 50 million. It covers as well long-term capital gains (July plan)⁷¹
- F -2.5 billion from the expiration of the exceptional contribution levied on pharmaceutical industry in 1996 (1996 social security reform)
- F 7.8 billion from higher health insurance premium for retired persons (1996 social security reform)

Corporate Taxes F 21.5 billion (unexpected: 24; announced: -2.5)

• F 24 billion from the temporary 15 percent surcharge on corporate tax for enterprises that have a turnover of more than F 50 million. It covers as well long-term capital gains (July plan)⁷²

⁶⁸Calculated as residual.

⁶⁹Calculated as residual.

⁷⁰ The Minister of Finance announces that FF 20 billion in credits in the 1996 Budget will be frozen." according to OECD Economic Surveys 1997 (p.148).

⁷¹Calculated using the percentage in IMF Staff Report 1997 and Banque de France and OECD estimation of 1997 GDP.

 $^{^{72}}$ Calculated using the percentage in IMF Staff Report 1997 and Banque de France and OECD estimation of 1997 GDP.

• F -2.5 billion from the expiration of the exceptional contribution levied on pharmaceutical industry in 1996 (1996 social security reform)

Personal Taxes F 7.8 (announced: 7.8)

• F 7.8 billion from higher health insurance premium for retired persons (1996 social security reform)

According to IMF Staff Report 1997 (p. 11) and Banque de France, Rapport Annuel 1997 (p.44) for the 1997 new measures and IMF Recent Economic Developments 1996 (pp. 17-20) for the social security reform, over the year, on the spending side, fiscal consolidation consisted in:

SPENDING: F 19.9 billion Government Consumption 7.4 (announced: 7.4)

• F 7.4 billion from virtual freeze in real terms of spending on physician service and hospitalization, including adjustment of physician remuneration, sanctions on physicians who prescribe unnecessary treatments and changes in the management of hospitals (1996 social security reform). Calculated as residual

Transfers F 12.5 billion (announced: 12.5)

- F 0.2 billion from the freezing of family allowances in nominal terms in 1996 (1996 social security reform)
- F -1 billion from the expiration of freezing of pensions in real terms implemented in 1996 (1996 social security reform)
- F 9.2 billion from other spending cuts in social security, Family branch (1996 social security reform)⁷³
- F 1.1 billion from social security reform, pension branch (1996 social security reform)
- F 3 billion from subjecting family allowances to income taxation starting in 1997 (1996 social security reform)

Not yet classified F 0 billion (unexpected: 0)

- F -10 billion for increase in spending announced in June
- F 10 billion from spending cuts (July plan)

France 1999

The partial expiration of 1997 temporary tax hike had a budgetary impact of -0.1 percent of GDP. According to OECD Economic Surveys 1999 (p. 41) the temporary 15 percent surcharge on corporate taxation introduced in July 1997 was reduced by 1/3 in 1999.

REVENUES: F -8 billion

Taxes on Income, Profits and Capital Gains F -8 (announced: -8)

• F -8 billion from the temporary 15 percent surcharge on corporate tax for enterprises that have a turnover of more than F 50 million. It covers as well long-term capital gains (July 1997 plan)

Corporate Taxes F -8 billion (announced: -8)

• F -8 billion from the temporary 15 percent surcharge on corporate tax for enterprises that have a turnover of more than F 50 million. It covers as well long-term capital gains (July 1997 plan)

France 2000

Temporary tax hike introduced in 1997 expired completely, having a budgetary impact of -0.2 percent of GDP. According to OECD Economic Surveys 1999 (p. 41) the 1997 temporary surcharge on corporate taxation expired completely in 2000.

REVENUES: F -16 billion

Taxes on Income, Profits and Capital Gains F -16 (announced: -16)

⁷³Calculated as residual.

• F -16 billion from the temporary 15 percent surcharge on corporate tax for enterprises that have a turnover of more than F 50 million. It covers as well long-term capital gains (July 1997 plan)

Corporate Taxes F -16 billion (announced: -16)

• F -16 billion from the temporary 15 percent surcharge on corporate tax for enterprises that have a turnover of more than F 50 million. It covers as well long-term capital gains (July 1997 plan)

8 Germany

Germany 1982

Fiscal consolidation totaled 1.22 percent of GDP, 0.58 percent of GDP tax hikes and 0.64 percent of GDP spending cuts. Measures of fiscal consolidation were contained in 1982 Federal Budget presented by the government in September 1981 and adopted by the Bundestag in December 1982 (OECD Economic Surveys 1981). This set of measures was denominated Operation '82⁷⁴. According to IMF Recent Economic Developments 1982 (pp.. 27 and 104) and OECD Economic Surveys 1982 (p. 61), on the revenues side the following measures were implemented:

REVENUES: DM 10.21 billion

Taxes on Income, Profits and Capital Gains DM 5.65 billion (unexpected: 5.65)

• DM 5.65 billion from the temporary increase of unemployment insurance tax rate. The increase will expire in 1984. (Amendments to Employment Promotion Act)⁷⁵

Corporate taxes DM 2.825 billion (unexpected: 2.825)

• DM 2.825 billion from the temporary increase of unemployment insurance tax rate. The increase will expire in 1984. (Amendments to Employment Promotion Act)⁷⁶

Private taxes DM 2.825 billion (unexpected: 2.825)

• DM 2.825 billion from the temporary increase of unemployment insurance tax rate. The increase will expire in 1984. (Amendments to Employment Promotion Act)

Taxes on Goods and Services DM 1.86 billion (unexpected: 1.86)

• DM 1.86 billion from the phasing out of tax exemptions and increase of taxes on spirits, wine and tobacco

Other DM 2.7 billion (unexpected: 2.7)

- DM 0.9 billion increase in other taxes
- DM 1.8 billion increase in other revenues

On the spending side the consolidation comprised⁷⁷:

SPENDING: DM 11.28 billion

Government Consumption DM 0.08 billion (unexpected: 0.08)

• DM 0.08 billion from cost reductions in Health services

Transfers DM 5.85 billion (unexpected: 5.85)

• DM 1.71 from the reduction of child benefits

⁷⁴During the year some expansionary measure (industry subsidies, spending in constructions etc.) were implemented. However, we do not take them into account since these were motivated by the economy weakness (IMF Recent Economic Development 1981, p.27).

⁷⁵At the same time, to avoid an excessive fiscal pressure, the contribution rate to the pension insurance funds was lowered by half a point. However this measure had no implication for the Federal Finances (IMF Recent Economic Development 1982, p. 27).

⁷⁶As IMF Recent Economic Developments (p. 27) explains, the unemployment insurance tax is shared equally by employers and employee.

⁷⁷Data are taken from IMF Recent Economic Developments 1982, table 21 and refer to Federal Government plus Lander and local authorities, as Devries et al. did.

- DM 3.96 billion savings from the introduction of stricter conditions to receive unemployment benefits and employment subsidies following the amendments to Employment Promotion Act
- DM 0.18 billion from law against illegal employment

Not yet classified DM 2.9 billion (unexpected: 2.9)

• DM 2.9 billion non-legislative measures including "payment settlements in the public sector, cuts in the coking coal subsidy, cuts in crude oil stockpiling" (OECD Economic Surveys 1982, p. 61)

Other DM 2.45 billion (unexpected: 2.45)

• other expenditure reduction for DM 2.45 billion

Germany 1983

Fiscal consolidation of 0.91 percent of GDP, 0.63 percent of GDP spending cuts, 0.28 percent of GDP tax hikes. The 1983 budget was first drafted in July 1982 and then updated by the new government in October 1982 and adopted by the Bundestag in December 1982. (OECD Economic Surveys 1983, p. 59). According to IMF Recent Economic Developments 1983 (pp.. 23-24), on the revenues side measures included:

REVENUES: DM 5.1 billion

Taxes on Income, Profits and Capital Gains DM 2.1 billion (unexpected: 2.1)⁷⁸

- DM 3.6 billion from the increase in private contribution to the Federal Labor Office
- DM -1.5 billion from change in computation of entrepreneurial income for trade tax Corporate taxes DM 0.3 billion (unexpected: 0.3)
- DM 1.8 billion from the increase in private contribution to the Federal Labor Office⁷⁹
- DM -1.5 billion from change in computation of entrepreneurial income for trade tax Personal taxes DM 1.8 billion (unexpected: 1.8)
- DM 1.8 billion from the increase in private contribution to the Federal Labor Office

Taxes on Goods and Services DM 3 billion (unexpected 3)

• DM 3 billion from rise of VAT, regular and preferential rate (on public transportation, books, food products, art pieces)

On the spending side, the following measures were implemented (IMF Recent Economic Developments 1983, pp. 23-24)⁸⁰:

SPENDING: DM 11.5 billion

Salaries DM 3.5 billion (unexpected: 3.5)

• DM 3.5 billion from the introduction of a 2 percent limit to the increase in wages and salaries of public employees

Transfers DM 8 billion (unexpected: 8)

- DM 0.98 billion from the reduction of children's benefits
- DM 0.584 billion from the postponement of annual adjustment of pension from January to June
- DM 4.836 billion from the reduction of the pension contributions of the Federal-Labor Office to the Pension Insurance System.
- DM 0.9 billion from the reduction of federal contribution to pension scheme
- DM -0.4 billion from increase in deductibility of interest rates for private households
- DM 1.1 billion from the cut in tax deductibility of private pension contributions

⁷⁸The 1983 budget included as well a compulsory 5 percent levy on high incomes. However the proceeds were entirely designed to finance social housing construction and for subsidies to private housing construction (IMF Recent Economic Developments 1983, p. 23). For this reason we do not take the tax into account, as in Devries et al. (2011).

⁷⁹The contribution is shared equally between employers and employees (IMF Recent Economic Developments 1983, p. 23).

 $^{^{80}}$ As in Devries et al. (2011) we take into account data for Federal Government, Länder and Municipalities.

Germany 1984

Fiscal consolidation totaled 0.31 percent of GDP, 0.62 percent of GDP spending cuts, partially off-set by the expiration of 1982 temporary measures that had a budgetary impact of -0.31 percent of GDP. Fiscal consolidation in 1984 was entirely based on spending cuts contained in the Budget proposed by the government in July 1983 and adopted by the Bundestag in December. However, according to IMF Recent Economic Development 1982 (p. 27 and 104), during the year the temporary 1982-83 unemployment insurance rate increase expired, generating a budgetary impact of DM -5.65 billion.

REVENUES: DM - 5.65 billion

Taxes on Income, Profits and Capital Gains DM -5.65 billion (expected: -5.65)

• DM -5.65 from expiration of 1982-83 increase of unemployment insurance tax rate

According to IMF Recent Economic Developments 1984 (pp. 26-27), on the spending side, measures included:

SPENDING: DM 11.8 billion

Salaries DM 4.97 billion (unexpected: 4.97)

DM 4.97 billion savings from freeze on wages and salaries of civil servants from July 1 1984 to April 4 1985

Transfers DM 5.435 billion (unexpected: 5.435)

- DM 1.055 billion from reduction in unemployment benefits for recipient without children
- DM 0.817 billion from other labor market measures
- DM 3.563 billion from changes to pension system (including changes in calculating the annual increment of pensions and rise in contribution of pensioners to the health insurance scheme) and other measures

Other DM 1.4 billion (unexpected: 1.4)

• DM 1.4 billion from other spending cuts (residual)

Germany 1991

Fiscal consolidation of 1.13 percent of GDP, 0.03 percent of GDP spending cuts, 1.1 percent of GDP tax hikes. The resolution to limit the deficit of the federal government and territorial authorities was announced by the government in November 1990. A set of measures for 1991 and 1992 followed in January 1991, including mainly cuts in transfers to Federal Labor Office compensated by an increase in unemployment insurance contribution rate and cuts in subsidies⁸¹ (IMF Economic Developments and Issues 1991, p.22-23). In addition a one percent rise in VAT rate was planned for 1993. These measures had a budgetary impact of DM 15 billion in 1991. In late February an additional consolidation become necessary due to higher financing needs of East German states and higher outlays for the crisis in Middle East⁸². It consisted in (temporary and permanent) tax hikes for 1991 and 1992 worthing DM 18.2 billion in 1991. At the same time the program named "Joint Effort - Upswing East" was implemented, augmenting infrastructure investments and other expenditure in East Germany, along with a set of tax exemptions for East Germany. Thus, over the year, on the revenues side, according to IMF Economic Developments and Issues 1991 (p. 25), measures comprised:

REVENUES: DM 30.5 billion⁸³

Taxes on Income, Profits and Capital Gains DM 23.6 billion (unexpected: 23.6)

- DM 20.3 billion from the increase in unemployment insurance contribution rate (January 1991)
- DM -8 billion for lowering the pension insurance contribution rate

⁸¹Measures included as well cuts in defense expenditure of DM 7.5 billion, not realized because of the Gulf War (Devries et. al 2011) and postponement of investment outlays of DM 2.25 billion not considered in Devries et al. maybe because it was off-set by the February investment plan.

⁸²"In late February due to much higher than expected financing needs of the east German states and municipalities and additional outlays related to eastern Europe and the crisis in the Middle East it became evident that expenditure would exceed the budgeted amount by a substantial margin" (IMF Economic Developments and Issues 1991, p.23).

 $^{^{83}\}mathrm{We}$ exclude DM 2 billion from higher contribution of the Federal Post Office to the federal government, as it is nor a tax hike neither a spending reduction.

• DM 11.3 billion from a temporary (until June 1992) 7.5 percent surcharge on income and corporation taxes (February 1991)

Corporate taxes DM 6.15 billion (unexpected: 6.15)

- DM 10.15 billion from the increase in unemployment insurance contribution rate⁸⁴ (January 1991)
- DM -4 billion for lowering the pension insurance contribution rate⁸⁵ (January 1991)

Private taxes DM 6.15 billion (unexpected: 6.15)

- DM 10.15 billion from the increase in unemployment insurance contribution rate (January 1991)
- DM -4 billion for lowering the pension insurance contribution rate (January 1991)

Taxes on Goods and Services DM 6.9 billion (unexpected: 6.9)

- DM 5.4 billion from rise in mineral oil taxes (February 1991)
- DM 0.7 billion from increase in tax on insurance premiums (February 1991)
- DM 0.8 billion from additional VAT on mineral oil and tobacco products (February (1991)

Not yet classified, C. vs. P. DM 11.3 billion (unexpected: 11.3)

• DM 11.3 billion from a temporary (until June 1992) 7.5 percent surcharge on income and corporation taxes (February 1991) (only according to C. vs. P.)

According to IMF Economic Developments and Issues 1991 (p. 98), on the spending side fiscal consolidation consisted in:

SPENDING: DM 0.78 billion

Transfers DM 0.28 billion (unexpected: 0.28)

- DM 0.2 billion cuts in coal subsidies (January 1991)
- DM 0.3 billion cuts in subsidies to R&D projects (January 1991)
- DM 0.08 billion cuts to freight subsidies and regional development (January 1991)
- DM -0.3 billion for the increase in compensation paid to commuters with cars (January 1991)

Other DM 0.5 billion

• DM 0.5 billion cuts in subsidies to Berlin and inner-German border (January 1991)

Germany 1992

Fiscal consolidation totaled 0.54 percent of GDP, 0.12 percent of GDP spending cuts, 0.42 percent of GDP tax hikes. Fiscal consolidation was a consequence of the 1991 tax measures and subsidies cut announced in January and February plus a new set of measures announced in July 1991⁸⁶ to yield additional annual savings (IMF Economic Developments and Issues 1991, p. 98). According to IMF Economic Developments and Issues 1991 (p.25 and 98), with respect to 1991, changes in revenues included:

REVENUES: DM 11.75 billion

Taxes on Income Profits and Capital Gains DM -0.15 billion (announced: -0.15)

- DM 1.7 billion from the increase in unemployment insurance contribution rate (January 1991)
- DM -3 billion for lowering the pension insurance contribution rate
- DM -0.6 billion from a temporary (until June 1992) 7.5 percent surcharge on income and corporation taxes (February 1991)

 $^{^{84}}$ Unemployment insurance contribution is shared equally between employers and employees.

⁸⁵Pension insurance contribution is paid half by the employer and half by the employee.

 $^{^{86}\}mathrm{Hence},$ considered as announced in our time-framework.

• DM 1.75 billion from modification modification in "taxation of interest income from life insurance contracts, the introduction of income limits for recipients of homeowners' tax preferences and a rise in the tax rate on small wage incomes" (July 1991)

Corporate taxes DM -0.65 billion (announced: -0.65)

- DM 0.85 billion from the increase in unemployment insurance contribution rate⁸⁷ (January 1991)
- DM -1.5 billion for lowering the pension insurance contribution rate⁸⁸ (January 1991)

Personal taxes DM 1.1 billion (announced: 1.1)

- DM 0.85 billion from the increase in unemployment insurance contribution rate (January 1991)
- DM -1.5 billion for lowering the pension insurance contribution rate (January 1991)
- DM 1.75 billion from modification modification in "taxation of interest income from life insurance contracts, the introduction of income limits for recipients of homeowners' tax preferences and a rise in the tax rate on small wage incomes" (July 1991)

Taxes on Goods and Services DM 11.9 billion (announced: 11.9)

- DM 8.6 billion from rise in mineral oil taxes (February 1991)
- DM 1.3 billion from increase in tax on insurance premiums (February 1991)
- DM 1.2 billion from additional VAT on mineral oil and tobacco products (February (1991)
- DM 0.8 billion increase in tobacco tax (February 1991)

Not yet classified, C vs. P DM -0.6 billion (announced: -0.6)

• DM -0.6 billion from a temporary (until June 1992) 7.5 percent surcharge on income and corporation taxes (February 1991) (only according to C. vs. P.)

According to IMF Economic Developments and Issues 1991 (p. 98), taking as a baseline 1991, changes in spending included:

SPENDING: DM 3.3 billion Transfers DM 1.05 billion (announced: 1.05)

- DM 0.5 billion from other subsidy cuts including cuts in subsidies for coal industry, regional development, freight and R&D projects (January 1991)
- DM 1.75 billion from cuts in Financial including cuts in subsidies to agriculture and shipbuilding and aircraft industry, cut in equity capital programs and certain labor market measures (July 1991)
- DM -1.2 billion for the increase in compensation paid to commuters with cars (January 1991)

Other DM 2.25 (announced: 2.25)

• DM 2.25 billion from reduced assistance to Berlin and inner-German border (January 1991)

Germany 1993

Fiscal consolidation of 0.27 percent of GDP, 0.17 percent of GDP spending cuts, 0.1 percent of GDP tax hikes. Fiscal consolidation in the year was an effect of measures announced in 1991 (January, February and July) on the spending side (cuts to subsidies) and on the tax side (increase in VAT). However the temporary tax surcharge implemented in 1991 expired, generating a budgetary impact of DM - 10.7 billion⁸⁹. In addition in March

 $^{^{87}}$ Unemployment insurance contribution is shared equally between employers and employees.

⁸⁸Pension insurance contribution is paid half by the employer and half by the employee.

⁸⁹Devries et al. report that temporary measures expiring in 1993 amounted to DM 15.1 billion. However the only temporary measure we could identify referring to 1991 IMF Economic Developments and Issues were the 12-month tax surcharge. It had a budgetary impact of DM 11.3 billion in 1991, 10.7 in 1992 and 0 onwards. Taking changes between years, we record: +11.3 in 1991, -0.6 in 1992 and 10.7 in 1993.

1993 the government proposed a "solidarity pact" to reduce the deficit of territorial authorities including the reform of revenue sharing between federal state and local authorities, some expenditure cuts and the reimposition of 7.5 percent "solidarity surcharge" on incomes starting from 1995 (see following entries). This package generated an effect only in the following years. Thus in 1993, according to IMF Economic Developments and Issues 1991 (p. 98 and 104) and to IMF Economic Developments and Issues 1994 (p.8), on the revenues side the consolidation consisted in:

REVENUES: DM 3.05 billion

Taxes on Income, Profits and Capital Gains DM -9.95 billion (announced: -9.95)

• DM 0.75 billion from modification in "taxation of interest income from life insurance contracts, the introduction of income limits for recipients of homeowners' tax preferences and a rise in the tax rate on small wage incomes" (July 1991)

During the year the following temporary measures expired (IMF Economic Developments and Issues 1991, p.25)

• DM -10.7 billion for a temporary 7.5 percent surcharge on income and corporation taxes (February 1991) (see footnote)

Private taxes DM 0.75 billion (announced: 0.75)

• DM 0.75 billion from modification in "taxation of interest income from life insurance contracts, the introduction of income limits for recipients of homeowners' tax preferences and a rise in the tax rate on small wage incomes" (July 1991)

Taxes on Goods and Services DM 13 billion (expected: 13)

• DM 13 billion from the increase in VAT rate from 14 to 15 percent (announced in February 1991)

Not yet classified, Corporate vs. Private DM -11.3 billion (expected: -11.3)

• DM -10.7 billion for a temporary 7.5 percent surcharge on income and corporation taxes (February 1991) (according to C. vs P.)

According to IMF Economic Developments and Issues 1991 (p. 98) and taking as a baseline 1992, changes in spending consisted in:

SPENDING: DM 5.25 billion

Transfers DM 1.75 billion (expected: 1.75)

- DM 0.25 billion from other subsidy cuts including cuts in subsidies for coal industry, regional development, freight and R&D projects (January 1991)
- DM 1.5 billion from cuts in financial aid including cuts in subsidies to agriculture and shipbuilding and aircraft industry, cuts in equity capital programs and certain labor market measures (July 1991)

Other DM 3.5 (expected)

• DM 3.5 billion from reduced assistance to Berlin and inner-German border (January 1991)

Germany 1994

Fiscal consolidation amounted to 0.96 percent of GDP, 0.83 percent of GDP spending cuts, 0.13 percent of GDP tax hikes. A new multi-year package of consolidation measures were proposed by the government in July 1993 and passed into law at the end of the year. It included measures to reduce expenditure (mainly social) and to increase revenues, reducing exemptions and fighting tax evasion. In addition measures implemented in January and July 1991 had a budgetary impact of DM 6.25 billion. Thus over the year, according to IMF Economic Developments and Issues 1991 (p.98), IMF Staff report 1993 - Supplement (p. 10), IMF Economic Developments and Issues 1994 (p.39), on the revenues side consolidation consisted in:

REVENUES: DM 4.3 billion⁹⁰

Taxes on Income, Profits and Capital Gains DM 4.3 billion (unexpected: 2.8; announced: 1.5)

⁹⁰Although the package included as well an increase in fuel tax, we do not take it into account since it was explicitly designed to finance the restructuring of federal railways (IMF Economic Developments 1994, p.9).

- DM 2.8 billion revenues from changes in the tax code to fight tax and social security evasion
- DM 1.5 billion from modification in "taxation of interest income from life insurance contracts, the introduction of income limits for recipients of homeowners' tax preferences and a rise in the tax rate on small wage incomes" (July 1991)

Private taxes DM 1.5 billion (announced: 1.5)

• DM 1.5 billion from modification in "taxation of interest income from life insurance contracts, the introduction of income limits for recipients of homeowners' tax preferences and a rise in the tax rate on small wage incomes" (July 1991)

Not yet classified, C vs. P DM 2.8 billion (announced: 2.8)

• DM 2.8 billion revenues from changes in the tax code to fight tax and social security evasion

According to IMF Staff report 1993 - Supplement (p. 4), IMF Economic Developments and Issues 1994 (p.39) and IMF Economic Developments and Issues 1991 (p.98), on the spending side consolidation consisted in 91:

SPENDING: 27.25 billion DM Salaries DM 7.5 billion (unexpected: 7.5)

• DM 7.5 billion from other spending cuts including reduction in wages of civil servants and cuts to staff⁹²

Transfers DM 115 billion (unexpected: 15)

- DM 15 billion cuts to social and labor market expenditure and subsidies, including reduction of replacement rations for unemployment benefits, some limitation in the duration of unemployment assistance and stricter criteria to receive child allowances
- DM 0.25 billion from other subsidy cuts including cuts in subsidies for coal industry, regional development, freight and R&D projects (January 1991)
- DM -0.25 billion from lower cuts in Financial including cuts in subsidies to agriculture and shipbuilding and aircraft industry, cuts in equity capital programs and certain labor market measures (July 1991)

Other DM 4.75

• DM 4.75 billion from reduced assistance to Berlin and inner-German border (January 1991)

Germany 1995

Fiscal consolidation totaled 1.21 percent of GDP, 0.94 percent of GDP spending cuts, 0.27 percent of GDP tax hikes. The bulk of the consolidation was the "Solidarity Pact", a broad package of measures aimed at reducing local authorities expenditures. Discussions between Federal government, Länder and local government started in summer 1992 but an agreement was reached only in March 1993. The final version included the revision of revenue sharing system between central and local government, the re-imposition of a "solidarity surcharge" on incomes and a series of small spending cuts. In addition measures contained in the July/end of 1993 consolidation package had a budgetary effect of DM 7. 3 billion. Thus, according to IMF Economic Developments and Issues 1993 (p.26), IMF Staff report 1993 - Supplement (p. 4) and IMF Economic Developments and Issues 1994 (p.39), on the revenues side, consolidation consisted in:

REVENUES DM 30.4 billion

Income, Profits and Capital Gains + Property taxes DM 30.4 billion (announced: 30.4)

- DM 2.4 billion revenues from changes in the tax code to fight tax and social security evasion (July 1993)
- DM 28 billion from the imposition of a 7.5 percent solidarity surcharge on wage and income (low incomes are partially or fully exempted) and the increase in wealth tax (Solidarity plan)

⁹¹ Although it describes the package only as originally proposed, we take the amounts form IMF Staff Report 1993 - Supplement (p.10) since they are decomposed and they are similar to the ones of the package effectively adopted (as in IMF Economic Developments and Issues 1994, p. 39).

⁹²See OECD Economic Surveys 1994 (p.58).

Not yet classified, C vs. P DM 30.4 billion (announced: 30.4)

- DM 2.4 billion revenues from changes in the tax code to fight tax and social security evasion (July 1993)
- DM 28 billion from the imposition of a 7.5 percent solidarity surcharge on wage and income (low incomes are partially or fully exempted) and the increase in wealth tax (Solidarity plan)

According to IMF Economic Developments and Issues 1993 (p.28), IMF Staff report 1993 - Supplement (p. 10) and IMF Economic Developments and Issues 1994 (p.39), on the spending side, consolidation consisted in:

SPENDING: DM 8.807 billion Salaries DM 3.207 billion (announced: 3.207)

- DM 0.22 billion cuts in federal government employment (Solidarity pact)
- DM 0.2 billion from reduction in pay supplements for civil servants (Solidarity pact)
- DM 0.487 billion from reduction in defense outlays (Solidarity Pact)
- DM 2.3 billion from other spending cuts including reduction in wages of civil servants and cuts to staff⁹³ (July 1993)

Transfers DM 3.133 billion (announced: 3.133)

- DM 2.6 billion cuts to social and labor market expenditure and subsidies, including reduction of replacement rations for unemployment benefits, some limitation in the duration of unemployment assistance and stricter criteria to receive child allowances (July 1993)
- DM 0.28 billion cuts in coking coal subsidies (Solidarity Pact)
- DM 0.253 billion cuts in agriculture subsidies (Solidarity Pact)

Other DM 2.467 billion (announced: 2.467)

• DM 2.467 billion from other spending cuts (Solidarity Pact) (Residual)

Germany 1997

Fiscal consolidation amounted to 1.56 percent of GDP, 1.07 percent of GDP spending cuts, 0.49 percent of GDP tax hikes. Fiscal consolidation measures were adopted in late 1996 as part of the 1997 budget and were aimed at reducing the deficit to meet the Maastricht criteria (IMF Staff report 1997, p. 20). They consisted in cuts to public spending (1 percent of GDP) and increase in revenues from pension contribution (0.5 percent of GDP). A freeze on discretionary expenditures worthing an additional 0.1 percent of GDP was proposed in May⁹⁴. Thus, according to IMF Staff Report 1997 (pp..20-22) on the revenues side the following measures were implemented:

REVENUES: DM 18 billion⁹⁵

Taxes on Income, Profits and Capital Gains DM 18 billion (unexpected: 18)

• DM 18 billion from increase in social security contribution

Corporate taxes DM 9 billion (unexpected: 9)

• DM 9 billion from increase in social security contribution ⁹⁶

Private taxes DM 9 billion (unexpected: 9)

• DM 9 billion from increase in social security contribution

⁹³See OECD Economic Surveys 1994 (p.58)

^{94&}quot;Structural weaknesses in the economy and in the tax system have undermined fiscal performance in 1997. With greater unemployment, particularly in the construction sector, spending on unemployment benefits is now expected to be higher by 1/2 percentage point of GDP [...] In all, revenues are now projected to fall short of earlier estimates by about 3/4 percentage point of GDP. With the Maastricht target in jeopardy, in May the authorities initiated a freeze on discretionary expenditures" (IMF Staff report 1997, p. 22).

⁹⁵"Other tax changes were envisaged to be broadly revenue neutral: the wealth tax was abolished, the inheritance and gift taxes were modified significantly, and the real estate transactions ax was increased sharply" IMF Staff report 1997.

⁹⁶Contribution is shared equally between employers and employees.

According to IMF Staff Report 1997 (pp..20-22), OECD Economic Surveys 1997 (pp.. 44-46), Die Welt (12.11.1997, "Waigel muß Haushalt erneut umschichten") on the spending side the following measures were implemented:

SPENDING: DM 42 billion⁹⁷

Government Consumption DM 7 billion (unexpected: 7)

• DM 7 billion savings

Transfers DM 17.4 billion (unexpected: 17.4)

- DM 1.2 billion cuts in subsidies
- DM12 billion form labor market and pensions
- DM 2.2 billion from cuts in subsidies to the agricultural sector
- DM 2 billion from reduced tax exemptions

Not yet classified DM 12 billion (unexpected: 12)⁹⁸

• DM 12 billion (1 percent of GDP) cuts in expenditures "with the greatest savings in wages and salaries and transfers to the labor office – the counterpart to which will be lower spending on active labor market measures in the new Länder and savings with respect to unemployment benefits and access to early retirement. Personnel in the federal administration are to be reduced by 2 per cent in 1997, which in combination with small tariff wage increases is set to lower the nominal wage bill by 1/2 per cent." (OECD Economic Surveys 1997) "reduced personnel costs achieved by wage restraint and retrenchments, spending limits imposed at the federal and state level, lower spending on active labor market measures, and substantial social security reforms—reducing sick pay coverage and restricting spa visits (both are financed by health insurance funds), and tightening eligibility criteria for unemployment benefits-were to curtail transfers to the social security funds." (IMF Staff report)

Other DM 3 billion (unexpected: 3)

• DM 3 billion⁹⁹ (0.1 percent of GDP) from freeze on discretionary expenditures

Germany 1998

Fiscal consolidation amounted to 0.02 percent of GDP, 0.1 tax hikes partially offset by spending increase of 0.08. The expiration of spending freeze introduced in 1997 had a budgetary impact of - 0.08 percent of GDP. On the revenue side, the projected rise in VAT was partially offset by the reduction of solidarity surcharge (Bundesministerium der Finanzen, September 2013, "Übersicht über die Steuerrechtsänderungen seit 1964", p. 97). Overall there was a net consolidation of DM 0.9 billion.

REVENUES: DM 3.9 billion

Taxes on income, Profits and Capital Gain DM -7.4 billion (unexpected: -7.4)

• DM -7.4 billion from reduction of solidarity surcharge

Taxes on goods and services DM 11.3 billion (unexpected: 11.3)

• DM 11.3 billion from increase in VAT tax rate in April

Not yet classified, C vs. P DM -7.4 billion (unexpected: -7.4)

• DM -7.4 billion from reduction of solidarity surcharge

SPENDING: DM -3 billion

Other DM -3 billion (announced: -3)

• DM -3 billion from expiration of freeze on discretionary expenditures (1997)

⁹⁷ The amounts are calculated taking the percentages of GDP from IMF Staff report 1997 and the official OECD estimate of GDP for

 $^{^{98}}$ Residual of all the other measures identified.

⁹⁹3 billion according to Die Welt (12.11.1997, "Waigel muß Haushalt erneut umschichten"), 1 percent of GDP according to IMF Staff Report 1997. Form Rhein Zeitung (05.06.1997, "Theo Waigel bleibt im Amt") we deduce that the exact composition of these cuts (mainly for ministry/departments expenditures) was not specified. Hence we put them in the cathegory "other".

During the year the 1998 hike in VAT rate had its full budgetary impact. However these proceeds were used to finance higher transfers from the federal budget to the pension system (Deutscher Bundestag: Drucksache 13/8704 vom 07.10.1997. In addition, the OECD Economic Surveys 1998-1999 (p. 50-51) reports that some tax allowances faded out but, since we found no mention anywhere of this measure, we decided not to take it into account. Hence, no net consolidation was achieved in 1999.

Germany 2000

Fiscal consolidation totaled 0.75 percent of GDP, 0.8 spending cuts partly offset by a tax cut of 0.05 percent of GDP. The spending-based consolidation was a consequence of the package ("Future Programme") presented by the government in June 1999 to meet the deficit reduction targets. It envisaged a wide variety of targeted spending cuts (mainly to social programs, public sector employment and subsidies) generating a total DM 30.5 billion (0.75 percent of GDP) savings in 2000 (OECD Economic Surveys 1999, pp. 177). However the tax reform that was discussed in late 1998 and come into operation in January 1999 and January 2000 scheduled a number of tax reductions generating a total DM 2 billion (0.05 percent of GDP) tax relief in the year. Thus net fiscal consolidation only amounted to 0.75 percent of GDP. According to OECD Economic Surveys 1999 (p.58), on the revenues side the following measure become effective:

REVENUES: DM - 2 billion

Taxes on Income, Profits and Capital Gains DM -2 billion (announced: -2)

• DM -2 billion net tax relief from all income tax reform implemented

Private taxes DM -2 billion (announced: -2)

• DM -2 billion net tax relief from all income tax reform implemented

According to OECD Economic Surveys 1999 (p.54) and Germany Fiscal Stability programme, update December 1999 (p. 18), on the spending side it consisted in:

SPENDING: DM 30.5 billion

Government Consumption DM 0.6 billion (announced: 0.6)

• DM 0.6 billion from modernization and increase in flexibility of the public service

Transfers DM 9.87 billion (announced: 9.87)

- DM 3 billion from a temporary ceiling on pension rises. Pension were raised in accordance to previous year inflation rate instead of wage growth rate
- DM 5.5 billion from the introduction of stricter criteria to receive unemployment assistance payments
- DM 0.8 billion from reduction of subsidies for agriculture
- DM 0.07 from reduction in housing subsidies
- DM 0.5 billion from restriction of tax exemptions on interest earned on life insurances

Not yet classified DM 20.03 billion (announced: 20.03)¹⁰⁰

• DM 20.03 billion from a variety of spending cuts including reduction in <u>salaries</u> (ceiling to public official wage increase, reduction of employment in the public service) <u>subsidies</u> (agriculture and low rent housing) and <u>tax</u> <u>subsidies</u> (restriction of tax exemptions on interest earned on life insurances and extension of terms to receive or pay interest on tax refunds or tax demands)

¹⁰⁰Residual of all the measures identified.

Fiscal consolidation of 1.17 percent of GDP, 1.12 tax hikes and 0.05 spending cuts. The consolidation package was proposed in October 2002 by the government and it was aimed at reducing the general government deficit to a level below 3 percent of GDP (OECD Economic Surveys 2002, p. 64). It included measures expected to generate higher revenues from income, business and indirect taxes and it mainly consisted in "reductions in tax allowances, e.g. for the construction of owner-occupied houses or the netting of business losses with profits, and broadening the base for the turnover tax". During the year the ecological tax reform was also implemented, raising taxes on non-renewable energies. Finally tax cut scheduled for 2003 as the third step of the 2000 Tax Reform was postponed to 2004 to finance the flood relief fund (Germany Financial Stability Program, December 2002 update). According to DIW Berlin, Wochenbericht Nr. 16/2003, (p. 261 table 3.12), fiscal consolidation consisted in:

REVENUES: € 16.7 billion

Taxes on Income, Profits and Capital Gains € 12.1 billion (unexpected: 27.1: announced: -15)

- \bigcirc 0.5 billion from an increase in the corporate tax
- \bigcirc 3.6 billion from the increase in the contribution rate for pension
- \bullet \in 1.6 billion from the increase of the income threshold for pension and unemployment insurance
- € 2.9 billion from increase in the health insurance contribution rate
- \bullet C -15 billion from tax cuts scheduled for 2003 as 3rd step of the 2000 Tax Reform
- \bigcirc 15 billion from the postponement of the tax cuts scheduled for 2003

Corporate € 0.5 billion (unexpected: 0.5)

• \bigcirc 0.5 billion from an increase in the corporate tax

Personal € 9.1 billion (unexpected: 9.1)

- \bigcirc 1 billion from the reform of low wage sector
- \mathfrak{C} 3.6 billion from the increase in the contribution rate for pension
- \bullet \in 1.6 billion from the increase of the income threshold for pension and unemployment insurance
- $\ \ \ \$ 2.9 billion from increase in the health insurance contribution rate

Not yet classified, C vs. P DM 0 billion (unexpected: 15; announced: -15)

- \bullet C -15 billion from tax cuts scheduled for 2003 as 3rd step of the 2000 Tax Reform
- \bigcirc 15 billion from the postponement of the tax cuts scheduled for 2003

Taxes on Goods and Services € 4.6 billion (unexpected: 4.6)

- \bigcirc 0.4 billion from an increase in the tax on to bacco

SPENDING: € 1 billion

Transfers € 1 billion (unexpected: 1)

• \bigcirc 1 billion from reduction of tax concessions

Fiscal consolidation of 0.39 percent of GDP, spending cuts of 1.09 percent of GDP partly offset by tax cuts of 0.7 percent of GDP. The 2004 budget contained a package of spending cuts expected to generate savings of 1.1 percent of GDP. At the same time, the third step of the 2000 Tax Reform scheduled for 2003 and postponed to 2004 become effective, generating a budgetary impact of -0.7 percent of GDP. According to IMF Staff Report 2004 (p. 23), on the revenue side the following tax cuts become effective:

REVENUES: € -15 billion

Taxes on Income, Profits and Capital Gains € -15 billion (announced: -15)

• \bigcirc -15 billion from tax cuts scheduled for 2003 and postponed to 2004 at the end of 2002¹⁰¹

Not yet classified, C vs. P DM -15 billion (announced: -15)

 \bullet C -15 billion from tax cuts scheduled for 2003 and postponed to 2004 at the end of 2002

According to IMF Staff Report 2004 (p. 23), on the spending side the prospected savings were:

SPENDING: € 23.5¹⁰² billion

Government Consumption € 8.5 billion (unexpected: 8.5)

• \mathfrak{C} 8.5 billion savings from the health care reform

Transfers € 4.2 billion (unexpected: 4.2)

- $\ensuremath{\mathfrak{C}}$ 2.1 billion saving from pension reform
- € 2.1 billion savings from subsidy cuts (coal mining and capital transfers)

Other \triangleleft 10.65 (unexpected: 10.65)

• € 10.65 billion from discretionary spending cuts

Germany 2006

Fiscal consolidation of 0.31 percent of GDP, totally based on spending cuts. At the beginning of the year the new coalition government proposed a wide package of fiscal consolidation including spending cuts (mainly in transfers), a 3 percent point increase in VAT in 2007, partly compensated by a decrease in social security contribution stating in 2007 and a series of measures to promote growth (such as new tax expenditures for private household, increase in investment depreciation allowances, increased child benefits, higher spending in infrastructure and R&D) (Germany Financial Stability programme, February 2006 update, p. 16 and OECD Economic Surveys 2006, p. 53). These measure were expected to accomplish deficit reduction starting in 2007 and to have a slight negative effect in 2006. However, taking into account the measures already implemented in the previous year (mostly on the spending side), overall deficit was expected to fall by 0.1 percent on GDP in 2006 (OECD Economic Surveys 2006, p. 53 and IMF Staff Report 2005, p.27)¹⁰³. Hence, according to IMF Staff Report 2005 (p.27)¹⁰⁴ fiscal consolidation consisted in

SPENDING: \bigcirc 6.738¹⁰⁵ billion

Transfers € 4.492 billion - (announced: 4.492)

- DM 2.246 billion from the Hartz IV labor market reform that was approved in July 2004 and came into operation in January 2005 consisting in a reorganization of unemployment benefits
- DM 2.246 billion from subsidy cuts announced in 2004¹⁰⁶

Other € 2.246 billion (announced: 2.246 billion)

• DM 2.246 billion form Discretionary cuts announced in 2004¹⁰⁷

¹⁰¹According to Germany Financial Stability Program, December 2003 update (p. 42) the reform implied an increase in personal allowance and tax rates remodulation.

¹⁰²Amounts are calculated using percentages of GDP as in table in IMF Staff Report 2004 (p. 23) and the OECD 2003 GDP estimate. ¹⁰³According to IMF Staff Report 2006 (p.23) the reduction in deficit was bigger than expected, totaling 0.5 percent of GDP. To the extent of our research we are interest in assessing the effects of the original plan announcemnts, hence we use the estimate in IMF Staff Report 2005.

 $^{^{104}}$ We only take into account policy changes. Landesbanken guarantees are registered under the line.

 $^{^{105}}$ Amounts are calculated using percentages of GDP as in table in IMF Staff Report 2006 (p. 23) and the OECD 2005 GDP estimate.

¹⁰⁶As we can infer from the table in IMF Staff Report 2005 (p.27) and from IMF Staff Report 2004 (p.23).

 $^{^{107}}$ As we can infer from the table in IMF Staff Report 2005 (p.27) and from IMF Staff Report 2004 (p.23).

Fiscal consolidation amounted to 0.94 percent of GDP, 0.52 percent of GDP spending cuts, 0.42 percent of GDP tax hikes. Consolidation in the year was a consequence of measures proposed by the new coalition government at the beginning of 2006. They included spending cuts (in government consumption and transfers), a 3 percent point increase in VAT and a reduction in social security contribution. According to Germany Financial Stability Programme, February 2006 update (p. 16), on the revenues side the impact of the measures was:

REVENUES: DM 9.288 billion

Taxes on Income, Profits and Capital Gains DM -13.932 billion (announced: -13.932)

- $\bullet\,$ -0.6 percent of GDP from the reduction of social security contribution rates
 - Corporate taxes -6.966 (announced:-6.966)
- -0.3 percent of GDP from the reduction of social security contribution rates ¹⁰⁸
 - Private taxes -6.966 (-0.3) (announced:-6.966)
- -0.3 percent of GDP from the reduction of social security contribution rates

Taxes on Goods and Services 23.22 (announced: 1)

• 1 percent of GDP from increase in VAT rate from 16 to 19 percent

According to Germany Financial Stability Programme, February 2006 update (p. 16), on the spending side, the impact of the measures was:

SPENDING: DM 11.61 billion

Government Consumption DM 4.644¹⁰⁹ billion (announced: 4.644)

• 0.2 percent of GDP from cuts in government consumption 110

Transfers DM 6.966 billion (announced: 6.966)

- 0.2 percent of GDP from cuts in social transfers, including lower long term unemployment benefits and abolishment of owner-occupied home premiums
- 0.1 percent of GDP from cuts in capital transfers

9 Ireland

Ireland 1982

Fiscal consolidation totaled 3.25 percent of GDP, with tax hikes of 2.95 percent of GDP and spending cuts of 0.3 percent of GDP. The consolidation is implemented by a newly-elected government in order to reduce the budget deficit which was deteriorating. It was "part of a five-year effort to eliminate the current deficit by the end of 1987" (IMF, Recent Economic Developments 1983, p. 52). The measures were based both on spending cuts and tax increases. Data on components are taken from Table 29 p. 73.

REVENUES: Ir£ 371.4 million

Income, profits and capital gains (unexpected: Ir£ 6.3 million)

- Ir£ -41.7 million income tax levy
- Corporate tax: Ir£ 28 million
- \bullet Special levy on banks: Ir£ 20 million

Personal (unexpected: Ir£-41.7 million)

 $^{^{108}\}mathrm{Social}$ security contribution is shared equally between employers and employees.

 $^{^{109}\}mathrm{Calculated}$ using GDP 2006 source OECD Economic Surveys 2007.

¹¹⁰This may include salaries: "further reductions in civil service payroll spending, in part through less generous pay, as well as measures to counter the surge in benefit payments to the long-term unemployed, have been introduced" (OECD Economic Surveys 2006, p. 52)

• Ir£ -41.7 million income tax levy

Corporate (unexpected: Ir£ 48 million)

• Corporate tax: Ir£ 28 million

• Special levy on banks: Ir£ 20 million

Indirect (unexpected: Ir£ 337.1 million)

 \bullet Tobacco, alcoholic drinks and table waters: Ir £ 47.5 million

• Hydrocarbon oils: Ir£ 23 million

• Motor vehicles and road tax: Ir£ 9 million

• Value-added tax: Ir£ 208.8 million

• Other indirect tax: Ir£ 10.8 million

• Postal and communication charges: Ir£ 38 million

Other (unexpected: Ir£ 28 million)

• Other revenues: Ir£ 28 million

SPENDING: Ir£ 38.2 million

Salaries (unexpected: Ir£ 25 million)

• Embargo on the filling of vacancies in the public service: Ir£ 25 million

Transfers (unexpected: Ir£ 13.2 million)

• Food subsidies on butter and margarine reduced by Ir£ 13.2 million

Ireland 1983

Fiscal consolidation totaled 2.73 percent of GDP, with tax hikes of 2.66 percent of GDP and spending cuts of 0.07 percent of GDP. For what concerns the motivations of this adjustment see the entry for 1982. Data are taken from IMF, Recent Economic Developments 1983 and in particular Table 29, p. 73.

REVENUES: Ir£ 395.4 million

Income, profits and capital gains (unexpected: Ir£ 38 million)

- Personal income taxation: Ir£ 14 million
- Special levy on banks: Ir£ 25 million
- Ir£ -1 million of corporate taxes, stock relief

Personal (unexpected: Ir£ 14 million)

• Personal income taxation: Ir£ 14 million

Corporate (unexpected: Ir£ 24 million)

- Special levy on banks: Ir£ 25 million
- Ir£ -1 million of corporate taxes, stock relief

Property (unexpected: Ir£ 30 million)

• Property tax: Ir£ 30 million

Indirect (unexpected: Ir£ 306.4 million)

• Tobacco, alcoholic drinks and table waters: Ir£ 70.7 million

• Hydrocarbon oils: Ir£ 65.7 million

• Motor vehicles and road tax: Ir£ 16 million

• Value-added tax: Ir£ 119.1 million

• Other indirect tax: Ir£ 11.9 million

• Postal and communication charges: Ir£ 23 million

Other (unexpected: Ir£ 21 million)

• Other revenues: Ir£ 21 million

SPENDING: Ir£ 10 million

Salaries (unexpected: Ir£ 10 million)

• Embargo on the filling of vacancies in the public service: Ir£ 10 million ¹¹¹

Ireland 1984

Fiscal consolidation totaled 0.31 percent of GDP based on tax hikes. The adjustment aims at consolidating the improvements in public finances made in the two previous years. The episode is based only on tax hikes. Data for the different components are taken from the IMF, Recent Economic Developments 1983 and in particular Table 27, p. 65.

REVENUES: Ir£ 51.5 million

Income, profits and capital gains (unexpected: Ir£-18.8 million)

- Ir£ -40.8 million personal income tax, mainly exemptions
- Ir£ -3 million corporate tax, stock relief
- Special levy on banks: Ir£ 25 million

Personal (unexpected: Ir£-40.8 million)

• Ir£ -40.8 million personal income tax, mainly exemptions

Corporate (unexpected: Ir£ 22 million)

- $\bullet\,$ Ir£ -3 million corporate tax, stock relief
- Special levy on banks: Ir£ 25 million

Indirect (unexpected: Ir£ 70.3 million)

- Tobacco, alcoholic drinks and table waters: Ir£ 31 million
- Hydrocarbon oils: Ir£ 16.3 million
- Motor vehicles and road tax: Ir£ 6.5 million
- Value-added tax: Ir£ 16.5 million

¹¹¹The teaching staff and the police force are not affected by this policy. It is expected that over 2,000 jobs, about 1 per cent of the affected work force, will remain unfilled in 1983, generating savings of some LIr 35-40 million, compared with ETr 25-30 million in 1982 (p. 51). It is not clear whether the measure was originally planned for 1982 and 1983 (and hence should be considered as announced) or it was extended at the beginning of 1983 (and hence should be considered as unexpected).

Ireland 1985

Fiscal consolidation totaled 0.13 percent of GDP based on tax hikes. After the government abandoned the objective of eliminating the budget deficit by 1987, it committed to a new reduction of the current deficit in 1985 with the target deficit of 5% of GNP in 1987. Data about fiscal components are taken from the IMF, Recent Economic Developments 1985 and in particular Table 26, p. 64.

REVENUES: Ir£ 24 million

Income, profits and capital gains (unexpected: Ir£ -14.1 million)

- Ir£ -72.6 million from personal income taxation, mainly due to exemptions
- Corporate taxation: Ir£ 1.5 million
- Tax on building societies: Ir£ 32 million
- Special levy on banks: Ir£ 25 million

Personal (unexpected: Ir£ -72.6 million)

• Ir£ -72.6 million from personal income taxation, mainly due to exemptions

Corporate (unexpected: Ir£ 58.5 million)

- Corporate taxation: Ir£ 1.5 million
- Tax on building societies: Ir£ 32 million
- Special levy on banks: Ir£ 25 million

Indirect (unexpected: Ir£ 38.1 million)

- Tobacco, alcoholic drinks and table waters: Ir£ 17.5 million
- Hydrocarbon oils: Ir£ 27.1 million
- Motor vehicles and road tax: Ir£ 7.5 million
- Value-added tax: Ir£ -9.2 million
- Other indirect tax: Ir£ -3.7 million
- Stamp duties: Ir£ -1.1 million

Ireland 1986

Fiscal consolidation totaled 0.56 percent of GDP based on tax hikes. The aim of the adjustment is to reduce the current deficit to 7.4% of GNP. Data about fiscal components are taken from IMF, Recent Economic Developments 1987 and in particular from Table 18, p. 37.

REVENUES: Ir£ 110.1 million¹¹²

Income, profits and capital gains (unexpected: Ir£ 1.3 million)

- Ir£ -25.6 million of personal income taxes
- Corporate tax increase generated Ir£ 1.9 million additional revenues
- Special levy on banks: Ir£ 25 million

Personal (unexpected: Ir£ -25.6 million)

• Ir£ -25.6 million of personal income taxes

Corporate (unexpected: Ir£ 26.9 million)

¹¹²Notice that the total amount of revenues is not consistent with Devries et al. (2011) since the total in Table 18 is wrong and does not correspond to the summation of all the listed measures. Therefore, we decided to take a different aggregate and use the components of the Table as we did for the previous entries.

- Corporate tax increase generated Ir£ 1.9 million additional revenues
- Special levy on banks: Ir£ 25 million

Property (unexpected: Ir£ 15 million)

• Property tax and tax evasion: Ir£ 15 million

Indirect (unexpected: Ir£ 94.8 million)

• Tobacco, alcoholic drinks and table waters: Ir£ 23.4 million

• Hydrocarbon oils: Ir£ 15 million

• Motor vehicles and road tax: Ir£ 4.7 million

Value-added tax: Ir£ 59.2 million
Other indirect tax: Ir£ -7.5 million

Ireland 1987

Fiscal consolidation totaled 1.63 percent of GDP, with spending cuts of 1.02 percent of GDP and tax hikes of 0.61 percent of GDP. The adjustment is part of the "Programme for National Recovery" announced in 1987. The measures are centered both on public spending cuts and tax hikes. Data about disaggregated components are taken from the OECD Economic Surveys 1987-1988 and from the 1987 Budget.

REVENUES: Ir£ 128.4 million

Income, Profits and Capital Gains (unexpected: £ 33 million)

- Retention tax to counter special crediting arrangements by financial institution: £ 33 million Corporate (unexpected: £ 33 million)
- Retention tax to counter special crediting arrangements by financial institution: £ 33 million

Indirect Tax (unexpected: £ 95.4 million)

- Duty-free and other allowances for travelers abroad less than 48 hours were abolished in order to benefit the genuine travelers in respect of the goods in their personal baggage that have no commercial character: £ 20 million
- Introduction of a 35 per cent withholding provision for tax on professional fees paid by State agencies (medical, legal, financial, training and engineering services) from 6th June: £ 25 million
- \bullet The farm tax was abolished: £ -9 million. The amount will be recouped by the equivalent reduction in the rate of the flat-rate VAT addition to farm prices.
- Flat-rate VAT addition to the farm prices reduced: £ 9 million (it offsets the net cost of abolishing the farm tax)
- Excise duties increased from midnight on 20th January 1987: £ 48.5 million. The goods whose prices are increased by the measure are: packet of 20 cigarettes, petrol, auto-diesel, auto-LPG, non auto oils and non-auto LPG
- Increase of stamp duty on life assurance premium: £ 2.4 million
- Reduction in VAT on photographic services, waste disposal services and driving instruction: £ -0.5 million

SPENDING: Ir£ 213 million

Salaries (unexpected: Ir£ 253 million)

• Freeze in public-sector wages and strict limitations on public-sector hiring: Ir£ 253 million

Transfers (unexpected: Ir£ -40 million)

- Three of the four housing grants were abolished and mortgage tax relief reduced by 10 per cent: £ 10 million
- PRSI (income tax) tax allowance: £ -50 million

Ireland 1988

Fiscal consolidation totaled 2.1 percent of GDP based on spending cuts. The adjustment aims at consolidating the progress in the reduction of primary deficit made in the previous years. The episode is entirely based on spending cuts. Data about fiscal components are taken from OECD Economic Surveys 1988/1989, p. 17.

SPENDING: Ir£ 471 million

Government Consumption (unexpected: Ir£ 268 million)

• Current expenditure cut by Ir£ 268 million

Government Investment (unexpected: Ir£ 203 million)

• Capital Expenditure cut: Ir£ 203 million

Ireland 2009

Fiscal consolidation totaled 4.74 percent of GDP, with spending measures of 2.39 percent of GDP and tax hikes of 2.35 percent of GDP. The adjustment is characterized by four different steps. The first is characterized by measures introduced in July 2008 in order to contain public spending. The second step is the 2009 Budget which was approved in October 2008 and prescribed revenues increases. In February 2009 further measures to contain public spending were announced and introduced cuts in public-sector wages. Finally, the Supplementary Budget of April 2009 prescribed further spending cuts and new tax hikes. Data about components are taken from the Document of Stability 2009 (p. C37), 2009 Budget (http://budget.gov.ie/Budgets/2009/Summary.aspx) and April 2009 Supplementary Budget (see http://budget.gov.ie/Budgets/2009Supp/Summary.aspx).

REVENUES: € 3.691 billion

Income, profits and capital gains (unexpected: € 3.063 billion)

- Changes to income levy, health levy and PRSI: € 1.322 billion (Apr 2009, Supplementary Budget)
- Taxation on savings: € 0.05 billion (Apr 2009, Supplementary Budget)
- Capital gain tax: € 0.03 billion (Apr 2009, Supplementary Budget)
- Other capital tax: € 0.031 billion (Apr 2009, Supplementary Budget)
- Corporate tax: € 0.02 billion (Apr 2009, Supplementary Budget)
- Introduction of a new income levy: € 0.815 billion (2009 Budget)
- Preliminary Tax payment dates for Large Companies: € 0.35 billion (2009 Budget)
- Capital gain tax, change in payment dates: € 0.2 billion (2009 Budget)
- Capital gain tax, change in tax rate: € 0.16 billion (2009 Budget)
- Tax on savings: 0.085 (2009 Budget)

Personal (unexpected: € 1.658 billion)

- Changes to income levy, health levy and PRSI: € 1.322 billion (Apr 2009, Supplementary Budget)
- Income tax increase: € 0.161 billion (Apr 2009, Supplementary Budget)
- Taxation on savings: € 0.05 billion (Apr 2009, Supplementary Budget)
- Tax on savings: 0.085 (2009 Budget)
- Charge on non-principal private residences: € 0.04 billion (2009 Budget)

Corporate (unexpected: € 0.37 billion)

• Corporate tax: € 0.02 billion (Apr 2009, Supplementary Budget)

• Preliminary Tax payment dates for Large Companies: € 0.35 billion (2009 Budget)

Property (unexpected: € 0.04 billion)

• Charge on non-principal private residences: € 0.04 billion (2009 Budget)

Indirect (unexpected: € 0.588 billion)

- Stamp duty: € 0.11 billion (Apr 2009, Supplementary Budget)
- Tobacco and mineral oils excises: € 0.102 billion (Apr 2009, Supplementary Budget)
- €-0.02 of VAT (Apr 2009, Supplementary Budget)
- Increase in VAT: € 0.208 billion (2009 Budget)
- Excises on tobacco, mineral oil, alcohol and licenses: € 0.043 billion (2009 Budget)
- Betting duty: € 0.04 billion (2009 Budget)
- Air Travel tax: € 0.095 billion (2009 Budget)
- € -0.03 billion for Stamp Duty changes (2009 budget)
- New Motor Tax rates: € 0.04 billion

Not yet classified C vs. P (unexpected: € 0.421 billion)

- Capital gain tax: € 0.03 billion (according to C vs P)
- Other capital tax: € 0.031 billion (according to C vs P)
- Capital gain tax, change in payment dates: € 0.2 billion (2009 Budget) (according to C vs P)
- Capital gain tax, change in tax rate: € 0.16 billion (2009 Budget) (according to C vs P)

SPENDING € 4.26 billion

Government Consumption (unexpected: € 0.767 billion)

- Departmental Savings: € 0.170 billion (Apr 2009, Supplementary Budget)
- Communications and other current expenditure: € 0.037 billion (Apr 2009, Supplementary Budget)
- Savings focused on reducing the payroll bill, introducing a range of efficiency measures across Departments and Agencies and reducing expenditure on consultancy, advertising and PR. In addition there was some re-prioritization of capital projects: € 0.56 billion (July 2008 Expenditure Adjustments, p. C36)

Salaries (unexpected: € 1.95 billion)

- Introduction of the public sector pension-levy which has the effect of reducing the public service pay bill: € 1.8 billion (Feb 2009)
- Payroll savings: € 0.150 billion (Apr 2009, Supplementary Budget)

Government Investments (unexpected: € 0.576 billion)

• Capital expenditure reduced by € 0.576 billion (Apr 2009, Supplementary Budget)

Transfers (unexpected: € 0.867 billion)

- Christmas Bonus Payments reduced by € 0.156 billion (Apr 2009, Supplementary Budget)
- Other welfare payments: € 0.124 billion (Apr 2009, Supplementary Budget)
- \bullet Health and children expenditure: € 0.166 billion (Apr 2009, Supplementary Budget)
- Other Income tax increase (Mortgage Interest Relief and Restriction in Interest Relief Rented Residential Property): € 0.161 billion (Apr 2009, Supplementary Budget)

- Health Expenses Relief: € 0.12 billion (2009 Budget)
- Relief on farmer's taxation: € 0.065 billion (2009 Budget)
- Tax exemption for Start-up Companies: € 0.01 billion (2009 Budget)
- Indexation of maximum allowable pension funds: € 0.045 billion (2009 Budget)
- Corporate tax credit for R&D: € 0.02 billion (2009 Budget)

Other (unexpected: € 0.1 billion)

• Reduction of overseas development aids: € 0.1 billion (Apr 2009, Supplementary Budget)

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Italy 1991

Fiscal consolidation amounted to 2.77 percent of GDP, with tax hikes worth 1.82 percent of GDP and spending cuts of 0.95 percent of GDP. After the 1991 Budget of L 48 trillion, fixed in September 1990, two different fiscal adjustments were implemented during the year. In May 1991, the first adjustment included L 14.2 trillion equally split between higher taxes and lower expenditure¹¹⁴ (OECD Economic Surveys 1992 p.38). The second set of measures was announced in September and October 1991 and aimed at curbing the estimated deficit on unchanged policies by an additional L 10.5 trillion of taxes¹¹⁵ (OECD Economic Surveys 1992, p. 38).

If we consider all of the policies announced for 1991, we can estimate that one third of the predicted effects were not realized. Of these, L 10 trillion were policies not approved by the parliament and L 15 trillion were lower yields caused by a miscalculation of the taxpayer's behavior¹¹⁶ (Bollettino Economico 18 feb 1992, p.37). Devries et al. (2011) takes as a reference the actual revenues for 1991 as a whole with: "budgetary tax and social security receipts [of] 25 trillion lire, [and] reduced expenditure by 16 trillion" (Bank of Italy Annual Report 1991, p.74). However, since within the 16 trillion of expenditure cuts there are L 3 trillion from direct reimbursement of loans raised by state-controlled enterprises and other measures (which we do not take into account in this research), our estimates for expenditure cuts is of 13 billion, differently from Devries et al. (2011). The decomposition is closer, in this case, to the actual returns of the single policies, including all the revisions implemented during the year. The decomposition of the tax policies goes as follows (Banca d'Italia Assemblea Generale Ordinaria Dei Partecipanti 1991, p.137).

REVENUES: L 24.9 trillion

Taxes on Income, Profits and Capital Gains L 11 trillion (unexpected: 11)

- Prepayment of the ten-year INVIM for L 4 trillion. One-off measure fixed in September 1991.
- L 2 trillion from prepayment of some direct taxes (IRPEF and ILOR) for natural persons¹¹⁷. Fixed in October 1991. One-off nature.

¹¹³The sources consulted for Italy are various issues of Banca d'Italia Assemblea Generale Ordinaria dei Partecipanti, Banca d'Italia Bollettino Economico, Bank of Italy Annual Report, IMF Background Economic Development and Issues, IMF Recent Economic Developments, Italy's update to Stability Program and OECD Economic Surveys.

¹¹⁴The first fiscal adjustment needed to compensate L 14.2 trillions due to lower-than-announced revenues coming from 1990 and higher-than-announced inflation (Bollettino Economico 18 feb 1992, p.37). "During the second quarter of 1991, it became apparent that interest payments and some primary expenditures (particularly public wages) were rising faster than announced while tax receipts were not in line with normative budget projections on account of both the marked deceleration of the economy and the persistence of tax evasion. In May, the Government, while approving a new package, estimated to yield Lit 14 trillion, reaffirmed the initial CGBR target, as part of the medium-term strategy set forth in the Documento di programmazione (DP91) approved at the same time". (IMF Background Economic Developments - Italy - 1992)

¹¹⁵The second deficit overshoot stemmed from unexpectedly low yields of the September Budget and by the decrease of direct taxes flowed by entrepreneurs and self-employed. (Bollettino Economico 18 feb 1992, p.37).

¹¹⁶In this context, it is particularly difficult to isolate the announced revenues effects of the single fiscal packages because often one corrects and overlaps the other and the expectations of the taxpayer vary substantially during the current year. Moreover, only at the end of the year it was possible to understand the composition of the changes in budget, when the actual revenue effect was at that point quite clear.

¹¹⁷Notice that Devries et al. (2011) and IMF Recent Economic Developments 1992 state that the prepayment of direct taxes included IRPEG as well, a direct corporate tax. However, Bank of Italy, Assemblea Generale Ordinaria Dei Partecipanti 1991, p.137 and the Decree Law of 1 October 1991 art. 1, comma 4 state that the prepayment of 98 percent of the total liable amount only involved IRPEF and ILOR, while the prepayment of 98 percent of IRPEG was already in place since 1989.

• L 5 trillion from a revaluation of social security contributions and special payments from tax evaders in return for a tax amnesty. Fixed in May 1991.

Property taxes L 3.1 trillion (unexpected: 3.1)

- Tax on land assets of L 2 trillion.
- Optional revaluation of company assets 118 for L 1.1 trillion. Fixed in September 1990. One-off nature.

Personal taxes L 2 trillion (unexpected: 2)

• L 2 trillion from prepayment of some direct taxes (IRPEF and ILOR) for natural persons¹¹⁹. Fixed in October 1991. One-off nature.

Corporate taxes L 1.1 trillion (unexpected: 1.1)

• Optional revaluation of company assets for L 1.1 trillion. Fixed in September 1990. One-off nature.

Taxes on Goods and Services L 7.8 trillion (unexpected 7.8)

- L 4.2 trillion¹²⁰ from shortening of the delays on the payment of VAT. One-off policy fixed in September 1990.
- L 2.1 trillion from prepayment of custom duties . One-off policy fixed in May 1991.
- L 1.5 trillion from increase in stamp duties. Fixed in September 1990.

Not yet classified, All L 3 trillion (unexpected: 3), Corporate vs. Private L 9 trillion (unexpected: 9)

- If we take as a reference Banca d'Italia, Assemble Generale dei Partecipanti 1991, there is a residual of L 3 trillions of measures which are not specified (according to both classifications)
- L 4 trillion from prepayment of the ten-year INVIM. Fixed in September 1991. (According to the Corporate vs. Personal classification)
- L 2 trillion from revaluation of land assets (inasprimento rendite catastali). (According to the Corporate vs. Personal classification)

On the expenditure side, the budget can be decomposed as follows (Banca d'Italia Assemblea Generale Ordinaria Dei Partecipanti 1991, p.137):

SPENDING: L 13 trillion

Government Consumption L 2 trillion (unexpected: 2)

• Cuts to goods and services purchases for L 2 trillion

Salaries L 1 trillion (unexpected: 1)

• L 1 trillion savings from restrictions on hiring staff

Investments L 5 trillion (unexpected: 5)

• L 5 trillion from cap on lending by the Deposits and Loans Fund (Cassa depositi e prestiti)

Transfers L 4.5 trillion (unexpected: 4.5)

- L 0.5 trillion from change in disability criteria
- L 4 trillion from cuts in health services (mainly due to higher charges on pharmaceuticals and diagnoses)

¹¹⁸This is a clear example of misalignment between announced and actual revenue. Indeed, this policy was supposed to return L 4.4 trillion but instead gathered only L 1.1 trillion (Banca d'Italia, Bollettino Economico, October 1990) thus triggering part of the Spetmber 1991 fiscal adjustment (Banca d'Italia, Bollettino Economico, February 1992 p.37)

¹¹⁹Notice that Devries et al. (2011) and IMF Recent Economic Developments 1992 state that the prepayment of direct taxes included IRPEG as well, a direct corporate tax. However, Bank of Italy, Assemblea Generale Ordinaria Dei Partecipanti 1991, p.137 and the Decree Law of 1 October 1991 art. 1, comma 4 state that the prepayment of 98 percent of the total liable amount only involved IRPEF and ILOR, while the prepayment of 98 percent of IRPEG was already in place since 1989.

 $^{^{120}5.8}$ trillion according to Devries et al. p.50 and Bollettino Economico Oct 1991 p.41

Not yet classified (unexpected: 0.5)

• Residual: 0.5 trillion

According to Banca d'Italia Assemblea Generale Ordinaria Dei Partecipanti 1991, p.138, mainly one third of the total shock (L 15 trillion) had a one-off nature, while according to Devries et al. (2011) L 19.4 trillion were considered temporary measures. The temporary measures only involved taxes (Devries et al. (2011) and Banca d'Italia Assemblea Generale Ordinaria Dei Partecipanti 1991)

Italy 1992

Fiscal consolidation totaled 3.18 percent of GDP, with spending cuts of 1.68 percent of GDP and tax hikes of 1.50 percent of GDP. Two rounds of deficit-driven fiscal consolidations occurred in 1992: one fixed in the 1992 Budget and another in the July. Emergency Budget¹²¹ (1994 OECD Economic Surveys, Table 7, p.39). Differently from Devries et al. (2011) we consider that the first Budget introduced tax hikes of L 22.6 trillion and spending cuts of L 18 trillion. The July Emergency Budget, introduced by a new government instead included L 16.2 trillion of revenue increases and L 6.8 trillion of lower spending¹²². The tax measures are decomposed as follows.

REVENUES: L 23.81 trillion

Taxes on income, profits and capital gains L -3.65 (unexpected: 3.95; announced: -7.6)

- L 2.9 trillion for increase in the income tax brackets (IRPEF).
- L -1.8 trillion for decrease in social contributions (mainly health contributions)
- L 1 trillion for amnesty on capital gains (*redditi da fabbricati*). This is a <u>one-off measure</u> of the July Emergency Budget.
- L 1 trillion for increase in contributions. This was a measure of the July Emergency Budget.
- L 0.85 trillion tax on companies that enjoys financial endowments from the State.

During the year the following one-off taxes expired 123 :

- L 2 trillion from the prepayment of some taxes for natural persons
- L 4 trillion from the prepayment of the ten-year INVIM
- L 1.6 trillion from the amnesty included in May 1991(estimation)

Property taxes L 18 trillion (unexpected: 19.1; announced: -1.1)

• L 6.8 trillion for revaluation of capital assets of enterprises (which was introduced as voluntary in 1991, now becomes mandatory). This is a one-off measure.

¹²¹The motivations for the July Emergency Budget were a revision from 2.7 to 1.8 of the GDP growth, higher-than-announced interest payments and the increase of almost all of the expenditure components (Bollettino Economico N. 19 October 1992, p.41).

¹²² According to Devries et al. (2011) the 1992 Budget introduced tax hikes of L 21.5 trillion (1.4 percent of GDP), and primary spending cuts worth Lit 20.8 trillion (1.38 percent of GDP). The July Emergency Budget, introduced by a new government included tax increases worth Lit 21.8 trillion (1.45 percent of GDP) and spending cuts worth Lit 8.2 trillion (0.54 percent of GDP). However, the 1992 Budget was slightly adjusted at the end of 1991 and actually included L 22.6 trillion of revenue increases and L 18 trillion of expenditure cuts (excluding savings on interests) (Bollettino Economico N. 18, February 1992, p. 60). Also the second adjustment of L 20.8 trillion does not find correspondence in any of the Italian authorities' documents and was acutally equal to L 16.2 trillion of tax hikes and L 6.8 trillion of higher expenditures (Relazione previsionale e programmatica per il 1993, Bollettino Economico N. 19, October 1992, p. 47 and Banca d'Italia, Assemblea Generale dei Partecipanti 1992, p. 130)

¹²³Notice that some one-off measures introduced in 1991 expired in 1992. Devries et al. (2011) state that these one-off measures included "the shortening of the delays on the payment of VAT (L 5.8 trillion) and customs duties (L 2.1 trillion), the prepayment of some direct taxes (acconti on IRPEF, IRPEG, and ILOR for L 5.5 trillion), the moving forward to 1991 of the ten-year INVIM (L 5 trillion), the slowing down in the reimbursement of VAT (L 1 trillion)."

However the latter figures correspond to the announced returns, which were corrected and adjusted several times during the year, as explained in entry 1991. Indeed, according to Banca d'Italia Assemblea Generale Ordinaria Dei Partecipanti 1991, p.138, only L 15 trillion of the total tax shocks had in practice a one-off nature. For this reasons, we revised the amounts indicated by Devries et al. (2011) in L 4.2 trillion from shortening of the delays on the payment of VAT, L 2.1 trillion from prepayment of custom duties, L 2 trillion from the prepayment of some taxes for natural persons, L 1.1 trillion from the optional revaluation of company assets, L 4 trillion from the prepayment of the ten-year INVIM and L 1.6 trillion from the amnesty included in May 1991.

- L 0.8 trillion for separation of capital assets for small enterprises.
- L 6.4 trillion from tax on buildings (fabbricati). This is a one-off measure of the July Emergency Budget.
- L 5.1 trillion from tax on bank deposits. This is a one-off measure of the July Emergency Budget.
- Expiration of the previous year's optional revaluation of company assets for L 1.1 trillion. Fixed in September 1990.

Corporate tax L 11.85 trillion (unexpected: 15.85; announced: -4)

- L 6.8 trillion for revaluation of capital assets of enterprises (which was introduced as voluntary in 1991, now becomes mandatory)
- Separation of capital assets for small enterprises of L 0.8 trillion
- Tax on buildings (fabbricati) of L 6.4 trillion. This is a one-off measure of the July Emergency Budget.
- Amnesty on capital gains (redditi da fabbricati) of L 1 trillion. This is a one-off measure of the July Emergency Budget.
- L 0.85 trillion tax on companies that enjoys financial endowments from the State
- L -4 trillion from the expiration of the previous year prepayment of the ten-year INVIM

Personal tax L 4.2 trillion (unexpected: 6.2; announced: -2)

- L 2.9 trillion from increase in income tax brackets (IRPEF).
- L -1.8 trillion from decrease in social contributions (mainly health contributions).
- Tax on bank deposits (L 5.1 trillion). This is a one-off measure of the July Emergency Budget.

During the year the following one-off taxes expired:

• L 2 trillion from the prepayment of some taxes for natural persons

Taxes on Goods and Services L -2.4 trillion (unexpected: 3.9; announced: -6.3)

- Indirect taxes and excises for L 1.2 trillion.
- Stamp duties and government concessions for L 2.7 trillion. This is a permanent measure decided in the July Emergency Budget.

During the year the following one-off taxes expired:

- Shortening of the delays on the payment of VAT for L 4.2 trillion
- L 2.1 trillion from prepayment of custom duties

Not yet classified, All L 11.86 trillion (unexpected: 11.86); Corporate vs. Private: L 12.11 trillion (unexpected: 12.86; announced: -1.6)

- Condonation schemes of L 10 trillion. The amnesty covers all major direct and indirect taxes, and includes the cases in which tax appeals are pending, (IMF Recent Economics Developments 1992, p.22). This is a one-off measure (according to both classification).
- Other revenues for L. 1.86 trillion, fixed in Law 30.12.91, n.413 (according to both classifications)
- Increase in contributions of L 1 trillion. (July Emergency Budget) (only according to the classification Corporate vs. Personal)
- L -1.6 trillion from the amnesty included in May 1991 (only according to C vs. P)

On the expenditure side, the decomposition goes as follows (Bollettino Economico N. 18 p. 60)

SPENDING: L 25 trillion

Consumption L 2.2 trillion (unexpected: 2.2)

- L 1.3 trillion in purchases of goods (mainly military expenditures)
- 'Some' defense expenditure cuts of L 0.9 trillion

Salaries L 9.5 trillion (unexpected: 9.5)

- Decrease in salaries of public employees of L 6.2 trillions
- Postponement of pension liquidation for Public employees for L 0.5 trillion
- L 0.5 trillion savings from public-employees turn-over
- Decrease of L 2.3 trillion in public salaries and hiring. This measure was implemented in July.

Transfers L 7.4 trillion (unexpected: 7.4)

- Cuts to transfers to enterprises for L 2.2 trillion
- Cuts to transfers to institutions different from the central government (Health National Fund, public enterprises and Basilicata and Campania municipalities) for L 1.9 trillion
- - L 0.8 trillion from higher transfers for growth
- Lower transfers to pensions for L 0.6 trillion. This measure was implemented in July.
- L 3.5 trillion associated with the increase in user fees for health services

Investments L 1 trillion (unexpected: 1)

- - L 1 trillion for higher investments in railway plan (Alta velocià FF.SS.)
- Cuts to transfers to the Mezzogiorno Fund for L 2 trillion

Others L 4.9 trillion (unexpected: 4.9)

- L 1.0 trillion in loans to local authorities of the Deposits and Loans Fund.
- Blocco impegni di spesa, riduzioni erogazioni a enti territoriali e altro. L 3 trillion from the July Emergency Budget
- Cuts to transfers to the Regional Common Fund for L 0.9 trillion

Italy 1993

Fiscal consolidation totaled 4.33 percent of GDP, with spending cuts of 3.12 percent of GDP and tax hikes of 1.21 percent of GDP. In 1993, fiscal consolidation was implemented in two rounds. The first one totaled L 93.3 trillion (including privatizations) and the second one a further consolidation of L 12.4 trillion.

The first round planned to raise taxes by L 44.4 ¹²⁴ trillion and the second one implemented additional L 6.8 trillion of tax measures¹²⁵. The tax shock can be decomposed as follows (Bollettino Economico N. 19 p. 72):

REVENUES: L 20.4 trillion

Income and Capital Gain L 23.7 trillion (unexpected: 24.7, announced -1)

- L 1.3 trillion from postponentment of payments for the substitute tax on interests from bank deposits. One-off
- L 6.1 trillion from change on income tax brackets (IRPEF)
- L 2.2 trillion from fiscal drag limitation. One-off
- L 7 trillion from non-deductible ILOR
- L 7 trillion from calculation of self-employment and enterprise income

¹²⁴Notice that Devries et al. (2011) state that the first round implemented tax hikes of L 42.5 trillion. However, the Parliament introduced some small modifications at the beginning of the year, resulting in a L 43.3 trillion maneuvre in taxes (Bollettino Economico N. 19 p. 72).

¹²⁵"Faced with renewed fiscal slippage caused by flagging economic activity and a lack of privatization proceeds, the new Government in May introduced additional measures of fiscal restraint" OECD 1994 Economic Survey, p. 47.

- L 1.1 trillion from pension and Health contributions
- L -1 trillion for the expiration of an amnesty on capital gains decided in the July Emergency Budget of 1992

Property taxes L -4.3 trillion (unexpected: 14; announced: -18.3)

- L 5 trillion from one-off tax on net enterprise property
- L 9 trillion from tax on buildings (ICI)

During the year the following one-off taxes expired:

- L 6.8 trillion for revaluation of capital assets of enterprises (which was introduced as voluntary in 1991, now becomes mandatory).
- L 6.4 trillion from tax on buildings (fabbricati).
- L 5.1 trillion from tax on bank deposits.

Corporate tax L -2.2 trillion (unexpected: 12; announced: -14.2)

- L 7 trillion from calculation of self-employment and enterprise income.
- L 5 trillion from a one-off tax on net enterprise property
- L 6.8 trillion for revaluation of capital assets of enterprises.
- L -1 trillion for the expiration of an amnesty on capital gains decided in the July Emergency Budget of 1992
- L -6.4 trillion from the expiration of one-off tax on buildings (fabbricati).

Personal tax L 2.1 trillion (unexpected: 7.2; announced: -5.1)

- L 6.1 trillion from change on income tax brackets (IRPEF)
- L 1.1 trillion from pension and Health contributions
- L -5.1 trillion from the expiration of the tax on bank deposits.

Tax on Goods and Services L 8.3 trillion (unexpected: 8.3)

- L 1.5 trillion from the alignment of the indirect taxes regime to the European legislation
- L 6.8 trillion for the additional increases on tax implemented in May 1993 consisted in indirect taxes (1994 OECD Economic Surveys p.47)

Not yet classified, All L - 7.3 trillion (unexpected: 2.7; announced: -10); C vs. P L 13.7 billion (unexpected: 23.7; announced: -10)

- L 0.2 trillion other revenues from Law 14.11.1992, n. 438 (according to both classifications)
- L 2.5 trillion from amnesty postponement (according to both classification)
- L 1.3 trillion from postponentment of payments for the substitute tax on interests from bank deposits (according to disaggregation Personal vs. Corporate)
- L 2.2 trillion from fiscal drag limitation (according to disaggregation Personal vs. Corporate)
- L 1.5 trillion from abolition of some tax-deductible obligation (according to disaggregation Personal vs. Corporate)
- L 7 trillion from non-deductible ILOR (according to disaggregation Personal vs. Corporate)
- L 9 trillion from tax on buildings (ICI) (according to disaggregation Personal vs. Corporate)

During the year the following one-off taxes expired:

• Condonation schemes of L 10 trillion. The amnesty covers all major direct and indirect taxes, and includes the cases in which tax appeals are pending, (IMF Recent Economics Developments 1992, p.22).

Ideally, we should take 1.5 percent of GDP as impact of one-off measures. According to Banca d'Italia Assemblea Generale Ordinaria Dei Partecipanti 1993 (p. 145) one-off measures had an impact on the 1993 budget worth 1.20 percent of GDP and comprised taxes on buildings, bank deposits and the majority of the amnesty schemes which were equal respectively to L 6.4 trillion, L 5.1 trillion and L 11 trillion; totaling L 22.5 trillion (1.5 percent of GDP). In order to be reconducted to the impact of 1.2 percent of GDP we considered that probably only L 6.6 trillion were actually gathered from the condonation schemes. Moreover, as explained in entry 1992, we should add to this negative impact the payment of INVIM (L 4 trillions) which is not included in the reports of the Bank of Italy but was actually supposed to be paid in 1993^a.

^aThe Bank of Italy Annual Reports always show the negative impact on the tax flows of the current year caused by the temporary measures implemented in the previous year. In the case of the payment of the ten-year INVIM, which was due in 1993 but anticipated to 1991, the lack of revenues (compared to the previous year) was indeed felt in 1992 but should be coded as a negative shock in 1993 in our database.

On the expenditure side, the first round of fiscal policies included L 41.9 trillion of expenditure cuts¹²⁶ (Bollettino Economico N. 19 p. 72) and the second one L 5.6 trillion less transfers (OECD 1994 Economic Survey p.47).

SPENDING: L 48.8 trillion

Consumption L 3.3 trillion (unexpected: 3.3)

• L 3.3 trillion from cuts to current expenditures and goods and services purchases

Salaries L 9.9 trillion (unexpected: 9.9)

• L 9.9 trillion

Investments L 6.8 trillion (unexpected: 6.8)

• L 6.8 of Capital expenditures

Transfers L 23.1 trillion (unexpected: 23.1)

- L 11.5 trillion from lower spending on pensions
- L 5.6 trillion cuts to transfers implemented in the May adjustment (OECD 1994 Economic Survey p.47)
- L 4.5 trillion cuts to Health expenditures (introducing full payment of medical assistance and pharmaceuticals payments for the persons having high income)
- L 1.5 trillion from abolition of some tax-deductible obligation

Others L 5.7 billion (unexpected: 5.7)

- L 3.5 trillion lower transfers to local institutions (that most likely ended up to expenditure cuts of equal amounts to the authorities and bodies beneficiaries of these funds)
- L 2.2 trillion Partite finanziarie

Italy 1994

Fiscal consolidation totaled 1.17 percent of GDP, with spending cuts of 1.59 percent of GDP partly offset by tax reductions of 0.42 percent of GDP. Fiscal consolidation was motivated by the government's multi-year deficit-reduction program. The adjustment in 1994 was "much smaller than for 1993" (OECD Economic Surveys 1994, p. 50). The amount of higher taxes implemented in 1994 was L 4.6 trillion (Bollettino Economico, October 1994, p.68). The tax disaggregated components are as follows.

REVENUES:L -6.5 trillion

Income and Capital Gains L -1.3 trillion (unexpected: 2; announced: -3.3)

• L 1.5 trillion from new determination of enterprise profit

¹²⁶Notice that Devries et al. (2011) wrongly refers to a L 31 trillion expenditure-based fiscal consolidation from 1994 OECD Economic Surveys (p.44-45) that actually corresponds to the primary deficit surplus in 1991.

¹²⁷The low amount of tax hikes, together with the decision not to compensate entirely the expiration of previously implemented one-off revenues, was justified by the fear to compromise the cyclical growth recovery (Banca d'Italia, Assemblea Generale dei Partecipanti 1994, p.151).

 $^{^{128}}$ Notice that we excluded revenues from public entities divestments like INPS, INAIL and INPDAP

- L 0.8 trillion from new determination of self-employment profit
- L -2.3 trillion from compensation of Fiscal drag
- L 2 trillion for reduction of the prepayments of direct taxes of 1993

The following measures from previous year expired:

- L 2.2 trillion from fiscal drag limitation.
- L 1.3 trillion from postponentment of payments for the substitute tax on interests from bank deposits.

Property taxes L -6 trillion (unexpected: -1; announced: -5)

• L -1 trillion decrease in taxes on the first house

During the year the following one-off measures expired:

- L 5 trillion from one-off tax on net enterprise property
 - Corporate tax L 2.3 trillion (unexpected: 2.3)
- L 1.5 trillion from new determination of enterprise profit
- L 0.8 trillion from new determination of self-employment profit

Personal tax L -3.3 trillion (unexpected: -3.3)

- L -1 trillion from decrease in taxes on the first house
- L -2.3 trillion for compensation of Fiscal drag

Taxes on Goods and Services L 6.6 trillion (unexpected: 6.6)

• L 6.6 trillion

Not yet classified, All L -5.8 trillion (unexpected: -3.3; announced: -2.5), Corporate vs. Private L -3.8 trillion (unexpected: -1.3; announced:-2.5)

- Measures against tax evasions for L 0.8 trillion (according to both classifications)
- Other announced losses of L -4.9 trillion (derivanti da effetti di retroazione sulle entrate di misure di contenimento della spesa e della riduzione, rispetto alle tendenze, del gettito di imposta sostitutiva a motivo della riduzione ai tassi di interesse) (according to both classifications)
- L 0.8 trillion selling of Goods and Services due to a restructuring of the Post enterprise (according to both classifications)
- Reduction of the prepayments of direct taxes of 1993 for L 2 trillion (according to the classification Corporate vs Personal)

During the year the following one-off measures expired:

• L 2.5 trillion from the expiration of the 1993 amnesty postponement (according to both classifications)

On the expenditure side the total amount of cuts is disaggregated as follows (Bollettino Economico, October 1994):

SPENDING: L 25.7 trillion

Government Consumption L 1.7 trillion (unexpected: 1.7)

• L 1.7 trillion from limitation of goods and services purchases

Salaries L 4.9 trillion (unexpected: 4.9)

- L 2 trillion from cuts to Public Employment
- L 2.9 trillion from Renegotiation of Public contracts and other norms

Investments L 11 trillion (unexpected: 11)

• L 11 trillion from savings on Capital expenditures

Transfers L 6.2 trillion (unexpected: 6.2)

- L 2.2 trillion from savings on pensions
- L 4 trillion from lower health transfers thanks to an increase in costs for the consumer

Others L 1.9 billion (unexpected: 1.9)

• L 1.9 trillion from lower transfers to the Special Regions

Italy 1995

Fiscal consolidation of 4 percent of GDP, 1.72 percent of GDP spending cuts, 2.28 percent of GDP tax hikes¹²⁹. Two rounds of fiscal consolidation occurred, the first set of measures was included in the Budget Law approved by parliament in December 1994 (L 24.1 trillion spending cuts and 23.4 tax hikes) and the second round of fiscal consolidation was proposed by the new Dini government in February 1995 ("Mini Budget", L 6.3 trillion spending cuts, L 14.9 trillion tax hikes)¹³⁰. On the tax side, increased revenues came from the following measures (OECD Economic Surveys 1996, Table A2 p. 144):

REVENUES: L 39 trillion

Taxes on Income, Profits and Capital Gains L 19.2 trillion (unexpected: 19.2)

- Amnesty on social security contribution for L 2.9 trillion (one-off) (budget law)
- Presumptive taxation of loss-making companies for L 1 trillion (budget law)
- New tax treatment of business mergers for L 0.5 trillion (budget law)
- New tax assessment procedures for 1989-93 income that were expected to generate L 11.5 trillion <u>one-off</u> revenues (budget law)
- Special taxes on co-operatives for L 0.7 trillion (budget law)
- Corporate tax increase for L 0.5 trillion (mini budget)
- Advancement of payment of tax on net wealth of enterprises for L 2.1 trillion (mini budget)

Taxes on Property L 6.9 trillion (unexpected: 6.9)

• Amnesty on illegal buildings for L 6.9 trillion (one-off) (budget law)

Corporate Taxes L 4.8

- Presumptive taxation of loss-making companies for L 1 trillion (budget law)
- New tax treatment of business mergers for L 0.5 trillion (budget law)
- Special taxes on co-operatives for L 0.7 trillion (budget law)
- Corporate tax increase for L 0.5 trillion (mini budget)
- Advancement of payment of tax on net wealth of enterprises for L 2.1 trillion (mini budget)

Private Taxes L 14.4

• Amnesty on social security contribution for L 2.9 trillion (one-off) (budget law)

¹²⁹In OECD Economic Survey 1996 there is a slight discrepancy between data reported in the text and in the attached tables. Devries et al. use data in the text but we decided to base our analysis on the data in the tables since they are decomposed.

¹³⁰This additional consolidation became necessary after the revision of expectations on interest rates: "Given overly optimistic assumptions about interest rates, the state sector deficit target came to be viewed as being unattainable already at the beginning of the year, prompting the new Dini government to adopt corrective budgetary measures worth L 20.8 trillion, or 1.1 per cent of GDP, in February 1995" (OECD Economic Surveys 1996 p. 44).

• New tax assessment procedures for 1989-93 income that were expected to generate L 11.5 trillion <u>one-off</u> revenues (budget law)

Taxes on Goods and Services L 8.9 trillion (unexpected: 8.9)

- VAT reduction on housing maintenance of L 0.9 trillion (budget law)
- VAT increase for L 2.9 trillion (mini budget)
- Excise tax increase on energy products for L 4.9 trillion (mini budget)
- Amnesties on car taxes and other fiscal irregularities for L 2.0 (one-off) (mini budget)

Other L 0.5 trillion (unexpected: 0.5)

• other revenues for L 0.5 (budget law) and 1 (mini budget) trillion

Not yet classified All L 3.5 (unexpected: 3.5), C vs P: L 10.4 trillion

- L 2.5 trillion (0.15 percent of GDP) revenue coming from anti-evasion measures (one-off) (mini budget)
- Amnesty on illegal buildings for L 6.9 trillion (one-off) (budget law) (Corporate vs Private)
- clearing of outstanding court cases (one-off) for L 1 trillion (budget law)

On the expenditure side, during the year the following measures were implemented (OECD Economic Surveys 1996, Table A3 p. 145):

SPENDING: L 29.4 trillion

Government consumption L 11.9 trillion (unexpected: 11.9)

- L 5.9 trillion cuts to Health expenditure ("Ceiling on spending on goods and services by local health units, ceilings on drug spending, closure of underutilized hospitals) (budget law)
- L 1.6 trillion reduction on spending for goods and services (budget law)
- L 3.7 trillion reduction on spending for goods and services of the state sector (mini budget)
- L 0.7 trillion reduction of transfers to local health units (mini budget)

Salaries L 1.2 trillion (unexpected: 1.2)

• L 1.2 trillion cuts to personnel expenditure including hiring freeze and restrictions on turnover (budget law)

Government Transfers L 12.7 trillion (unexpected: 12.7)

- L 9.1 trillion lower expenditure for pensions, including freeze on seniority retirement and postponement of pension indexation and compensatory pension payments (Budget law)
- L 4.6 trillion cut of transfers to firms (budget law)
- Higher deductions for children and compensation for fiscal drag for a total L -1 trillion (budget law)

Not yet classified for L 1.2 trillion (unexpected: 1.2)

- L 0.3 trillion for lower expenditure (mini budget)
- L 0.9 trillion for reduction of special funds (mini budget)

Other for L 2.4 trillion (unexpected: 2.4)

- L -1.1 trillion for other higher expenditure (budget law)
- L 2.8 trillion cuts of transfers to local government, including transfers to special status regions (budget law)
- L 0.7 trillion reduction on transfers to local government (mini budget)

Italy 1996

Fiscal consolidation of 1.12 percent of GDP, 1.1 percent of GDP spending cuts and 0.02 tax hikes. Two rounds of fiscal consolidation, the 1996 Budget Law that called for spending cuts of L 10 trillion (0.52 percent of GDP) and tax hikes of L 22.5 trillion (1.16 percent of GDP) and an additional set of measures worth L 16 trillion announced by the new government in June¹³¹. Overall, according to the "Bollettino Economico di Banca d'Italia" (n°26, Febbraio 1996, pp. 68-69) for the 1996 Budget Law, and to OECD Economic Surveys 1997 (p. 60) for the additional measures, over the year, on the revenues side, fiscal consolidation consisted in:

REVENUES: L 2.44 trillion

Taxes on Income, Profits and Capital Gains L 2.95 trillion (unexpected: 17.35; announced: -14.4)

- L 4 trillion from the revision of the parameters for the calculation of taxes for entrepreneurs when sector studies are not applicable (parametri presuntivi) (1996 budget)
- L 1.5 trillion from the extension of the new tax assessment procedures to income earned in 1994 (one-off) (1996 budget)
- L 0.7 trillion from amnesty on accounting irregularities (one-off) (1996 budget)
- L 3.45 trillion for anticipation of taxes on enterprises' net wealth (one-off) (1996 budget)
- L 1.9 trillion from fiscal drag (one-off) (1996 budget)
- L 5.8 trillion from increased social contributions following the 1995 pensions' reform (1996 budget)

Expiration of the following measures from previous years:

- Amnesty on social security contribution for L 2.9 trillion
- New tax assessment procedures for 1989-93 income that were expected to generate L 11.5 trillion

Property taxes L -5.9 trillion (unexpected: 1; announced: -6.9)

- L 1 trillion from transformation of leasehold estate ("diritto di superficie") (1996 Budget)
- Expiration of the previous year's Amnesty on illegal buildings for L 6.9 trillion

Corporate taxes L 8.15 trillion

- L 4 trillion from the revision of the parameters for the calculation of taxes for entrepreneurs when sector studies are not applicable ("parametri presuntivi") (1996 budget)
- L 0.7 trillion from amnesty on accounting irregularities (one-off) (1996 budget)
- L 3.45 trillion for anticipation of taxes on enterprises' net wealth (one-off) (1996 budget)

Private taxes L -5.6 trillion (unexpected: 8.18; announced: -14.4)

- L 1.5 trillion from the extension of the new tax assessment procedures to income earned in 1994 (one-off) (1996 budget)
- L 1.9 trillion from fiscal drag (one-off) (1996 budget)
- L 5.8 trillion from increased social contributions following the 1995 pensions' reform (1996 budget)
- Amnesty on social security contribution for L -2.9 trillion (one-off in 1995 budget)
- New tax assessment procedures for 1989-93 income that were expected to generate L -11.5 trillion (one-off in 1995 budget)

Taxes on Goods and Services L 9.1 trillion (unexpected: 11.1; announced: -2)

• L 1.25 trillion from increased taxes on loans, building registrations and government licenses (1996 budget)

¹³¹"Given the unexpected cyclical downswing, the fiscal targets moved quickly out of reach, demanding additional corrective action under the 1996 financial law. Correspondingly, the new government, which took office in mid-May, announced an additional L 16 trillion of measures in June" (OECD Economic Surveys 1997, p.60).

- L 2.2 trillion from the extension of lotteries' sales (1996 budget)
- L 1.8 trillion from the increase of stamp duty (1996 budget)
- L 0.7 trillion from the increase of taxes on tobacco, alcohol and gasoline (1996 budget)
- L 0.15 trillion from "diritti di segreteria"
- L 5 trillion from "higher excise duties and levies on lotteries and unleaded gasoline as well as higher taxes on some bank deposits and issues of insurance contracts" (additional consolidation)
- Expiration of an amnesty on car taxes and other fiscal irregularities for L 2.0 coming from the previous year

Other taxes L -2.62 trillion (unexpected: -2.62)

- L 0.4 trillion from regional and local taxes
- generic lower revenues for L 3.02 trillion

Not yet classified L -1.09 trillion (unexpected: 2.41; announced: -3.5), C vs P L 13.81 trillion (unexpected: 3.41; announced: -10.4)

- L 2.41 trillion revenues coming from various rationalizing measures
- L 1 trillion from transformation of leasehold estate ("diritto di superficie") (1996 Budget) (Corporate vs Private)

Expiration of the following amnesties from previous years:

- L 2.5 trillion (0.15 percent of GDP) revenue coming from anti-evasion measures (one-off) (mini budget)
- clearing of outstanding court cases (one-off) for L 1 trillion (budget law)
- Amnesty on illegal buildings for L 6.9 trillion (one-off) (budget law) (Corporate vs Private)

On the spending side, fiscal consolidation consisted in ¹³²:

SPENDING: L 20.29 trillion

Government Consumption L 14.66 trillion (unexpected: 14.66)

- cuts to health expenditure for L 1.67 trillion (pharmaceutical expenditure and cuts to National Sanitary Fund) (1996 budget)
- reduction in goods and services purchase for L 1.99 trillion (1996 budget)
- "spending cuts in transportation, education, defense and health care" for L 11 trillion (additional consolidation)

Salaries L 0.7 trillion (unexpected: 0.7)

• reduction of public employment for L 0.7 trillion (1996 budget)

Investments L 2.7 trillion (unexpected: 2.7)

• savings on capital and financial expenditures ("spese in conto capitale e partite finanziarie") for L 2.7 trillion (1996 Budget).

Government Transfers L 0.6 trillion (unexpected: -0.4; anticipated: 1)

- disbursement of L -0.85 trillion for pensions, following the 1995 pensions reform (1996 budget)
- higher subsidies to families generating L -1.9 trillion (1996 budget)
- lower unemployment subsidies ("Cassa integrazione Guadagni") for L 0.1 trillion (1996 budget)
- lower transfers to enterprises for L 3 trillion (1996 budget)
- reduction of other transfers for L 0.9 trillion (1996 budget)

¹³²All the data refer to Public Sector ("Settore Pubblico").

- L -0.63 trillion for incentive to investments in underdeveloped areas.
- L -1.02 coming from the increase of tax credit for families (1996 budget)
- Expiration of higher deductions for children and compensation for fiscal drag for a total L 1 trillion (1995 budget)

Other L 1.63 trillion (unexpected: 1.63)

• reduction in other current expenditures for L 1.63 trillion

Italy 1997

Fiscal consolidation of 1.84 percent of GDP, 1.16 percent of GDP spending cuts, 0.68 percent of GDP tax hikes. The consolidation effort consisted in one "ordinary" fiscal adjustment, based upon June 1996 three year medium term plan (Documento di Programmazione Economico-Finanziaria), and one supplementary deficit cut ("Piano per l'Europa")¹³³ consisting in a one year "Europa tax", a progressive income tax, generating revenues of L 11.5 trillion (0.6 percent of GDP) and additional financial adjustments as reclassification of interest payments that are not recorded as spending cuts or tax hikes. Over the year, according to OECD Economic Surveys 1997 (pp. 61-65), on the revenues side, the consolidation included:

REVENUES: L 13.65 trillion

Taxes on Income, Profits and Capital Gains L 5.5 trillion (unexpected: 12.7; announced: -7.55)

- L 1.2 trillion from fiscal drag
- L 11.5 trillion from the introduction of "Europa tax" (one-off)

During the year a series of 1996 one-off measures expired, determining a negative budgetary impact of L 7.55 trillion (Banca d'Italia, Relazione Annuale 1995, p. 147). All the 1996 one-off measures were Taxes on Income, Profits and Capital Gains.

Private taxes L 12.7 trillion

- L 1.2 trillion from fiscal drag
- L 11.5 trillion from the introduction of "Europa tax" (one-off)

Taxes on Goods and Services L 5.3 trillion (unexpected: 5.3)

- increased taxes on lottery for L 1 trillion
- faster payments on excises and consumption taxes for L 2.5 trillion
- higher VAT on drugs for L 0.6 trillion
- increased taxation of tobacco products for L 0.5 trillion
- reduction of health expenditure deductions for L 0.7 trillion

Other taxes L 3.2 trillion (unexpected: 3.2)

• additional revenues for L 3.2 trillion came from other taxes.

On the spending side, fiscal consolidation included:

SPENDING: L 22.6 trillion

Government Consumption L 1.9 trillion (unexpected: 1.9)

- reduction of health expenditure for L 0.6 trillion, achieved through savings in hospital spending (reduction in number of beds per person and introduction of incompatibility for doctors to work in public and private structures) and in the pharmaceutical expenditure (reduced margins of pharmacists and the establishment of standards for diagnostic and specialist ambulatory care)
- cuts to public consumption for L 1.3 trillion

¹³³This supplementary fiscal adjustment was aimed at meeting the Maastricht criteria in 1997 (OECD Economic Surveys 1997, p. 146)

Salaries L 0.7 trillion (unexpected: 0.7)

- decrease in civil servants compensation cost for L 2.8 trillion through hiring freeze on central administration, limit on turnover, reduction in the number of teachers and cuts to the armed forces
- Increase in spending for measure for employment of L -2.1 trillion

Government Transfers L 16.9 trillion (unexpected: 16.9)

- L 5.2 trillion savings in social security from the harmonization of contributions for civil servants, enhanced controls on beneficiaries of invalidity pension and more intense fighting against frauds
- L 7.3 cuts to transfers to public utilities and enterprises financing, including "savings on service-contracts with the railway company, and measures to restructure the national post office and the railways"
- reduction of deductions in corporate taxation for employees' fringe benefits for L 4.4 trillion

Other L 3.1 trillion (unexpected: 3.1)

- other primary spending cuts for L 1.1 trillion
- L 2 trillion lower transfers to local authorities ¹³⁴

Italy 1998

Fiscal consolidation of 0.62 percent of GDP, 0.57 percent of GDP spending cuts, 0.05 percent of GDP tax hikes. The measures contained in the 1998 budget proposal consisted of L 12 trillion of spending cuts and L 13 trillion of revenue increases. In addition, in the year expired the one-off "Europa-tax" that had a budgetary impact of L -11.5 trillion. According to the OECD Economic Surveys 1999 (p. 54), on the revenues side, fiscal consolidation consisted in:

REVENUES: L 1.52 trillion

Tax on Income, Profits and Capital Gains L -9.77 trillion (unexpected: 1.73; announced: -11.5)

- L 0.83 trillion from withholding tax on incomes of self-employed
- L 0.9 trillion from higher social security contribution rate for self-employed (see OECD, 1999, Table 10 footnote 1)

In addition the expiration of 1997 one-off measure ("Europa tax") had a budgetary impact of L -11.5 trillion

Corporate Taxes L 1.73 trillion

- L 0.83 trillion from withholding tax on incomes of self-employed
- L 0.9 trillion from higher social security contribution rate for self-employed (see OECD, 1999, Table 10 footnote 1)

Tax on Goods and Services L 6.63 trillion (unexpected: 6.63)

- L 5.73 trillion from rise in VAT rates
- $\bullet\,$ L 0.9 from health contribution increase

Other taxes L 1.61 trillion (unexpected: 1.61)

• other taxes L 1.61 trillion

Not yet classified L 3.05 trillion (unexpected: 3.05)

 \bullet an additional L 3.05 trillion was expected to came from reduced tax and contribution evasion

¹³⁴These cuts were paired with the devolution of some tax authority. Hence they may have resulted in higher local taxes rather than lower spending, but it depends on the decisions undertaken by local authorities.

On the spending side, fiscal consolidation consisted in:

SPENDING: L 11.98 trillion

Government consumption L 1.79 trillion (unexpected: 1.79)

- reduction in health expenditure for L 0.79 trillion
- cuts to purchase of goods and services for L 1 trillion

Government Transfers L 6.9 trillion (unexpected: 6.9)

- savings in social security system for L 3.65, including the effect of higher contribution rate for self employed
- reduction of transfers to public utilities and enterprises financing for L 2 trillion
- reduction of cash financing for L 1.25 trillion

Salaries L -0.33 trillion

- lower expenditures of L 1.11 trillion in public employment
- but more than offset by increase in spending of L -1.44 trillion for measure for employment

Other spending cuts L 3.62 trillion

- savings for L 1.12 trillion came from the reduction of other primary spending
- cuts to transfers to regions and public administrations for L 2.5 trillion

Italy 2004

Fiscal consolidation of 1.29 percent of GDP, 0.36 percent of GDP spending cuts, 0.93 percent of GDP tax hikes. The first set of structural and one-off measures was contained in the 2004 Budget Law and called for \mathfrak{C} 9 billion of tax hikes and \mathfrak{C} 7 billion of spending cuts. An additional set of measures approved in mid July¹³⁵ consisted of \mathfrak{C} 4.2 billion reductions in expenditures, \mathfrak{C} 1.3 billion increase in revenues and \mathfrak{C} 2 billion of administrative measures. We exclude savings of \mathfrak{C} 5.5 billion coming from privatization and raising value of public goods and government real estate sales and \mathfrak{C} 0.8 billion from the transformation of "Cassa depositi e prestiti" into a private company.

According to Italy's Stability Program Update (November 2003, pp. 23-24) for the 2004 budget and to the Decree-Law 12.07.2004 n° 168 for the additional consolidation, on the tax side the measures included:

Revenues: € 12.55 billion

Taxes on Income, Profits and Capital Gains € 6.504 billion (unexpected: 6.504)

- anticipation of a special tax system, the so called "concordato preventivo", expected to raise € 3.584 billion (2004 budget)
- "an increase in social security contributions for "parasubordinati" (a flexible working arrangement)" for € 0.748 billion (2004 budget)
- revenues were expected to came from extension of tax amnesty for € 0.872 billion (2004 budget) (one-off)
- € 1.3 billion increase in revenues coming from taxes on insurance companies, banks and non commercial institutions (additional adjustment)

Taxes on property € 3.130 billion (unexpected: 3.130)

• zoning regulation amnesty for € 3.130 billion (one off) (2004 budget)

Corporate Taxes € 4.884 billion

• € 1.3 billion increase in revenues coming from taxes on insurance companies, banks and non commercial institutions (additional adjustment)

¹³⁵ These measures become necessary since "The performance of the public finances in the early months of 2004 suggested that an overshoot of the objective was likely, as the state sector borrowing requirement was considerably larger than in 2003" (Bank of Italy Annual Report 2004, p. 118). The government decide to propose the additional consolidation to keep the deficit below the 3 percent threshold and avoid the European Council warning.

• anticipation of a special tax system, the so called "concordato preventivo", expected to raise € 3.584 billion (2004 budget)

Personal Taxes € 1.62 billion

- "an increase in social security contributions for "parasubordinati" (a flexible working arrangement)" for € 0.748 billion (2004 budget)
- revenues were expected to came from extension of tax amnesty for € 0.872 (2004 budget)

Taxes on Goods and Services € 0.7 (unexpected: 0.7)

• introduction of a tax on video games and betting for € 0.7 billions (2004 budget)

Other taxes € 0.216 billion (unexpected: 0.216)

 \bullet Additional revenues of $\mathfrak C$ 0.216 billion from other sources were included in the 2004 Budget

Not yet classified e 2 billion (unexpected: 2), C vs P e 5.13 billion

- The additional consolidation comprised as well savings of \mathfrak{C} 2 billion coming from administrative measures.
- zoning regulation amnesty for € 3.130 billion (C vs P)

On the spending side the following measures were implemented:

SPENDING: € 4.8 billion

Government Consumption € 2.95 billion (unexpected: 2.95)

• cuts to Ministries budget and to public administrations' business and consultants expenditure for € 2.95 billion (additional consolidation)

Salaries € 0.5 billion (unexpected: 0.5)

• freeze on hiring and the use short term contracts in the public sector for € 0.5 billion (2004 budget)

Government Transfers € 1.35 billion (unexpected: 1.35)

• cuts to transfers to public and private enterprises for € 1.35 billion (additional consolidation)

Italy 2005¹³⁶

Fiscal consolidation of 0.77 percent of GDP, 0.7 percent of GDP spending cuts, 0.07 percent of GDP tax hikes. 137 Budget measures were presented by the government and approved by the parliament in December 1994. We exclude $\mathfrak C$ 1.5 from financial asset management. In addition, according to Devries et al. in 2004 no one-off measure was implemented. However, after an accurate analysis we identified one off measures for $\mathfrak C$ 4 billion consisting in $\mathfrak C$ 0.872 billion Taxes on Income, Profits and Capital Gains and $\mathfrak C$ 3.130 billion Taxes on property (Italy's Stability Program Update, November 2003, pp. 23-24). According to Italy's Stability program update (November 2004, pp. 24-26), on the revenue side, the following measures were implemented:

REVENUES: € 1.076 billion

Taxes on Income, Profits and Capital gains € 1.937 billion (unexpected: 2.809; announced: -0.872)

- "Introduction of a pre-defined tax liabilities scheme for company executives, artisans, shopkeepers and professionals who are subjected to tax arrangements based on the sectoral studies" expected to raise additional € 3.804 billion
- € 0.466 billion from taxation of the income of cooperative companies
- € -1.461 billion is due to the extension of tax reliefs (Corporate and private not clear the amount)
- € -0.872 billion from the expiration of the tax amnesty (2004 budget) (one-off)

¹³⁶In Devries et al. there is an inconsistency between the source they cite (Bank of Italy Annual Report, 2005) and the data they use. Thus we decided to use decomposed data from Italy's stability Program update, November 2004, consistent with Bank of Italy aggregate data.

¹³⁷Additional and one-off revenues of 0.5 percent of GDP (Bank of Italy annual report 2005) came from sales of public buildings. Following Devries et al. we don't include these operations in the analysis since they are not spending cuts nor tax hikes.

Taxes on Property € -2.814 billion (unexpected: 0.316; announced: -3.13)

- Increase of tax on income from properties apart from first home for € 0.316 billion
- € -3.13 billion from the expiration of the zoning regulation amnesty for (one off) (2004 budget)

Corporate taxes € 4.27

- "Introduction of a pre-defined tax liabilities scheme for company executives, artisans, shopkeepers and professionals who are subjected to tax arrangements based on the sectoral studies" expected to raise additional € 3.804 billion
- \bigcirc 0.466 billion from taxation of the income of cooperative companies

Private € -0.872 billion

• $\ensuremath{\mathfrak{C}}$ -0.872 billion from the expiration of the tax amnesty (2004 budget) (one-off)

Taxes on Goods and Services € 1.175 billion (unexpected: 1.175)

- \bigcirc 0.5 billion coming from increase in tobacco excise
- € 0.485 billion coming from taxes on video games and betting
- \bigcirc 0.19 billion were expected to come from measures against VAT evasion

Other revenues € 0.778 billion (unexpected: 0.778)

• € 0.778 local authorities' revenues

Not yet classified C vs. P €-4.275 billion (unexpected: -1.145; announced: -3.13)

- Increase of tax on income from properties apart from first home for \bigcirc 0.316 billion (C vs P)
- A € -1.461 billion is due to the extension of tax reliefs (Corporate and private not clear the amount) (C vs P)
- € -3.13 billion from the expiration of the zoning regulation amnesty for (one off) (2004 budget)

On the spending side, fiscal consolidation consisted in:

SPENDING: € 9.715 billion

Government consumption € 7.057 billion (unexpected: 7.057)

• The Introduction of the "2 percent" ceiling for the growth of current expenditure of central government ("rationalization and tightening of the procedures regarding the procurements"), local government, via a revision of the internal Stability Pact, and health sector realized by the Pharmaceutical Agency and the Regions, was expected to generate savings for € 7.057 billion (1.2, 1.27 and 4.25 respectively)

Investments € 2.08 billion (unexpected: 2.08)

• An analogous 2 percent limit was put to the growth of government departments' capital expenditure, generating savings for € 2.08 billion

Not yet classified: € 0.578 billion (unexpected: 0.578)

- € 1.57 billion spending cuts
- \bigcirc 0.992 billion higher expenditures

Italy 2006

Fiscal consolidation amounted to 1.46 percent of GDP with spending cuts of 0.83 percent of GDP, and tax hikes of 0.63 percent of GDP. The adjustment is composed by spending and revenues measures that are partially offset by reforms implemented to boost economic growth over the long-run. The deficit reduction induced by tax hikes and spending cuts amounted to €27.9 billion. The measures that aimed at enhancing economic growth were composed by a decrease of revenues centered on a reduction of labour costs through a cut in social contributions. On the spending side, the measures are aimed at supporting the income of families, rearing children and reallocate resources to public employment. The data are taken from the "Italy's Stability Programme, December 2005" and the records largely refer to Table 7, p.27.

REVENUES: € 9 billion

Income, profits and capital gains € 5.3 billion (unexpected: 5.3)

- Substitute tax on capital gains from real estate sales generated \bigcirc 0.5 billion
- Revision of the tax regime for enterprises that "provides an increase in the levy on banks' and insurance companies' income". It amounted to € 1.3 billion
- Alignment of the depreciation period for investments undertaken by enterprises operating in the energy sector. It generated revenues of € 1 billion
- Fiscal planning that "permanently widens and stabilizes the tax base [...] This is limited to company owners and self-employed who are subjected to the tax arrangement based on the sectoral studies" (p.30) This measure amounts to € 1 billion
- Right to adjust their income for the biennium 2003-2004 for those adhering to the new tax regime (i.e. the fiscal planning's one). It involves further revenues amounting to € 1 billion.
- Extension of the depreciation period allowed to business goodwill from ten to eighteen years. It was worth € 1.7 billion.
- Modification to the tax regime regarding property leasing and new regulations for capital losses arising from share exchange operations: € 0.8 billion
- Labour costs reduction "through a cut in social contributions, up to a maximum of one percent, and should have an impact of around € -2 billion" (p. 31)

Property Taxes € 1.8 billion (unexpected: 1.8)

- "Reinstating rules for the revaluation of enterprises' tangible and intangible assets and for real estate areas"
 (p. 30) brought further € 0.9 billion.
- Revaluation of enterprises assets: € 0.9 billion

Corporate €5.7

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Indirect Taxes € 0.7 billion (unexpected: 0.7)

• Fighting illegality in games: € 0.7 billion

Other € 0.6 billion (unexpected 0.6)

• Other revenues for \bigcirc 0.6 billion

Not yet Classified All € 0.6 billion (unexpected: 0.6), C vs. P € 1.1 billion

- Proceeds from fighting tax evasion € 0.6 billion
- Substitute tax on capital gains from real estate sales generated € 0.5 billion (according to corporate vs personal)

Spending: € 11.98 billion

Government Consumption € 7.8 billion (unexpected: 7.8)

- Intermediate consumption reduced by € 5.3 billion of which € 1.7 central government and € 2.6 local government
- Health expenditure reduced by € 2.5 billion to have a "more rigorous control of costs through a more efficient use of the existing health care services" (p.29)

Salaries: € 0.4 billion (unexpected: 0.4)

- Public employment is reduced through a "more selective hiring strategy, reducing the use of temporary contracts, integrative bargaining, flexibility [...]" (p.29), it should generate savings of around € 0.9 billion.
- Staff costs (net values) increased by € 0.5 billion

Government Investments € 1 billion (unexpected: 1)

• Gross Fixed Capital Formation reduced by € 1 billion

Transfers € 2.02 billion (unexpected: 2.02)

- Current transfers to enterprises are reduced "setting-up specific funds in each Ministry to record the flows of the allocated resources" (p.29). The measure amounted to € 1 billion.
- Capital Transfers reduced by 1 3.1 billion
- Households and solidarity fund created with a total of € -0.7 billion: "the measures are aimed at supporting the income of families rearing children, through the setting up of a Fund" (p.31)
- Public safety fund increased by € -0.18 billion
- "Extension of some tax relief schemes currently in force in the agricultural sector, and of those offered for home improvements, for total € -1.2 billion" (p.31)

Others € 1.7 billion (unexpected: 1.7)

• \bigcirc 1.7 billion from other spending cuts

Not yet classified € -0.94 billion (unexpected: -0.94)

- Internal Stability Pact: € -0.18 billion
- previous charges € -0.759 billion

Italy 2007

Fiscal consolidation amounted to 0.92 percent of GDP, with tax hikes of 1.34 percent of GDP partly offset by spending increases of 0.42 percent of GDP. The adjustment is similar to the one conducted the year before. There are both spending and revenues measures that generated spending cuts of \mathfrak{C} 9.6 billion and tax policy measures of \mathfrak{C} 25.1 billion (Italy Stability Program December 2006, p. 25). These measures are partially offset by spending increases and tax reductions that aim at achieving greater social equity and promoting economic growth. The growth measures amounted to a spending increase of \mathfrak{C} 14 billion and lower revenues of approximately 5 billion (Public real estate assets management generated a revenues increase of \mathfrak{C} 0.5 billion). The data are taken from the Italy's Stability Programme, December 2006 and the records largely refer to Table 8, p.25.

REVENUES: € 19.98 billion

Income, profits and capital gains € 14 billion (unexpected: 14)

- "Further measures aimed at enhancing tax administrations' efficiency introduce new regulations on sectoral studies so as to render them more consistent with territorial or company characteristics, and each firm's business trends" (p. 27). These measures increased revenues by € 3.3 billion.
- Taxes on capital income experienced a "revision [...] provided through harmonization of tax rates for any type of investment savers may make" (p. 27), for a total of 1.1 billion.
- In order to encourage supplementary pension schemes the fiscal consolidation regulates the destination of severance benefits. "As a whole, net of the effects of fiscal and social security contributions resulting from the higher number of employees joining supplementary pension schemes and compensatory effects, such measures produce additional revenues amounting to 5 billion euros" (p. 28).
- Moreover, measures regarding the pension system are aimed at improving social fairness of the system. The measures regarded social security contributions of both employees and self-employed. They brought a net impact of € 4.3 billion.
- Additional taxes on income that included a revision of the PIT amount to \mathfrak{C} 2.5 billion.
- The regularization of immigrants generated additional revenues for $\mathfrak C$ 0.9 billion.
- Additional regional taxes were extended and generated € 1 billion of revenues.
- The personal income tax was reduced by 1 1.6 billion
- IRAP's (tax on firms' profits) levy was reduced by € 2.5 billion

Property € 1.1 billion (unexpected: 1.1)

• The municipal property tax (ICI) was increases to generate € 1.1 billion improvement of budget deficit (according to corporate vs personal).

Corporate: € 1.8 billion

- "Further measures aimed at enhancing tax administrations' efficiency introduce new regulations on sectoral studies so as to render them more consistent with territorial or company characteristics, and each firm's business trends" (p. 27). These measures increased revenues by 3.3 billion.
- Additional regional taxes were extended and generated $\mathfrak C$ 1 billion of revenues.
- IRAP's (tax on firms' profits) levy was reduced by € 2.5 billion

Personal: € 10.8 billion

- Taxes on capital income experienced a "revision [...] provided through harmonization of tax rates for any type of investment savers may make" (p. 27), for a total of € 1.1 billion.
- Additional taxes on income that included a revision of the PIT amount to \mathfrak{C} 2.5 billion.
- Moreover, measures regarding the pension system are aimed at improving social fairness of the system. The measures regarded social security contributions of both employees and self-employed. They brought a net impact of € 4.3 billion.

- In order to encourage supplementary pension schemes the fiscal consolidation regulates the destination of severance benefits. "As a whole, net of the effects of fiscal and social security contributions resulting from the higher number of employees joining supplementary pension schemes and compensatory effects, such measures produce additional revenues amounting to 5 billion euros" (p. 28).
- The regularization of immigrants generated additional revenues for $\mathfrak C$ 0.9 billion.
- Family benefits generated reduced revenues for € 1.4 billion.

Indirect Tax € 4.88 billion (unexpected: 4.88)

- Fighting tax evasion generated a broadening of the indirect tax base. In particular, the revision regarded "the deductibility of instrumental assets purchased through leasing agreements, mortgage registration taxes, and fiscal regime for donations and inheritance" (p.27). The resources collected through this measure amounted to \mathfrak{C} 4.2 billion.
- Indirect taxes in tobacco, video games and cars' sectors were raised and generated € 0.6 billion.
- \bullet Finally, indirect taxes on motor vehicle were raised and collected additional resources amounting to \le 0.08 billion.

Not yet classified, C vs. P € 1.1 billion

• The municipal property tax (ICI) was increases to generate € 1.1 billion improvement of budget deficit (according to corporate vs personal).

Spending: € billion

Government Consumption € 6.48 billion (unexpected: 6.48)

- Intermediate consumption is reduced by 5.6 billions. The Central Government intermediate consumption is cut by a "process of reorganization, transformation and suppression of public entities, which will result in greater efficiency, lower costs and better services. As a whole, the measures should produce savings amounting approximately to 2.4 billion euros" (p. 26). For what concerns the local government level, the reduction amounts to € 3.2 billion
- Health expenditure is reduced by 2.03 billion
- Current expenditure is reduced by \bigcirc 0.25 billion
- Military expenditure for peace missions increased by \bigcirc 1.4 billion.

Salaries € -1 billion (unexpected: -1)

- The adjustment implemented "Public employment measures [...] aimed at a better control of staff costs while safeguarding the functioning of the Public Administration" (Italy Stability Program December 2006, p. 26). The staff cost reduction amounted to 0.5 billion.
- They involve an increase of staff costs due to the renewal of public employment contracts (p. 29) that together with an increase of employment costs amounts to € 1.1 billion.
- Severance Benefits (TFR) increase of € 0.4 billion

Investments € -1.99 billion (unexpected: -1.99)

- Capital expenditure is cut by \bigcirc 1.2 billion
- Public investments for railways (Ferrovie S.P.A.) amount to € 2.4 billion.
- Road network (ANAS) investments cost € 0.2 billion.
- Other government investments involve additional resources to the Competitiveness and Development Fund for \triangleleft 0.1 billion

- Fund for Investments in Scientific and Technological Research (FIRST) increased by € 0.15 billion.
- School relaunching program absorbed € 0.34 billion.

Government Transfers € -3.1 billion (unexpected: -3.1)

- \bigcirc 0.08 billion are allocated to a fund for households policies.
- Employment Fund and Unemployment Benefits increased by approximately € 0.9 billion
- Family benefits generated reduced revenues for € -1.4 billion.

Other € -5.1 billion (unexpected: -5.1)

• \mathfrak{C} -5.1 billion from other higher expenditures

Not yet classified € -1.6 billion (unexpected: -1.6)

- Tax extensions -1.1 billion ¹³⁸
- Public enterprise fund increased by 0.5 billion

11 Japan¹³⁹

Japan 1979

Fiscal consolidation in 1979 amounted to 0.12 percent of GDP due to tax hikes of 0.1 percent of GDP and spending cuts of 0.02. The adjustment is motivated by the will to reduce the budget deficit. It is based on tax hikes, that mostly fell on indirect taxes, and on tax cuts reductions. Data about fiscal components are taken from the IMF Recent Economic Developments 1980, p. 37, Table 18.

REVENUES: ¥ 204.74 billion

Income, profits and capital gains \mathbf{Y} 42.58 billion (unexpected: 42.58)

• Rationalization of tax system on Physicians' incomes: ¥ 42.58 billion

Personal \mathbf{Y} 42.58 billion (unexpected: 42.58)

• Rationalization of tax system on Physicians' incomes: ¥ 42.58 billion

Indirect \mathbf{Y} 149.33 billion (unexpected: 149.33)

• Gasoline tax: Y = 135.33 billion

• Aviation fuel tax: ¥ 14 billion

Other \mathbf{Y} 12.83 billion (unexpected: 12.83)

• Others: Y 12.83 billion

SPENDING: ¥ 48.41 billion

Transfers \mathbf{Y} 48.41 (unexpected: 48.41)

- Entertainment allowances: ¥ 17.5 billion
- Dependence allowance for the aged 140 : Υ -8.17 billion
- Tax deductible: reserves for defaulted loans ("less favorable provisions governing tax deductible reserves for losses realized in the book value of inventories and securities"): ¥ 39.08 billion

¹³⁸We include it here as in Table 8 (p. 25) of the Italy's Stability Programme, December 2006, it is listed under *Higher expenditures*.

139In Japan fiscal year is April-March.

¹⁴⁰ For taxpayers who live with aged dependents who are lineal ascendants, a deduction from taxable income of Y 400,000 will be allowed for each such dependent, instead of the Y 350,000 deduction normally allowed for aged dependents".

Japan 1980

Fiscal consolidation in 1980 amounted to 0.21 percent of GDP, based on tax hikes for 0.2 and spending cuts for 0.11. The adjustment is motivated by the reduction of primary deficit: "in 1980/81 the Government, for the first time since 1973174, shifted to a less expansionary fiscal stance as part of its commitment to a gradual reduction in the budget deficit during the medium term." (IMF, Recent Economic Developments 1981, p. 40). The new measures are centered on tax hikes and tax credit reductions 141. Moreover, the consolidation is characterized by the continuation of the previous year reform. Data about fiscal components are from the IMF, Recent Economic Developments 1981, p. 45, Table 19. For what concerns the reference for the 1979 reform see entry above.

REVENUES:

Income, Profits and Capital Gains 74.16 billion (unexpected: 28; announced: 46.16)

- Curtailment of tax preferences for enterprises, reduction of long-term capital gains tax on housing ¹⁴²: ¥ 28 billion
- Calendar year allocation of the 1979/80 measures: ¥ 30.41 billion (announced in 1979)
- Rationalization of tax system on Physicians' incomes: ¥ 15.75 billion (announced in June 1979 Reform)

 Personal (announced: ¥ 46.16 billion)
- Calendar year allocation of the 1979/80 measures: ¥ 30.41 billion (announced in 1979)
- Rationalization of tax system on Physicians' incomes: ¥ 15.75 billion (announced in June 1979 Reform)

Indirect ¥ 300.91 billion (announced: 300.91)

- Gasoline tax: ¥ 44.92 billion (announced in June 1979 Reform)
- Calendar year allocation of the 1979/80 measures: \(\foatimes 255.99\) billion (announced in 1979)

Not yet classified \(\frac{1}{2} \) 28 billion (unexpected: 28) (according to P vs C))

• Curtailment of tax preferences for enterprises, reduction of long-term capital gains tax on housing

Other \mathbf{Y} 45.91 billion (announced: 45.91)

- Other tax increase: ¥ 23.92 billion (announced in June 1979 Reform)
- Calendar year allocation of other tax increase introduced in 1979/80: ¥ 21.99 billion (announced in 1979)

SPENDING: ¥ 251 billion

Transfers ¥ 251 billion (unexpected: 176.75; announced: 62.58)

- Reduction of employment income deduction: ¥ 15.17 billion
- Curtailment of deductible retirement allowance reserve: \(\forall 161.58\) billion
- Calendar year allocation of the 1979/80 measures: ¥ 34.58 billion (announced in 1979)
- Entertainment allowances: ¥ 25.67 billion (announced in June 1979 Reform)
- Tax deductible Reserves for defaulted loans ("less favorable provisions governing tax deductible reserves for losses realized in the book value of inventories and securities"): ¥ 2.33 billion (announced in June 1979 Reform)

 $^{^{141}}$ There are other tax measures that are excluded: "Various special taxation measures applicable to enterprises, such as accelerated depreciation, were either curtailed or eliminated. There was also an increase in the Promotion of Power Resources Development Tax from 4 85 to Y 300 per 1,000 kilowatt hours of electricity . This was estimated to increase tax revenue by Y 83 billion during 1980/81. These funds go into a special account for developing substit u t e energy sources for petroleum."

¹⁴²The 1980 Budget lists the following measures: "Curtailment and repeal of special tax preferences for enterprises [...] Measures for promoting the supply of housing land An alleviation of taxation on long-term capital gains derived from certain transfers of land etc. is proposed. [...] Measures for development of alternative energy resources".

Japan 1981

Fiscal consolidation totaled 0.44 percent of GDP based on tax hikes for 0.37 and spending cuts for 0.07. The motivation behind the adjustment is "to move decisively toward restoring 'fiscal discipline and to eliminate the issuance of deficit-financing bonds by 1984/85" (IMF, Recent Economic Developments 1982, p. 41). The new measures fell entirely on tax hikes (mainly corporate and indirect taxes) and tax credit cuts. The total amount of the consolidation takes into consideration the effects of the measure introduced in 1979 and the calendar year allocation of June 1980 measures. Data about components are from the IMF Recent Economic Developments, p. 42. For what concerns announced measures see references for 1979 and 1980 entries.

REVENUES: ¥ 903 billion

Income, Profits and Capital gains ¥ 392.92 billion (unexpected: 361.67; announced: 31.25)

- A 2 percentage point increase in the corporation tax rate: \forall 361.67 billion
- Calendar year allocation of the 1980/81 measures: \(\forall 20\) billion (announced in 1980)
- Calendar year allocation of the measures announced in 1979 for FY 1980/1981: ¥ 11.25 billion (announced in June 1979 reform)

Personal (announced: ¥ 31.25 billion)

- Calendar year allocation of the 1980/81 measures: ¥ 20 billion (announced in 1980)
- Calendar year allocation of the measures announced in 1979 for FY 1980/1981: ¥ 11.25 billion (announced in June 1979 reform)

Corporate (unexpected: ¥ 361.67 billion)

• A 2 percentage point increase in the corporation tax rate: \(\forall \) 361.67 billion

Indirect ¥ 492.91 billion (unexpected: 460.83; announced: 32.08)

- A 100% increase in the stamp tax rate: \forall 215.83 billion
- Various increases in liquor tax rates \(\forall 163.33\) billion
- Increase in the excise duty on automobiles and the introduction of an excise duty on video tape recorders, station wagons, etc.: ¥ 46.67 billion
- Increase in the tax on securities transactions: \forall 35 billion
- Calendar year allocation of the measures announced in 1979 for FY 1980/1981: ¥ 32.08 billion (announced in June 1979 reform)

Not yet classified \(\forall 20\) billion (announced: 20) (according to P vs C))

• Calendar year allocation of the 1980/81 measures: \(\forall 20\) billion (announced in 1980) (according to P vs C)

Other Y 17.08 billion (announced: 17.08)

• Calendar year allocation of other tax increase announced in 1979 for FY 1980/1981: ¥ 17.08 billion (announced in June 1979 reform)

SPENDING:¥ 146.25 billion

Transfers Υ 146.25 billion (announced: 146.25)

- Calendar year allocation of the 1980/81 measures: ¥ 126.25 billion (announced in 1980)
- Calendar year allocation of the measures announced in 1979 for FY 1980/1981: ¥ 20 billion (announced in June 1979 reform)

Fiscal consolidation totaled 0.99 percent of GDP, with spending cuts of 0.68 percent of GDP and tax measures of 0.31 percent of GDP. The adjustment was motivated by deficit reduction. "The initial framework for the 1982/83 budget indicates an unprecedented effort to curtail the increase in government expenditure, but somewhat less emphasis than in the previous year on increasing tax revenue" (IMF, Recent Economic Developments 1983). Spending cuts fell mainly on public salaries and investments. There are some additional spending measures that are not taken into account by Devries et al. (2011). They are: "reduction in expenditures amounting to \mathbf{Y} 3 trillion, half of which resulted primarily from a reduction in the transfer of national tax revenue to Local authorities, reflecting the downward revision of tax receipt estimates. In addition, the annual transfer of funds from the general account to the sinking fund amounting to \mathbf{Y} 1.2 trillion was recalled in an effort to reduce expenditures". We exclude them given that they are "under the line" measures as indicated in footnote 1 and 2 of IMF Recent Economic Developments 1983, p. 63. Moreover, the deficit is further reduced by the calendar year allocation of measures taken in 1981. Data about components are taken from IMF, Recent Economic Developments 1983, p. 63; and OECD Economic Surveys 1981/1982, p. 36.

REVENUES: ¥

Income, Profits and Capital Gains ¥ 462.33 billion (unexpected: 204, announced: 258.33)

- Shortening the period within which corporate tax payments must be made and curtailing the tax-exempt bad debt reserves of corporations (p.63): ¥ 204 billion
- A 2 percentage point increase in the corporation tax rate: ¥ 258.33 billion (announced in 1981)

Corporate (unexpected: ¥ 204 billion, announced: ¥ 258.33 billion)

- Shortening the period within which corporate tax payments must be made and curtailing the tax-exempt bad debt reserves of corporations: ¥ 204 billion
- A 2 percentage point increase in the corporation tax rate: ¥ 258.33 billion (announced in 1981)

Indirect \mathbf{Y} 329.17 billion (announced: 329.17)

- A 100% increase in the stamp tax rate: ¥ 154.17 billion (announced in 1981)
- Various increases in liquor tax rates \forall 116.67 billion (announced in 1981)
- Increase in the excise duty on automobiles and the introduction of an excise duty on video tape recorders, station wagons, etc.: \(\forall 33.33\) billion (announced in 1981)
- Increase in the tax on securities transactions: ¥ 25 billion (announced in 1981)

SPENDING: ¥ 1812.79 billion

Consumption \(\fomage 45.5\) billion (unexpected: 45.5)

• Administrative expenditure cuts: Y = 45.5billion¹⁴³

Salaries ¥ 187.83 billion (unexpected: 187.83)

• Freeze on civil servants' pay increases: ¥ 187.83 billion 144

Investments \(\forall 1579.46\) billion (unexpected: 1579.46)

• 0.3 % cut in public works appropriations. Should be: Υ 1579.46 billion ¹⁴⁵

 $^{^{143}}$ It comes from (400-322)*7/12 (see footnote 3 p. 63).

 $^{^{144}\}mathrm{It}$ comes from 322*7/12 (see footnote 3 p. 63) .

¹⁴⁵I computed the amount in Yen by taking the percentages over GDP of the whole plan provided by Devries.

Fiscal consolidation totaled 0.40 percent of GDP, with spending cuts of 0.34 percent of GDP, and tax hikes of 0.06 percent of GDP. The adjustment is a direct consequence of the previous year reform with additional cuts in public investments due to the freeze of nominal spending for public works (OECD Economic Surveys 1982/1983, p. 30). For what concerns data about components see entry for 1982.

REVENUES: announced: ¥ 145.83 billion

Income, Profits and Capital Gains ¥ 145.83 billion (announced: 145.83)

- Calendar year allocation of corporate taxes introduced in 1982: ¥ 145.83 billion (announced in 1982)

 Corporate (announced: ¥ 145.83 billion)
- Calendar year allocation of corporate taxes introduced in 1982: ¥ 145.83 billion (announced in 1982)

SPENDING: ¥ 933.82 billion

Government Consumption \mathbf{Y} 32.5 billion (announced: 32.5)

• Calendar year allocation of administrative cuts introduced in 1982: ¥ 32.5 billion (announced in 1982)

Salaries ¥ 134.17 billion (announced: 134.17)

• Calendar year allocation of freeze on civil servants' pay increases introduced in 1982: ¥ 134.17 billion (announced in 1982)

Government Investments ¥ 767.15 billion (unexpected: 767.15)

• 0.3 % cut in public works appropriations: ¥ 767.15 billion

Japan 1997

Fiscal consolidation totaled 1.42 percent of GDP, with spending cuts of 0.44 percent of GDP and tax hikes of 0.98 percent of GDP. The main objective of the FY 1997 Budget is "to reverse some of the exceptional stimulus measures taken to support activity during the downturn" (IMF Staff Reports 1997, p. 19). The deficit had grown since the beginning of the new decade due to a significant increase in public spending and a decrease in tax revenues. The measures of the fiscal reform are centered both on spending and taxes. In addition to the measures reported, an increase in Social Security benefits was also introduced (IMF Staff Reports 1997, p. 22). However, since the aim of this measure is not clear and Devries et al. do not report it, we exclude the measure from our calculations. Data about components are taken from the IMF Staff Report 1997, p. 22.

REVENUES: ¥ 5025 billion

Income, Profits and Capital Gains ¥ 5025 billion (unexpected: 5025)

- Increase in consumption tax rate: \$ 3000 billion
- Termination of temporary income tax cut: ¥ 1500 billion
- Increase in households' medical insurance copayments: ¥ 525 billion

Personal (unexpected: ¥ 5025 billion)

- Increase in consumption tax rate: ¥ 3000 billion
- Termination of temporary income tax cut: ¥ 1500 billion
- Increase in households' medical insurance copayments: ¥ 525 billion

SPENDING: ¥ 2250 billion

Government Investments \(\fomega 2250\) billion (unexpected: 2250)

 \bullet Decline in overall public investments: ¥ 2250 billion

Fiscal consolidation in 1998 amounted to 0.48 percent of GDP with tax hikes of 0.33 percent of GDP and spending cuts of 0.15 percent of GDP. The adjustment is the consequence of the calendar year allocation of measures introduced the year before. For what concerns data about fiscal components see entry above.

REVENUES: ¥ 1675 billion

Income, Profits and Capital Gains ¥ 1675 billion (announced: 1675)

- Increase in consumption tax rate: \forall 1000 billion (announced in 1997)
- Termination of temporary income tax cut: ¥ 500 billion (announced in 1997)
- Increase in households' medical insurance copayments: ¥ 175 billion (announced in 1997)

Personal (unexpected: ¥ 1675 billion)

- Increase in consumption tax rate: \forall 1000 billion (announced in 1997)
- Termination of temporary income tax cut: ¥ 500 billion (announced in 1997)
- Increase in households' medical insurance copayments: ¥ 175 billion (announced in 1997)

SPENDING: ¥ 750 billion

Government Investments ¥ 750 billion (announced: 750)

• Decline in overall public investments: ¥ 750 billion (announced in 1997)

Japan 2003

Fiscal consolidation totaled 0.48 percent of GDP based on spending cuts. The consolidation is the first step of a fiscal consolidation program that aimed at reducing the size of government within 4-5 years. The adjustment is completely based on public investment cuts. Data about components are taken from the IMF Staff Report 2004, p. 30,31,32.

SPENDING: ¥ 2405.28 billion

Government Investments ¥ 2405.28 billion (unexpected: 2405.28)

• Cut in public investments: 0.48% of GDP: \S 2437.92 billion ¹⁴⁶

Japan 2004

Fiscal consolidation totaled 0.63 percent of GDP, with a spending cut of 0.45 percent of GDP and tax hikes worth 0.18 percent of GDP. The adjustment goes in the same direction of the previous consolidation. Unlike the 2003 reform, this episode is also based on tax hikes mostly centered on personal taxes. The government continues its plan of public investments reduction. Data about components are taken from the 2005 IMF Staff Report and from the OECD Economic Surveys 2005 (p. 83).

REVENUES: unexpected: ¥ 900 billion

Income, Profits and Capital Gains ¥ 900 billion (unexpected: 900)

• Hike in the pension premium for employees, partial abolition of the special income tax deduction for spouses, end of the elderly income tax deduction and the scaling back of deductions on public pension benefits: ¥ 900 billion

Personal (unexpected: ¥ 900 billion)

• Hike in the pension premium for employees, partial abolition of the special income tax deduction for spouses, end of the elderly income tax deduction and the scaling back of deductions on public pension benefits: ¥ 900 billion

SPENDING: unexpected: ¥ 2264.85 billion¹⁴⁷

Government Investments ¥ 2264.85 billion (unexpected: 2264.85)

• Cut in public investments: 0.45% of GDP: ¥ 2264.85 billion

¹⁴⁶Notice that for all of these cases (from 2003 to 2006) we are computing the total amount of the measures using the projected GDP for the year I found on the Staff Report. In fact we believe it is the best way to evaluate the expected value of the measures. In any case, there are not significant differences when using the other values.

¹⁴⁷In 2004 the Japanese government also implemented a pension reform. However, as the 2004 IMF Staff Report argues, this reform was estimated to deliver savings only over the medium term.

Fiscal consolidation totaled 0.28 percent of GDP, with spending cuts of 0.22 percent of GDP and tax hikes of 0.06 percent of GDP. The fiscal adjustment aims at further reducing the budget deficit and containing spending growth. Moreover, the episode includes the calendar year allocation of revenue measures that were introduced in 2004. Data about fiscal components are taken from IMF Staff Report 2006 (pp. 35, 36).

REVENUES: ¥ 300 billion

Income, Profits and Capital Gains ¥ 300 billion (announced: 300)

• Hike in the pension premium for employees, partial abolition of the special income tax deduction for spouses, end of the elderly income tax deduction and the scaling back of deductions on public pension benefits: ¥ 300 billion

Personal (announced: ¥ 300 billion)

• Hike in the pension premium for employees, partial abolition of the special income tax deduction for spouses, end of the elderly income tax deduction and the scaling back of deductions on public pension benefits: ¥ 300 billion

SPENDING: Υ 1111.66 billion¹⁴⁸

Government Investments ¥ 1111.66 billion (unexpected: 1111.66)

• Cut in public investments: 0.22% of GDP: ¥ 1111.66 billion

Japan 2006

Fiscal consolidation totaled 0.74 percent of GDP, with spending cuts of 0.27 percent of GDP and tax hikes of 0.47 percent of GDP. The adjustment is motivated by the extremely deteriorated conditions of Japan's fiscal stance. Indeed, Japan had the worst deficit-to-GDP ratio among developed countries and an extremely high public debt. The consolidation was centered both on tax hikes that fell mostly on personal taxes and spending cuts that further reduced the total amount of public investments. Data about fiscal components are taken from the IMF Staff Report 2007 and the OECD Economic Surveys 2006, p. 83.

REVENUES: ¥ 2400 billion

Income, Profits and Capital Gains ¥ 2400 billion (unexpected: 2400)

- Phasing out of the fixed-rate cut in 2006-07 for personal income and local inhabitant taxes: ¥ 2400 billion Personal (unexpected: ¥ 2400 billion)
- Phasing out of the fixed-rate cut in 2006-07 for personal income and local inhabitant taxes: ¥ 2400 billion

SPENDING: ¥ 1378.08 billion

Government Investments ¥ 1378.08 billion (unexpected: 1378.08)

• Cut in public investments: 0.27% of GDP: ¥ 1378.08 billion

Japan 2007

Fiscal consolidation totaled 0.16 percent of GDP based on tax hikes. The adjustment is the result of the calendar year allocation of revenues measures that were introduced in 2006.

REVENUES: announced: ¥ 800 billion

Income, Profits and Capital Gains ¥ 800 billion (announced: 800)

• Phasing out of the fixed-rate cut in 2006-07 for personal income and local inhabitant taxes: ¥ 800 billion (announced in 2006)

Personal (announced: ¥ 800 billion)

• Phasing out of the fixed-rate cut in 2006-07 for personal income and local inhabitant taxes: ¥ 800 billion (announced in 2006)

¹⁴⁸At the same time, while there was "a sharp decline in government employment beginning in 2004," this was partly offset by an increase in public-sector wages in 2005. We do not include this change since the net is zero and the two measures will fall both in category "salaries".

12 Portugal

Portugal 1983

Fiscal consolidation totaled 1.78 percent of GDP, with spending cuts of 0.74 percent of GDP and tax hikes of 1.04 percent of GDP. ¹⁴⁹ According to the 1983/1984 OECD Economic Surveys, the spending measures classification goes as follows

REVENUES: PTE 25 billion

Not yet classified: PTE 25 billion ¹⁵¹ (unexpected: 25)

• There were tax hikes— both direct and indirect—totaling 25 billion escudos (1983/1984 OECD Economic Surveys, p. 44), or 1.35 percent of GDP

SPENDING: PTE 17.7 billion

Goods and Services: PTE 6 billion (unexpected: 6)

• cuts in expenditure on goods and services worth another 6 billion escudos (0.32 percent of GDP).

Not yet classified: PTE 11.7 billion (unexpected: 11.7)

• 11.7 billion escudos (about 0.63 percent of GDP) (p. 42) cuts to current spending on a number of items (these are not Goods and Services because otherwise they would have included them together with the 6 billion of before)

Portugal 2000

Fiscal consolidation totaled 0.47 percent of GDP based on spending cuts. Fiscal consolidation was motivated by meeting the government's budget deficit target and was based on an intra-year budget freeze (2001 OECD Economic Surveys, p. 45). The freeze had a budgetary impact estimated at 0.50 per cent of GDP (2001 OECD Economic Surveys, p. 51). According to the *Stability and Growth Programme 2000-2004* p.15 the expenditure cuts included:

SPENDING: 111 billion escudos¹⁵² Consumption PTE 29 billion (unexpected: 29)

• 0.13 per cent of GDP from a freeze of 15 per cent of expenditure earmarked for "variable and contingency payments", "the acquisition of goods and services", "other current expenditure" and "the acquisition of capital goods", totaling PTE 29 billion.

¹⁴⁹This is correct. However Devries et al. (2011) do not mention that these measures were implemented only in the second half of the year and that there was a first-round budget already implemented for 1993. Indeed, according to IMF Recent Economic Developments 1984, p.25: "even before embarking on the stabilization program in the second half of the year, the Government had formulated the 1983 budget in the light of growing recognition that the financial policies of the past had contributed to the continuation of high domestic inflation rates and to the widening of the balance of payments deficit". This budget planned some surcharges on the transfer, estate and gift, and capital taxes, which were excepted to yield Esc. 12.5 billion in additional revenues. Moreover, other indirect taxes were supposed to be implemented (IMF 1984, p.25). However, Devries et al. might have decided not to include this first-round budget because its objective was to set as a target deficit the same nominal amount as in the 1982 budget... "Despite such measures, the delayed implementation of the budget, which came into effect only in April, coupled with substantial slippages in expenditure control during the first half of the year coinciding with the tenure of a caretaker government, pointed to a substantial overshoot of the initial budget target, possibly reaching 11 percent of GDP in the absence of remedial measures" IMF 1984, p.25. Thus, "some economy measures were taken in the interim budget. The figure for current spending for a number of items was cut by about 4 per cent, or 1 1.7 billion escudos. In addition, expenditure on goods and services was cut by 15 per cent or about 6 billion escudos". OECD 1984 p.42 And then, "Beginning in June 1983 the new government took a series of fiscal measures designed both to slow the growth of the budget deficit in the short term and to curb domestic demand.

¹⁵⁰Looking at the reports of Banco du Portugal 1983 and 1984, there is a very useful disentanglement of the discretionary components of the 1983 budget but the figures do not correspond to the ones of Devries et al. (2011) and hence of the OECD, probably because they take into account all of the policies implemented in 1983 and not the fiscal adjustments implemented after the second half of the year.

¹⁵¹The fact that the fiscal consolidation was an adjustment basically made at the end of the year makes particularly difficult to disentangle its components. Indeed, no info is given in the IMF Rececent Economic Developments report or in the OECD Surveys.

¹⁵²OECD 2001, p.50 and Stability and Growth Programme 2000-2004 mention restrictions on civil service recruitment as another measure introduced in the 2000 budget. New recruitments must be authorized by the Prime Minister and the Minister of Finance. With the ageing of the workforce, the number of civil servants retiring in Portugal is expected to increase significantly over the next few years. A substitution ratio of well below one will be a major factor in consolidating the budget in the medium term; However, the impact of this policy is not computed in the reports and not included by us since it probably has impact in the following years, at a rate that is unknown to us.

Investments PTE 45 billion (unexpected: 45)

• 0.2 per cent of GDP from a reserve clause covering 8 per cent of expenditure earmarked for public investments and the Military Planning Law, totaling PTE 45 billion.

Transfers PTE 37 billion (unexpected: 37)

• 0.17 per cent of GDP from a freeze on 10 per cent of current transfers to the non-State parts of the general government (OECD 2001, p.50). This freeze was equal to PTE 37 billion.

Portugal 2002¹⁵³

Fiscal consolidation totaled 1.50 percent of GDP, with spending cuts of 0.30 percent of GDP and tax measures of 1.20 percent of GDP.¹⁵⁴ Fiscal consolidation was motivated by deficit reduction, as the 2002 IMF Staff Report explains (p. 14): "the newly elected government implemented sizable measures aimed at reducing the fiscal deficit to 2.8 percent of GDP". Therefore, a rectifying budget was presented to parliament, which became law in June. It included consolidation measures totaling about 0.6% of GDP (Update of the Convergence Programme of Portugal (2003-2006): An Assessment). Moreover, one-off measures introduced in late 2002 had a budgetary impact of 1.50 percent of GDP (Banco de Portugal Annual Report 2002, p. 97). Of these, only 0.9 percent of GDP is taken into consideration because the rest consisted in privatizations. The decomposition of these measures goes as follows (Banco de Portugal 2002 Annual report and Update of the Convergence Programme of Portugal (2003-2006): An Assessment):

REVENUES: PTE 1.476 billion Indirect taxes PTE 0.369 billion (unexpected: 0.369)

• 0.369 billion - 0.3 percent of GDP from a rise in the normal VAT rate from 17% to 19%.

Not yet classified PTE 1.107 billion (unexpected: 1.107)

• 1.107 billion - 0.9 percent of GDP. On 14 November, Decree-Law No. 248-A2002 established that tax arrears, which should be legally collected by 31 December 2002, could be settled without paying interest and fines. The impact of this measure on the 2002 deficit amounted to 1,168.8 million (0.9 per cent of GDP). On 14 November, Decree-Law No. 248-A2002 established that tax arrears, which should be legally collected by 31 December 2002, could be settled without paying interest and fines. The impact of this measure on the 2002 deficit amounted to 1,168.8 million.

SPENDING: PTE 0.369 billion

Investment PTE 0.369 billion (unexpected: 0.369)

• 0.369 billion - 0.3 percent of GDP. According to the *Update of the Convergence Programme of Portugal (2003-2006): An Assessment*, "the July budget included consolidation measures totaling about 0.6% of GDP, notably a rise in the normal VAT rate from 17% to 19%, and a reduction in investment expenditure". Since in the *Banco de Portugal 2002 Annual report*, it is computed that the rise in VAT had an impact of 0.3% of GDP, we allocate the residual of 0.3% to the investment expenditures. ¹⁵⁵

Portugal 2003

The end of a one-off tax amnesty had a budgetary impact of -0.75 percent of GDP in 2003. The 2002 one-time tax amnesty yielded tax revenue of 0.15 percent of GDP in 2003 after yielding 0.90 percent of GDP in 2002 (see above), as explained in the Banco de Portugal Annual Report 2004 (p. 102). The change in saving due to the 2002 tax measure in 2003 was thus -0.75 percent of GDP (0.15-0.90). Since the measure was announced only

¹⁵³GDP2001=122.978 billion €. Source: OECD Economic Surveys 2003.

 $^{^{154}}$ Notice that Devries et al. (2011) computed the spending cuts to be equal to 0.4 percent of GDP. But this is because it computed the total amount of the shock to be (0.6+1.5-0.5), with -0.5 being the result of asset sales. However, according to Banco de Portugal 2002 Annual report, p.97. the total amount of asset sales was equal to 0.6 % of GDP, changing the residual for spending from 0.4 to 0.3.

¹⁵⁵The rectifying budget included other measures, notably the freezing of hiring by the government, the closure and merger of public institutes, and the end of new interest rate subsidies to mortgage loans. The rectifying budget also provided for the sale of government property. However, the impact of these measures is not taken into account in the reports that we use, hence we cannot include them in the analysis.

in November 2002, according to our time framework the whole amount of -0.75 is classified as unexpected in 2003. Hence we cannot consider this year as of fiscal consolidation, nor as part of a fiscal consolidation plan.

REVENUES (-0.75 percent of GDP) Not yet classified (-0.75, unexpected)

• -0.922 billion, -0.75 percent of GDP

Portugal 2005

Fiscal consolidation totaled 0.62 percent of GDP with tax hikes of 0.54 percent of GDP and spending cuts of 0.08 percent of GDP. Fiscal consolidation in 2005 was motivated by deficit reduction, as the 2005 IMF Staff Report explains (p. 13): "the authorities had announced a series of measures, mostly on the revenue side, that are intended to reduce the deficit to 6.0 percent of GDP this year." The composition goes as follows:

REVENUES: € 810 million

Income profits and capital gains €280 million (unexpected: 280)

- 150€ million of taxes on income and wealth
- 130€ million of social security contributions

Indirect taxes € 530 million (unexpected: 530)

• 530€ million of VAT rise

Not yet classified (According to P vs. C):

• All the income taxes of before are not classified according to the decomposition Personal taxes vs. Corporate taxes. We cannot figure out wether the income and wealth taxes + social contributions were paid by either the individuals, the corporations or both.

SPENDING: € 125 million

Consumption + Salaries € 100 million (unexpected: 100)

• 100€ million from restructuring Public Administration, Human Resources and Public Services. ¹⁵⁶

Transfers € 25 million (unexpected: 25)

• 25€ million of medicaments co-payment policy

Portugal 2006

Fiscal consolidation totaled 1.65 percent of GDP, with tax measures of 1.10 percent of GDP and spending cuts of 0.55 percent of GDP. Fiscal consolidation was motivated by deficit reduction, as the Portuguese Republic Stability and Growth Program 2005-2009 explains (p. 1): "The Government views the sustainability of public finances as a prerequisite for sustained economic growth, which, in turn, is an essential factor in the pursuit of economic development and social cohesion policies. In this vein, budgetary consolidation is, in a particularly focused manner in 2006, at the centre of the immediate objectives of budgetary policy." There are some discrepancies between the measures retrieved by Devries et al. and what we believe should take into account. We first present a possible decomposition being as close as possible and then "our version" in the box.

REVENUES: (1.1 percent of GDP)

Taxes Income profits and capital gains (0.37 percent of GDP)

- 455€ million of taxes on income and capital gains
- 140€ million of social security contributions

Indirect taxes (0.73 percent of GDP)

• 690€ million from a raise in VAT

¹⁵⁶This structural reform included the devolution of duties to local and regional levels, reduction of administrative structures, the simplification, streamline and re-engineering of administrative procedures. Moreover, many reforms in the management of human resources were applied such as altering of the status of trainee teachers, teaching duties in retirement, freezing of automatic progression, change in recrutiement rules and many others.

- 200€ million from a tax on oil products
- 110€ million from a tax on to bacco

Not yet classified (according to C vs P) (0.37 percent of GDP)

• All the income taxes previously mentioned

Spending (0.55 percent of GDP)

Consumption + Salaries (0.26 percent of GDP)

• 375€ million from restructuring Public Administration, Human Resources and Public Services. ¹⁵⁷

Transfers (0.29 percent of GDP)

• 415€ million from curbing social security and co-payment expenditure

Information about the structural plan that began in 2005/06

The expenditure measures expected to have an impact on the budget in the Stability and Growth Program 2005-2009 regarded two main areas: Restructuring of Public administration, Human Resources and public services and the curbing of Social Security and Health co-payment expenditure. Within the first area of expenditure reforms, several measures were implemented in order to modernize the public services. Some of the measures announced in 2005 were:

- PRACE (Restructuring Programme for the State's Central Administration) aimed at decentralize duties to local authorities, reduction of administrative structures, simplification, streamlining and re-engineering of administrative procedures.
- Reorganization of Education, Healthcare, Justice and Local Government Network. Some of the measures were: hospitals of the National Health Services shall adopt the corporate public entity model and implement other organizational changes, primary schools (1st cycle) with less than 10 pupils should close down and alike.
- The government has committed itself to a comprehensive reform of a too complex and rigid civil service careers
- Freezing of automatic progression mechanisms until the legislation regarding the reform careers is being drafted.
- Recruitment rules are changed and only one new recruit is hired for every two civil servant leaving
- Increasing in the effectiveness of the management and mobility of civil servants.

Overall these measures produced an expected impact which is outlined in Table 2.4.1 of the Stability and Growth Programme (2005-2009, December update). However, we consider that the impact only estimated the new recruitment rules for civil servants^a.

The measures affecting Social Security and Health co-payment expenditure included instead reforms on the pension system like the establishment of ceiling to pensions and new formulae to compute contributions, the civil servants forced registration to the general Social Security scheme, plus their retirement age gradually rise from 60 to 65 and other measures involving transfers for health services. However, these policies had impact only in 2006.

^aThis assumption is made given the fact that Table 7 of the stability and growth program 2007-2011 represents the impact of the same group of reforms, and the component representing the 'control of admission and recruitment' exactly corresponds to the estimates presented in table 2.4.1 of the Stability and Growth Programme (2005-2009, December update).

¹⁵⁷This structural reform included the devolution of duties to local and regional levels, reduction of administrative structures, the simplification, streamline and re-engineering of administrative procedures. Moreover, many reforms in the management of human resources were applied such as altering of the status of trainee teachers, teaching duties in retirement, freezing of automatic progression, change in recruitment rules and many others.

Our version: a

Fiscal consolidation totaled 2.36 percent of GDP, with tax measures of 1.06 percent of GDP and spending cuts of 1.3 percent of GDP

As for this year, we take as a reference the impact of the various measures introduced in 2005, 2006 and 2007. Measure from 2.4.1 stability and growth programme 2005-2009. Unless otherwise stated, in annex 2.A1 of OECD 2008 we verified that all the measures with impact in 2006 were contained in the budget law 2006, promulgated in November 2005)

REVENUES: € 1.595 billion (1.06% of GDP)

Taxes Income profits and capital gains € 0. 595 billion (unexpected: 0.595)

- 0.455€ billion of taxes on income and capital gains
- 0.140€ billion of social security contributions

Indirect taxes € 1 billion (unexpected: 0.31; announced: 0.69)

- € 0.690 billion from a raise in VAT, implemented from June 2005
- \bigcirc 0.200 billion from a tax on oil products
- \bigcirc 0.110 billion from a tax on tobacco

Not yet classified (according to C vs P)

• All the income taxes previously mentioned

SPENDING: € 1.973 billion (1.3 % of GDP)

Consumption € 0.442 billion (unexpected: 0.156; announced: 0.286)

- 0.156 billion 0.1 of GDP Includes, besides discretionary cost cutting measures in the acquisition of current goods and services, the reorganization of the State's local services and the overhead associated to the reduction of the number of civil servants effectively employed (resulting from the control of recruitment and contracting and the transfer of civil servants to special mobility status). This component is all unexpected.
- 0.286 billion 0.2 percent of GDP. Includes the savings arising from the passage of civil servants to special mobility status, the reduction of overtime, the review of remuneratory supplements, and the convergence of the healthcare sub-systems.

Salaries € 0.935 billion (unexpected: 0.935)

- 0.3 percent of GDP for control of admission and recruitment, computable from Table 7 of Stability and Growth program 2007-2011 and table 2.4.1 of Stability and growth program 2005-2009. This measure was approved November 30 2005 (see p. 25 of Stability and Growth program 2007-2011), hence it is coded as unexpected in 2006
- 0.3 for further restraining of salaries (also decided during late 2005 and 2006)

Transfers € 0.44 billion (announced: 0.44)

• The first round of pension and health measures, promulgated in mid 2005 (see p. 26 of stability and growth programme 2005-2009 for more details about the timing) had an impact of 0.44 billion or 0.3 percent of GDP, according to table 2.4.1 of the stability and growth programme 2005-2009

Not yet classified € 0.156 (unexpected: 0.156)

• 0.156 billion - 0.1 percent of GDP from health reforms (see more details at a further stage), unexpected. See table 11 of stability and growth programme 2007-2011.

 $[^]a\mathrm{For}$ anticipated in 2005: GDP2004=142.843 billion euros. Source: OECD Economic Surveys 2006

For 2006 measures: GDP= 155.833 billion euros from Table 2.4.1, p. 30, Stability and Growth Programme 2005 2009, December Update

Portugal 2007

Fiscal consolidation totaled 0.60 percent of GDP with tax hikes of 0.52 percent of GDP and spending cuts of 0.08 percent of GDP. In order to disentangle this exact estimates we look at Figure 2.4 of OECD Economic Surveys 2008/9 p.46 because it is exactly the same source that Devries et al. (2011) took as a reference. Most of the measures were apparently been decided already in 2006. Again, we present first a version consistent with Devries et al. and then, in the box, "our version"...

REVENUES: 0.5 percent of GDP Not yet classified:

• 0.5 percent of GDP from tax structure and contributory efficiency change

SPENDING: 0.9 percent of GDP Salaries (0.4 percent of GDP)

• 0.4 percent of GDP from public administration reform that actually includes only savings on salaries (see p. 25 of Stability and Growth program 2007-2011)

Transfers (0.1 percent of GDP)

• 0.1 percent of GDP from pensions cuts

Not yet classified (0.4 percent of GDP)

- 0.1 percent of GDP from health expenditures
- 0.3 percent of GDP from "other public administration reforms"

Our Version^a

Fiscal consolidation totaled 2.22 percent of GDP with tax hikes of 0.51 percent of GDP and spending cuts of 1.71 percent of GDP.

Classification goes as follows:

REVENUES: € 0.78 billion (0.5 percent of GDP) Not yet classified € 0.78 billion (announced: 0.78)

• Two measures were apparently modified in 2006 for 2007. The special deduction for pensioners (IRS) was reduced and increase in the coefficient of taxation for independent workers. I cannot figure out the amount of these two because in the growth and stability program report 2007-2011 there is not a classification as in table 2.4.1 of stability and growth program 2005-2009

SPENDING: € 2.047 billion

Consumption € 1.261 billion (unexpected: 0.326; announced: 0.935)

- 0.5 percent of GDP. Includes the savings arising from the passage of civil servants to special mobility status, the reduction of overtime, the review of remuneratory supplements, and the convergence of the healthcare sub-systems.
- 0.1 percent of GDP Includes, besides discretionary cost cutting measures in the acquisition of current goods and services, the reorganization of the State's local services and the overhead associated to the reduction of the number of civil servants effectively employed (resulting from the control of recruitment and contracting and the transfer of civil servants to special mobility status). This component is all unexpected.
- 0.1 percent of GDP from PRACE (Restructuring Programme for the State's Central Administration) aimed at decentralize duties to local authorities, reduction of administrative structures, simplification, streamlining and re-engineering of administrative procedures. This measure was actually announced in 2005 but seems to have its impact only in 2007.
- 0.1 percent of GDP from Shared Services meaning measures to improve ITC use in public administration, cutting red tape and centralization of the purchasing of goods.

Salaries € 0.623 billion (announced: 0.623)

• 0.4 percent of GDP for control of admission and recruitment, computable from Table 7 of Stability and Growth program 2007-2011 and table 2.4.1 of Stability and growth program 2005-2009. This measure was approved November 30 2005 (see p. 25 of Stability and Growth program 2007-2011), hence it is coded as expected from 2006.

Transfers € 0.623 billion (announced: 0.623)

- 0.3 percent of GDP from curbing Social Security and Health co-payment expenditure (expected from 2005). See table 2.4.1 of stability and growth programme 2005-2009
- New pension measures decided in 2007, with impact in 2007 estimated in about 0.1 percent of GDP

Not yet classified € 0.163 billion (unexpected: 0.163)

• 0.1 percent of GDP from health reforms (see more details at a further stage), unexpected. See table 11 of stability and growth programme 2007-2011.

for anticipated in 2006: GDP= 155.833 billion euros from Table 2.4.1, p. 30, Stability and Growth Programme 2005 2009, December Update

 $[^]a$ for unexpected measures: GDP2007= 162.919 billion €. Source: OECD Economic Surveys 2008

13 Spain

Spain 1983¹⁵⁸

Fiscal consolidation totaled 1.81 percent of GDP based on tax hikes. The fiscal adjustment is based on tax hikes and motivated by the necessity to reduce the budget deficit. Data are taken from the "1984, IMF Recent Economic Developments".

REVENUES: 378.309

Income, profits and capital gain (unexpected: 179.199)

• Increase in personal income tax by 0.9% of GDP. "Revenue from direct taxes grew from 7.0 percent of GDP in 1982 to 7.9 percent because of the increase in the schedule of withholdings for personal income tax, a reduction of exemptions, and some success in reducing income tax evasion" (p.35)

Personal (unexpected: 179.199)

• Increase in personal income tax by 0.9% of GDP. "Revenue from direct taxes grew from 7.0 percent of GDP in 1982 to 7.9 percent because of the increase in the schedule of withholdings for personal income tax, a reduction of exemptions, and some success in reducing income tax evasion" (p.35)

Indirect (unexpected 199.11)

Indirect taxes increased by 1% of GDP. "Indirect tax revenue rose from 7.2 percent of GDP in 1982 to 8.2 percent i 1983 due to the increase in the rates of various indirect taxes" (p.35).

Spain 1984

Fiscal consolidation totaled 1.26 percent of GDP, with spending cuts of 0.84 percent of GDP and tax measures of 0.42 percent of GDP. Data are taken from the "1984, IMF Recent Economic Developments".

REVENUES: Ptas 100 billion

Indirect (unexpected: Ptas 100 billion)

• Increase of Ptas 100 billion. "Government revenue is to be raised by about Ptas 100 billion through a widening of the base of the turnover tax and a reduction by 15 percent of the rebate of indirect taxes granted to exporters" (p. 45)

SPENDING: Ptas 200 billion

Not yet classified (unexpected: Ptas 200 billion)

• Spending reductions: Ptas 200 billion

Spain 1989^{159}

Fiscal consolidation totaled 1.22 percent of GDP, with tax measures of 1.11 percent of GDP and spending measures of 0.09 percent of GDP. The adjustments started a consolidation process that lasted two years and was motivated by reducing the deficit before 1992. After 1992 a new series of fiscal adjustments started to achieve the criteria imposed by the Maastricht criteria. The measures of the adjustment in 1989 were approved in two different stages. First, the 1989 Budget prescribed an increase in the tax levy induced by both direct and indirect taxes. A second part of measures was announced in May and introduced a consolidation package worth Ptas 250 billion. It was motivated by the acceleration in the rate of inflation, that according to our procedure must be classified as exogenous. Some of the measures included in the second package expired in 1990 with a negative impact on budget deficit. Data on fiscal components are taken from IMF, Recent Economic Developments 1989 (p.27-28).

REVENUES: Ptas 471 billion

Income, profits and capital gain (unexpected: Ptas 375.385 billion)

 $^{^{158}}$ GDP19982= 19911. Source: OECD Economic Survey 1984

 $^{^{159}\}mathrm{GDP}{=}48077$ billion. Source: Devries et al.

- Direct tax measures: Ptas 240.385 billion (0.5\% of GDP)
- Bringing forward of corporate tax that raised Ptas 135 billion (0.28% of GDP)

Corporate (unexpected: Ptas 135 billion)

• Bringing forward of corporate tax that raised Ptas 135 billion (0.28% of GDP)

Indirect (unexpected: 96.154)

• Increases in the rates of VAT, levied on legal services end excise taxes on tobacco products and alcoholic beverages: Ptas 96.154 billion (0.2% of GDP)

Not Yet classified (unexpected: 240.385 - 0.5\% of GDP (P vs C))

• Direct tax measures: Ptas 240.385 billion (0.5% of GDP) (according to P vs C)

SPENDING¹⁶⁰: Ptas 40 billion

Government Investments (unexpected: Ptas 40 billion)

• Cuts in public investment and capital transfers amounting to Ptas 40 billion (0.08% of GDP)

Spain 1990

The end of a temporary fiscal consolidation measure introduced in 1989 had a budgetary impact of -0.32 percent of GDP. This episode is the result of the expiration of corporate tax measures introduced in 1990.

REVENUES: Ptas -135 billion

Income, profits and capital gains (anticipated: Ptas -135 billion)

• Expiration of bringing forward of corporate taxes: Ptas -135 billion(anticipated in 1989)

Corporate (anticipated: Ptas -135 billion)

• Bringing forward of corporate tax that raised Ptas 135 billion

Spain 1992¹⁶¹

Fiscal consolidation totaled 0.61 percent of GDP, with spending cuts of 0.38 percent of GDP and tax hikes of 0.23 percent of GDP. The adjustment is characterized by three different rounds of announcements¹⁶². The first one is the 1992 Budget that introduced indirect and social security taxes that were completely offset by an announced decrease of the personal income tax¹⁶³. The latter was the result of the Personal Income Tax Reform approved in 1991 and is therefore classified as announced according to our procedure¹⁶⁴. The second round is put in place in April, right after the Convergence Programme was presented. The government made substantial changes in the unemployment coverage regulations and prescribed cuts in government transfers. Finally, despite these measures, the deficit was still above the target and thus forced the government to implement further measures in July, that included personal and indirect taxes and additional cuts in government transfers. Data about components are taken from OECD Economic Surveys 1992-1993 (Table 11, p. 43).

REVENUES: Ptas 164 billion

Income, profits and capital gains: Ptas -164.37 (unexpected: 164.373 announced: -328.746)

• Social security contributions increase: 109.582 - 0.2% of GDP

¹⁶⁰We decided to exclude the postponement of payments of overdue financial obligations that was worth Ptas 75 billion, since it seems to be an "under the line" measure. As a consequence, we move away from Devries et al. (2011) also in year 1990 where they include a negative shock of Ptas -75 billion.

¹⁶¹GDP1991= 54791 billion. Source OECD Economic Surveys 1993.

 $^{^{162}}$ For a detailed description of the three rounds and their motivation see OECD Economic Surveys 1992-1993

¹⁶³Personal income tax rates were lowered considerably, by about 3 percentage points on average including a fall in the top marginal tax rate from 56 per cent to 53 per cent. The effective marginal tax rate fell from 0.59 to 0.59 according to Romero and Sanz (2005).

¹⁶⁴ Notice that the mid-1991 reform is not part of the traditional legislative process and therefore is not considered part of the 1992 Budget.

- Reduction in Personal income tax rates: -328.746 -0.6% of GDP (announced in 1991)
- Personal Income Tax levy increased by 54.791 0.1% of GDP

Personal: (unexpected: 54; announced: 328)

- Reduction in Personal income tax rates: -328.746 -0.6% of GDP (announced in 1991)
- Personal Income Tax levy increased by 54.791 0.1% of GDP

Indirect: (unexpected: Ptas 328.746 billion)

• Increase in VAT and excise taxes amounting to 328.746

Not yet classified: (unexpected: 0.2% of GDP (according to C vs P))

• Social security contributions increase: 109.582 - 0.2% of GDP (according to personal vs corporate)

SPENDING:Ptas 219.164 billion

Government Transfers: (unexpected: Ptas 219.164 billion)

- Unemployment coverage cut by 0.3% of GDP
- \bullet Sick leave and invalidity reduced by 0.1% of GDP

Spain 1993¹⁶⁵

Fiscal consolidation totaled 1.03 percent of GDP, with tax hikes of 0.75 percent of GDP and spending cuts of 0.28 percent of GDP. The government confirms its commitment to pursue budget consolidation to achieve the Maastricht criteria. The adjustment is composed by measures coming from the 1993 Budget and the effects of the measures introduced in 1992 that generate effects for an entire year¹⁶⁶. Data about fiscal components are taken from OECD Economic Surveys 1992-1993 (Table 11, p. 43).

REVENUES: Ptas 450.511 billion

Income, profits and capital gains: Ptas 282.077 billion (unexpected: 117.704, announced: 164.373)

• Social security contributions increase: 117.704 - 0.2% of GDP

Personal: 164.373 (announced: 0.3% of GDP)

• Personal Income Tax levy increased by 164.373 - 0.3% of GDP (announced in 1992)

Indirect: 109.582 (announced: 0.2% of GDP)

• Increase in VAT and excise taxes amounting to 109.582 - 0.2% of GDP (announced in 1992)

Not yet classified: (unexpected: 58.852 0.1% of GDP; 117.704 0.3% of GDP (according to P vs C))

- Social security contributions increase: 117.704 0.2% of GDP (according to personal vs corporate)
- Personal Taxation to reduce income and VAT tax evasion by professionals and artisans: 58.852 0.1% of GDP

SPENDING: Ptas 164.373 billion

Government Transfers (announced: 164.373 - 0.3% of GDP)

- Unemployment coverage cut by 0.2% of GDP (announced in 1992)
- Sick leave and invalidity cut by 0.1% of GDP (announced in 1992)

 $^{^{165}}$ GDP1992=58852 billion. Source: OECD Economic Surveys 1994.

¹⁶⁶However, it seems that nothing new has been implemented and therefore we should not take into account the measures of April and July as part of the 1993 consolidation.

Spain 1994^{167}

Fiscal consolidation totaled 1.6 percent of GDP based on spending cuts. The adjustment was motivated by the need to attain the Maastricht criteria. It was only based on spending cuts that concerned government consumption and public investments. In particular, the latter knew a significant cut. Data are taken from the "1996, IMF Recent Economic Developments"

SPENDING: 1034.704

Government Consumption: (unexpected: 129.338)

• "Public sector consumption of goods and services was also compressed by 0.2 percent of GDP" (p. 12)

Government Investments: (unexpected: 905.366)

- Gross fixed capital formation reduced by 0.1 percent of GDP (p. 12)
- Capital transfers reduced by 1.3% of GDP. "Capital transfers halved, from 2.6 percent to 1.3 percent of GDP" (p. 12).

Spain 1995

Fiscal consolidation totaled 0.8 percent of GDP based on spending cuts. The consolidation is based on the Convergence Plan introduced the previous year and is exclusively based on spending cuts. Data about spending components are taken from the OECD Economic Survey 1995-1996, p. 139.

SPENDING: Ptas 550 billion

Government Consumption (unexpected: Ptas 400 billion)

• Spending on infrastructure investment and military spending was frozen: Ptas 400 billion (0.54% of GDP)

Other (unexpected: Ptas 150 billion)

• Across-the-board cut in discretionary spending: Ptas 150 billion

Spain 1996¹⁶⁸

Fiscal consolidation totaled 1.29 percent of GDP, with spending cuts of 1.09 percent of GDP and tax hikes of 0.20 percent of GDP. The adjustment was motivated by the reduction of budget deficit needed to achieve the criteria imposed by the Maastricht Treaty. Data about components are taken from the OECD Economic Surveys, 1997/1998.

REVENUES: Ptas 147.322 billion

Indirect taxes: (unexpected: Ptas 147.322 billions)

• Excise taxes on tobacco and alcohol raised in August 1996 amounting to 0.2% of GDP (p. 156)

SPENDING: Ptas 810.271 billion

Government Consumption: (unexpected: Ptas 147.322 billion)

• Reduced by 0.2% of GDP (p. 47)

Government Investments: (unexpected: Ptas 662.949 billion)

• Capital outlays were squeezed by 0.9% of GDP (p. 47)

¹⁶⁷GDP1994=64669 billion. Source: OECD Economic Surveys 1996, this is the same GDP reported by "1996, IMF Recent Economic Developments" where we retrieved details about the consolidation measures.

¹⁶⁸GDP1996=73661. Source: OECD Economic Surveys 1998, which is the document where we retrieved details about the measures of fiscal consolidation.

Spain 1997¹⁶⁹

Fiscal consolidation totaled 1.49 percent of GDP, with spending cuts of 1.4 percent of GDP and tax measures of 0.09 percent of GDP. This adjustment is the final step to meet the Maastricht criteria and is characterized by unexpected measures on both fiscal leverages. Data on fiscal components are taken from the IMF, Recent Economic Developments 1997.

REVENUES: Ptas 73.661 billion

Indirect: (unexpected: Ptas 73.661 billion)

• Insurance Policy Tax: 0.1% of GDP

SPENDING: Ptas 1105 billion

Consumption (unexpected: Ptas 147.322 billion)

• Goods and services spending is prescribed to fall sharply by 0.2% of GDP

Salaries (unexpected: Ptas 368.305 billion)

 \bullet Wage freeze throughout the public sector and hiring restrictions to reduce public employment worth 0.5 % of GDP.

Investments (unexpected: Ptas 368.305 billion)

• Finally, savings of nearly 1/2% percent of GDP are expected from additional cuts in public investment spending, although some of these cuts (around 0.1 percent of GDP) are to be supplanted by increased private participation in public investment projects, and others (another 0.1 percent of GDP) are accounting changes which effectively postpone payments on some infrastructure investment 2-3 years into the future.

Transfers: (unexpected: 220.983)

• Social contributions are cut by 0.3 percent of GDP "reflecting further savings in unemployment payments and modest projected growth rates for pensions and health care spending" (p. 10).

14 United Kingdom¹⁷⁰

United Kingdom 1979

Fiscal consolidation totaled 0.257 percent of GDP, with and tax cuts of 0.26 partly offset by spending increase of 0.003. The consolidation was announced in June 1979 and was part of a two year program that involved both spending cuts and tax hikes, even if the net of tax measures is a tax reduction due to the decrease of the Personal Income Tax. Data about fiscal components are from the IMF Staff Report 1979 (p. 9-10), but are integrated with data from the Financial Stability Budget Report 1979-1980 (Table 14 p. 26 and Table 16 p. 31).

REVENUES: £ 0.433 billion

Income, Profits and Capital Gains (unexpected: £ -1.393 billion)

- Reduction in basic rate: £ -0.966 billion
- Extension of basic rate band: £ -0.119 billion
- Changes in higher rate thresholds and rates: £ -0.229 billion
- \bullet Increase in investment income surcharge thresholds: £ -0.017 billion
- Corporate Decrease in rate of ACT to 3/7th of the amount of the dividend. £ -0.143 billion
- Petroleum Revenue Tax¹⁷¹: £ 0.083 billion

¹⁶⁹GDP1996=73661. Source OECD Economic Surveys 1998.

¹⁷⁰Fiscal year runs from April 1- March 31. The sources consulted for UK are mainly Financial Statement and Budget Reports, IMF Recent Economic Developments, IMF Staff Report, and OECD Economic Surveys.

¹⁷¹The Petroleum Revenue Tax (PRT) is charged on "super-profits" arising from the exploitation of oil and gas in the UK and the UK's continental shelf.

• Development land tax: £ -0.002 billion

Personal (unexpected: £ -1.331 billion)

- Reduction in basic rate: £ -0.966 billion
- Extension of basic rate band: £ -0.119 billion
- \bullet Changes in higher rate thresholds and rates: £ -0.229 billion
- Increase in investment income surcharge thresholds: £ -0.017 billion

Corporate (unexpected: £ -0.062 billion)

- Corporate Decrease in rate of ACT to 3/7th of the amount of the dividend. £ -0.143 billion
- Petroleum Revenue Tax: £ 0.083 billion
- Development land tax: £ -0.002 billion

Indirect (unexpected: £ 1.826 billion)

- VAT: unification of rates to 15%: £ 1.526 billion
- Excise on light oil, heavy oil, cigarettes, etc.: £ 0.3 billion

SPENDING: £-0.005 billion

Government Consumption (unexpected: £ 0.477 billion)

• Current expenditure on goods and services: £ 0.477 billion

Government Investments (unexpected: £ 0.284 billion)

- Gross Fixed Capital Formation: £ 0.119 billion
- Capital Grants to local authorities, public corporations and private sector: £ 0.165 billion

Government Transfers (unexpected: £ -0.766 billion)

- Current Grants to local authorities, personal sector, abroad: £ 0.480 billion
- Subsidies: £ 0.056 billion
- Increase in single and married allowances: £ -1.156 billion
- \bullet Increase in additional personal allowance: £ -0.008 billion
- Increase in age allowance: £ -0.126 billion
- \bullet Exemption of child dependency allowance: £ -0.004 billion
- Exemption of war windows' pensions: £ -0.003 billion
- Increase in limits for small company relief: £ -0.005 billion

United Kingdom 1980

Fiscal consolidation totaled 0.084 percent of GDP, tax hikes of 0.085 percent of GDP and a net spending increase of 0.001. The episode is the continuation of the budget plan introduced during the previous year. Measures interested both spending and revenues. Data for the disaggregated components are taken from IMF Staff Report 1979 (p. 9-10), but are integrated with data from the Financial Stability Budget Report 1979-1980 (Table 14 p. 26 and Table 16 p. 31).

REVENUES: £ 0.14 billion

Income, Profits and Capital Gains (announced: £ -0.464 billion)

• Total Personal Taxes in 1979 Budget: £ -0.443 billion (announced in 1979)

- Total Corporate Taxes in 1979 Budget: £ -0.021 billion (announced in 1979)

 Personal (announced: £ -0.443 billion)
- Total Personal Taxes in 1979 Budget: £ -0.443 billion (announced in 1979) Corporate (announced: £ -0.021 billion)
- Total Corporate Taxes in 1979 Budget: £ -0.021 billion (announced in 1979)

Indirect (announced: £ 0.60875 billion)

• Total Indirect Taxes in 1979 Budget: £ 0.60875 billion (announced in 1979)

SPENDING: £ -0.001 billion

Government Consumption (announced: £ 0.159 billion)

• Current expenditure on goods and services: £ 0.159 billion

Government Investments (announced: £ 0.09475 billion)

- Gross Fixed Capital Formation: £ 0.03975 billion
- Capital Grants to local authorities, public corporations and private sector: £ 0.055 billion

Government Transfers (announced: £ -0.255 billion)

- \bullet Total Transfers tax-related from 1979 budget: £ -0.434 billion
- \bullet Subsidies and current grants: £ 0.179 billion

United Kingdom 1981

Fiscal consolidation totaled 1.29 percent of GDP, with spending cuts of 0.13 percent of GDP and tax hikes of 1.16 percent of GDP. The adjustment is a two year plan based on both fiscal leverages. Data about components are taken from the Financial Statement and Budget Report 1981.

REVENUES: £ 2.7 billion

Income, Profits and Capital Gains (unexpected: £ 0.9 billion)

• Direct taxes: £ 0.9 billion ¹⁷²

Indirect (unexpected: £ 1.8 billion)

• Indirect taxes: £ 1.8 billion

Not yet classified, C vs. P £ 0.9 billion

• Direct taxes: £ 0.9 billion

SPENDING: £ 0.3 billion

Government Investments (unexpected: £ 0.3 billion)

• Cuts to public investments: £ 0.3 billion

¹⁷²The OECD Economic Survey 198, p.33 lists the measures: -Excise duties were raised by twice as much as prices in order to compensate in part for incomplete adjustments in the past, -A special once-and-for-all 21 per cent tax on bank deposits, -The provision for the indexation of personal income tax allowances and band rates was temporarily suspended, raising the fiscal burden on households, -Tax measures to help small business and, -A new stock relief scheme was introduced

United Kingdom 1982

Fiscal consolidation totaled 0.43 percent of GDP, with spending cuts of 0.04 percent of GDP and tax hikes of 0.39 percent of GDP. The consolidation is composed by the implementation of the second part of measures that were introduced in 1981. Data about components are taken from the Financial Statement and Budget Report 1981.

REVENUES: £ 1 billion

Income, Profits and Capital Gains (announced: £ 0.3 billion)

• Direct taxes: £ 0.3 billion (anticipated in 1981)

Indirect (announced: £ 0.6 billion)

• Indirect taxes: £ 0.6 billion (anticipated in 1981)

SPENDING: £ 0.1 billion

Government Investments (announced: £ 0.1 billion)

• Cuts in public investments: £ 0.1 billion (anticipated in 1981)

United Kingdom 1994

Fiscal consolidation totaled 0.86 percent of GDP, with spending cuts of 0.39 percent of GDP and tax hikes of 0.47 percent of GDP. 1994 was the firs year of a multi-year plan of fiscal consolidation, as the IMF Recent Economic Development 1995 points out. Data about fiscal components are taken from the IMF Recent Economic Developments 1995, p. 25-26. Data about public spending are taken from the FSBR 1995-1996, p. 119, Table 6.5. There are three different waves of reform: the March 1993 Budget, the November 1993 Budget and finally some measures approved between the two. For what concerns spending, the November 1993 Budget seems to introduce a multi-year reduction plan that does not simply stop in FY 94/95 as Devries et al. (2011) describe. In fact, the Table shows the whole evolution of spending cuts making clear that new measures will be introduced in FY 95/96 and 96/97. However to be as close as possible to Devries et al. we only take into account the impact of measures on F.Y. 1994-95

REVENUES: £ 3.032 billion¹⁷³

Income, Profits and Capital Gains £ 0.118 billion (unexpected: £ -0.199 billion; anticipated: £ 0.317 billion)

- Measures in November 1993 Budget: £ -0.199 billion
- Measures in March 1993 Budget: £ 0.317 billion (announced in 1993)

Personal Taxes (unexpected: £ -0.435 billion; anticipated: £ -0.248 billion)

- Measures in November 1993 Budget: £ -0.435 billion
- Measures in March 1993 Budget: £ -0.248 billion (announced in 1993)

Corporate Taxes (unexpected: £ 0.236 billion; anticipated: £ 0.619 billion)

- \bullet Measures in November 1993 Budget: £ 0.236 billion
- Measures in March 1993 Budget: £ 0.619 billion (announced in 1993)

Indirect Taxes £ 2.914 billion (unexpected: £ 1.129 billion; anticipated: £ 1.785 billion)

- Measures in November 1993 Budget: £ 1.129 billion
- Measures since March 1993 Budget: £ 0.664 billion (announced in 1993)

 $^{^{173}}$ I reconstructed the £ 6.3 billions by summing up the measures included in the November 1993 (Table 4.1, p. 76) and the measures of March 1993 having effects in 1994 and all of the measures for FY 94/95 announced between the two Budgets. See Tables at p. 81 and 82 of the FSBR 1994/1995.

• Measures in March 1993 Budget: £ 1.121 billion (announced in 1993)

SPENDING: £ 2.55 billion

Consumption (unexpected: £ -0.045 billion)

• Defense: £ 0.1875 billion

• Foreign Office: £ -0.2325 billion

• Agriculture, Fisheries:£ 0.1125 billion

• Legal Departments: £ 0.0675 billion

• Education: £ -0.03 billion

• National Heritage: £ -0.0075 billion

• Health: £ -0.015 billion

• Chancellor's Departments: £ 0.03 billion

• Cabinet Office - OPSS: £ -0.0075 billion

• Transport: £ -0.225 billion

• DOE - Housing: £ 0.1275 billion

• DOE - Environment: £ -0.0225 billion

• DOE - PH, PSA (Public health, Public Service Announcements): £ -0.03 billion

Salaries (unexpected: £ 0.0075 billion)

• Employment: £ 0.0075 billion

Transfers £ 0.556 billion (unexpected: £ -0.787 billion; announced: 1.343)

• Trade and Industry: £ -0.0075 billion

- \bullet ECGD (UK Export Finance, Export Credits Guarantee Department, the United Kingdom's export credit agency): £ -0.0075 billion
- Social Security: £ -1.095 billion
- Income Tax Allowance: £ 0.323 billion (November 1993 budget)
- Mortgage interest relief: £0.615 billion (Anticipated March 1993 budget)
- Married Couple allowance: £ 0.728 billion (Anticipated March 1993 budget)

Not yet classified (unexpected: £ -0.03 billion)

 \bullet Local authority self-financed expenditure: £ -0.75 billion

• Allowance for shortfall: £ 0.75 billion

• Wales: £ 0.045 billion

• Northern Ireland: £ -0.075 billion

Other (unexpected: £ 2.063 billion)

• Reserve: £ 2.625 billion

• Overseas Development: £ -0.0675 billion

 \bullet DOE - Local Government 174 : £ 0.0225 billion

• European Communities: £ -0.5175 billion

 $^{^{174}}$ Includes payments of Revenue Support Grant and National Non-Domestic Rates to English local authorities (footnote 2, p.119, Table 6.5).

United Kingdom 1995

Fiscal consolidation totaled 0.33 percent of GDP, with spending cuts of 0.17 percent of GDP and tax hikes of 0.16 percent of GDP. The episode is characterized by the simple calendar year allocation of the policies announced the year before. Data about public spending are taken from the FSBR 1994-1995, p. 119, Table 6.5. Moreover, there are some measures coming from the November 1993 Budget, that were motivated by the will to reduce deficit and entered in office after November 1994. They were not taken into account by Devires et al. (2011) and amount to £ 3.925 billion. We found data about the latter in FSBR 1995/1996 Table 5B.2, p. 107. We decided not to include them since they are already included in the announcements of the previous Budget. In the same document there is record of all the revenues measures approved in the November 1994 Budget that seem to be exogenous and were not considered by Devries et al. $(2011)^{175}$. However, in order to be consistent with Devries et al. (2011), we don't take into account these additional revenues measures.

REVENUES: £ 0.955 billion

Income, Profits and Capital Gains (anticipated: £ 0.057 billion)

- Measures in November 1993 Budget: £ -0.066 billion (announced in 1994)
- \bullet Measures in March 1993 Budget: £ 0.123 billion (announced in 1993)

Personal Taxes (anticipated: £ -0.228 billion)

- Measures in November 1993 Budget: £ -0.145 billion (announced in 1994)
- \bullet Measures in March 1993 Budget: £ -0.083 billion (announced in 1993)

Corporate Taxes (anticipated: £ 0.285 billion)

- Measures in November 1993 Budget: £ 0.079 billion (announced in 1994)
- Measures in March 1993 Budget: £ 0.206 billion (announced in 1993)

Indirect Taxes (anticipated: £ 0.898 billion)

- Measures in November 1993 Budget: £ 0.376 billion (announced in 1994)
- Measures since March 1993 Budget: £ 0.221 billion (announced in 1993)
- Measures in March 1993 Budget: £ 0.374 billion (announced in 1993)

SPENDING: £ 1.218 billion

Consumption (announced: £ -0.0125 billion)

• Measures from November 1993 Budget: £ -0.0125 billion (announced in 1994)

Salaries (announced: £ 0.0025 billion)

• Employment: £ 0.0025 billion (announced in 1994)

Transfers (announced: £ 0.558 billion)

- Measures from November 1993 Budget: £ 0.11 billion (announced in 1994)
- Measures from March 1993 Budget: £ 0.448 billion (announced in 1993)

Not yet classified (announced: £ -0.01 billion)

- \bullet Local authority self-financed expenditure: £ -0.25 billion (announced in 1994)
- Allowance for shortfall: £ 0.25 billion (announced in 1994)
- Wales: £ 0.015 billion (announced in 1994)

¹⁷⁵Indeed, the FSBR 95/96 p.8 claims: "They contribute to the Government's strategy for strengthening the supply side. This aims to make the economy more responsive to market disciplines by enlarging the market sector, increasing competition, deregulating, and improving the climate for enterprises".

• Northern Ireland: £ -0.025 billion (announced in 1994)

Other (announced: £ 0.68 billion)

• Reserve: £ 0.875 billion (announced in November 1993)

 \bullet Overseas Development: £ -0.023 billion

• European Communities: £ -0.1725 billion (announced in 1994)

United Kingdom 1996

Fiscal consolidation totaled 0.33 percent of GDP, based on spending cuts. The consolidation is motivated by deficit reduction as the Government Budget Speech points out. The measures were all announced in the November 1995 Budget for the FY 1996-97 and included significant spending cuts¹⁷⁶. Data about fiscal components are found in the FSBR 1996-1997. For what concerns spending see Table 1.6, p. 12.

SPENDING: £ 2.475 billion

Consumption (unexpected: £ 1.5 billion)

• Health: £ -0.3 billion

• DOE other: £ 0.6 billion

• Defense: £ 0.375 billion

• Education and Employment: £ 0.3 billion

 \bullet Other Departments: £ 0.525 billion

Transfers (unexpected: £ -0.825 billion)

• Health NHS: £ -0.075 billion

• Social Security: £ -0.75 billion

Not yet classified (unexpected: £ -0.3 billion)

• Transport: £ 0.15 billion

• Local authorities self-financed expenditure: £ -0.45 billion

Other (unexpected: £ 2.1 billion)

• Reserve: £ 2.4 billion

• DOE Local Government: £ -0.3 billion

United Kingdom 1997

Fiscal consolidation totaled 0.83 percent of GDP in 1997, with tax hikes of 0.57 percent of GDP and spending cuts of 0.26 percent of GDP. Data about fiscal components are taken from July 1997 Budget, p. 40-41, Table 2.2. Data about increase in spending following the implementation of the Welfare to Work program are found at p. 33. For what concerns revenues, we found the record of all Taxation and National Insurance Contribution measures in the 1997-98 Budget, Table 1.4, p. 12. One concern arises since the calendar year allocation for year 2000 is not considered by Devries et al. (2011). Given that we are not sure whether there are some expansionary measures that more than compensate the allocation, we decided not to include the year. Moreover, we must take into account the revenues generated by changes in spending. The aggregate amount of the latter is reported at p. 6. We also found information about measures that increase revenues and are included in the

¹⁷⁶Unlike Devries et al. (2011), we believe that the revenues measures introduced in November are intended to boost long-run growth. Indeed, the "Budget continues the work of recent years to promote sustainable economic growth with low inflation. [...] The Budget will ensure that the PSBR continues to decline. And it will help the economy to work better by improving incentives for individuals, ensuring better value for money from public spending and delivering services more efficiently in partnership with the public sector" (p. 5). Revenues are presented in Table 1.5, p.11. However in order to stick with Devries et al. we don't include them.

Spend to Save Program as suggested by the 1997-98 Budget, footnote 3, p. 96. Their total amount in the three years is £ 2.443 billion as the "Audit of Assumptions for the Pre-Budget 2000 Report" states, and we allocated them in the years approximating the trend of the aggregate amount displayed in the 1997-98 Budget (Table 5.2, p. 96). The remainder of the revenues increase generated by spending cuts concerns the reduction of gross trading surplus of local authorities (see footnote 3 at p. 96). Finally, there is a clear mistake in Devries et al. (2011) since they do not take into account the calendar year allocation of the spending measures in the 1996-1997 Budget in order to compute the total impact of measures. We included them in order to be consistent with our methodology.

REVENUES: £ 4.264 billion¹⁷⁷

Income, Profits and Capital Gains (unexpected: £ 2.715 billion)

- Total Income and Capital Gain Taxes included in November 1996 Budget: £ -1.365 billion
- Inland Revenues in the Spend to Save Program: £ 0.190 billion
- Private Medical insurance: £ 0.02 billion (July 97)
- Companies and shareholders: £ 1.725 billion (July 97)
- Windfall Tax on privatized utilities: £ 1.950 billion (July 97)
- Anti-avoidance corporate measures: £ 0.1875 billion (July 97)
- \bullet PAYE: actions against trade debt schemes: £ 0.0075 billion (July 97)

Personal (unexpected: £ -1.39 billion)

- Private Medical insurance: £ 0.02 billion (July 97)
- \bullet Total Personal Taxes included in November 1996 Budget: £-1.41 billion

Corporate (unexpected: £ 3.784 billion)

- Companies and shareholders: £ 1.725 billion (July 97)
- Windfall Tax on privatized utilities: £ 1.950 billion (July 97)
- Anti-avoidance corporate measures: £ 0.1875 billion (July 97)
- PAYE: actions against trade debt schemes: £ 0.0075 billion (July 97)
- Total Corporate Taxes included in November 1996 Budget: £ -0.086 billion

Indirect Taxes (unexpected: £ 1.549 billion)

- VAT on domestic fuel: £ -0.165 billion (July 97)
- VAT: cash accounting scheme: £ 0.0075 billion (July 97)
- Excise duties: £ 0.559 billion (July 97)
- Stamp Duty: £ 0.180 billion (July 97)
- Total Indirect Taxes included in November 1996 Budget: £ 0.896 billion
- Indirect Taxes in the Spend to Save Program: £ 0.0717 billion

Not Yet Classified (unexpected: £ 0.321 billion (according to P vs C))

- Total Taxes included in November 1996 Budget: £ 0.131 billion (according to P vs C)
- Inland Revenues in the Spend to Save Program: £ 0.190 billion (according to P vs C)

Other Taxes (unexpected: £ 0.267 billion)

¹⁷⁷The value of revenues reported by Devries is taken from a dubious table. The Table that is used for the other years is not considered. Why???

- Other Taxes included in November 1996 Budget: £ 0.154 billion
- Revenues increase due to spending cuts (reduction in gross trading surplus of local authorities): £ 0.113 billion

SPENDING:£ 1.98 billion¹⁷⁸

Consumption £ 0.7775 billion (unexpected: £ 0.2775 billion; announced: £ 0.5 billion)

- Total Consumption in November 1996 Budget: £ 0.2775 billion
- Total Consumption in November 1995 Budget: £ 0.5 billion (announced in November 1995)

Transfers £ -1.104 billion (unexpected: £ -0.829 billion; announced: £ -0.275 billion)

- Welfare to Work Program¹⁷⁹: £ -0.15 billion
- Total Transfers in November 1996 Budget: £ -0.023 billion
- Total Transfers in November 1996 Budget, revenue related (Personal allowances, Capital Allowances Long Life Assets, Relief for Drilling Production of Oil Wells): £ -0.656 billion
- Total Transfers in November 1995 Budget: £ -0.275 billion (announced in November 1995)

Not yet classified £ -0.613 billion (unexpected: £ -0.413 billion; announced: £ -0.2 billion)

- Total NYC in November 1996 Budget: £ -0.413 billion
- Government Transport £ 0.05 billion (announced in November 1995)
- Local authorities self-financed expenditure £ -0.15 billion (announced in November 1995)

Other £ 2.924 billion (unexpected: £ 2.224 billion; anticipated: £ 0.7 billion)

- Reserve: £ 1.875 billion
- Overseas development £ 0.123 billion
- European communities £ 0.188 billion
- DOE Local Government: £ 0.038 billion
- Reserve: £ 0.8 billion (announced in November 1995)
- DOE Local Government: £ -0.1 billion (announced in November 1995)

United Kingdom 1998

Fiscal consolidation totaled 0.43 percent of GDP, consisting of 0.31 tax measures and 0.12 spending measures. The episodes is the prosecution of the consolidation process started the previous year.

REVENUES: £ 2.48 billion

Income, Profits and Capital Gains: (announced: £ 1.835 billion)

- Calendar year allocation of July 1997 measures 1.597 billion (announced in 1997)
- Total Income and Capital Gains Taxes included in November 1996 Budget: £ -0.091 billion (announced in November 1996)
- Inland Revenues in the Spend to Save Program: £ 0.329 billion (announced in 1997)

Personal: (announced: £ -0.482 billion)

• Calendar year allocation of July 1997 measures: £ 0.074 billion (announced in 1997)

 $^{^{178}}$ For what concerns the changes in spending announced in the November 1996 Budget, Devries is not consistent with previous years. In fact, he includes also the GGE(X) and not only the Control Total. Moreover, the aggregate is displayed for the period until 2000, while disaggregated quantities are provided only for 97-98 and 98-99.

¹⁷⁹It includes a New Deal for young people and new schools.

- Total Personal Taxes included in November 1996 Budget: £ -0.556 billion (announced in November 1996)

 Corporate: (announced: £ 1.445 billion)
- Calendar year allocation of July 1997 measures: £ 1.523 billion (announced in 1997)
- Total Corporate Taxes included in November 1996 Budget: £ -0.078 billion (announced in November 1996)

Property Tax: (announced: £ -0.0056 billion)

• Gilt interest simplification: £ -0.0056 billion (announced in 1997)

Indirect Taxes: (announced: £ 0.414 billion)

- Calendar year allocation of July 1997 measures: £ -0.193 billion (announced in 1997)
- Indirect Taxes in the Spend to Save Program: £ 0.124 billion (announced in 1997)
- Total Indirect Taxes included in November 1996 Budget: £ 0.483 billion (announced in November 1996)

Not Yet Classified (£ 0.872 billion (according to P vs C))

- \bullet Taxes included in November 1996 Budget: £ 0.543 billion (announced in November 1996) (according to P vs C)
- Inland Revenues in the Spend to Save Program: £ 0.329 billion (announced in 1997) (according to P vs C)

Other (announced: £ 0.24 billion)

- Other measures from July 1997: £ -0.004 billion (announced in 1997)
- Revenues increase due to spending cuts (reduction in gross trading surplus of local authorities): £ 0.1963 billion (announced in 1997)
- Other Taxes included in November 1996 Budget: £ 0.048 billion (announced in November 1996)

SPENDING: £ 0.9255 billion

Government Consumption (announced: £ 0.3925 billion)

 \bullet Calendar year allocation of measures in November 1996 Budget: £ 0.3925 billion (announced in November 1996)

Transfers (announced: -0.291 billion)

- Mortgage interest relief part of measures announced in July 1997: £0.675 billion
- Calendar year allocation of measures in November 1996 Budget: £ 0.068 billion (announced in November 1996)
- Total Transfers in November 1996 Budget, revenue related (Personal allowances, Capital Allowances Long Life Assets, Relief for Drilling Production of Oil Wells): £ -0.234 billion
- Welfare to Work Program¹⁸⁰: £ -0.8 billion (announced in 1997)

Not yet classified (announced: £ 0.305 billion)

 \bullet Calendar year allocation of measures in November 1996 Budget: £ 0.305 billion (announced in November 1996)

Other (announced: £ 0.519 billion)

- European communities £ -0.043 billion (calendar year allocation of 1997 measures)
- DOE Local Government: £ -0.063 billion (calendar year allocation of 1997 measures)
- Reserve: £ 0.625 billion (calendar year allocation of 1997 measures)

 $^{^{180}\}mathrm{It}$ includes a New Deal for young people and new schools.

UK 1999

Fiscal consolidation totaled 0.35 percent of GDP, based on tax increases of 0.19 and spending cuts of 0.16. The episode is the prosecution of the consolidation process started the previous year. For what concerns the data about fiscal components see entry for 1997.

REVENUES: £ 1.62 billion

Income, Profits and Capital Gains: (announced: £ 1.256 billion)

- Calendar year allocation of July 1997 measures: £ 0.101 billion (announced in 1997)
- Inland Revenues in the Spend to Save Program: £ 0.3168 billion (announced in 1997)
- Income and Capital Gains Taxes included in November 1996 Budget: £ 0.838 billion (announced in November 1996)

Personal: (announced: £ -0.028 billion)

- Calendar year allocation of July 1997 measures: £ 0.023 billion (announced in 1997)
- Personal Taxes included in November 1996 Budget: £ -0.051 billion (announced in November 1996)
 Corporate: (announced: £ 0.054 billion)
- Calendar year allocation of July 1997 measures: £ 0.078 billion (announced in 1997)
- Corporate Taxes included in November 1996 Budget: £ -0.024 billion (announced in November 1996)

Property Tax: (announced: £ -0.0019 billion)

• Gilt interest simplification: £ -0.0019 billion (announced in 1997)

Indirect Taxes: (announced: £ 0.1832 billion)

- Calendar year allocation of July 1997 measures: £ -0.129 billion (announced in 1997)
- Indirect Taxes in the Spend to Save Program: £ 0.1195 billion (announced in 1997)
- Indirect Taxes included in November 1996 Budget: £ 0.11 billion (announced in November 1996)

Other: (announced: £ 0.187 billion)

- Other measures from July 1997: £ -0.001 billion (announced in 1997)
- Revenues increase due to spending cuts (reduction in gross trading surplus of local authorities): £ 0.18875 billion (announced in 1997)
- Other measures included in November 1996 Budget: £ -0.001 billion (announced in November 1996)

Not Yet Classified (announced: £ 1.23 billion (according to P vs C))

- Inland Revenues in the Spend to Save Program: £ 0.3168 billion (according to P vs C) (announced in 1997)
- \bullet Measures included in November 1996 Budget: £ 0.913 billion (according to P vs C) (announced in November 1996)

SPENDING: £ 1.358 billion

Government Consumption (announced: £ 0.1 billion)

• Calendar year allocation of measures in November 1996 Budget: £ 0.1 billion (announced in November 1996)

Transfers (announced: £ 0.258 billion)

- Mortgage interest relief part of measures announced in July 1997: £0.225 billion
- \bullet Calendar year allocation of measures in November 1996 Budget: £ 0.025 billion (announced in November 1996)

- Total Transfers in November 1996 Budget, revenue related (Personal allowances, Capital Allowances Long Life Assets, Relief for Drilling Production of Oil Wells): £ 0.258 billion
- Welfare to Work Program¹⁸¹: £ -0.25 billion (announced in 1997)

Not yet classified (announced: £ 0.448 billion)

- £ 0.3 billion from calendar year allocation of measures in "Control Total" for the F.Y. 1999-2000 ¹⁸²
- Calendar year allocation of measures in November 1996 Budget: £ 0.148 billion (announced in November 1996)

Other (announced: 0.552)

- European communities £ -0.035 billion (calendar year allocation of 1997 measures)
- DOE Local Government: £ -0.025 billion (calendar year allocation of 1997 measures)
- Overseas Development: £ -0.013 billion (calendar year allocation of 1997 measures)
- Reserve: £ 0.625 billion (calendar year allocation of 1997 measures)

15 United States¹⁸³

United States 1978

Fiscal consolidation of 0.139 percent of GDP totally based on tax hikes. The consolidation consisted in an increase in Social Security contribution, following 1972 Social Security Amendment that raised the social security tax base on January 1973 and programmed two increases in the tax rate, one on January 1, 1973, one on January 1, 1978 (Romer and Romer 2009, p. 57). As in Romer and Romer we record the latter one as exogenous and announced consolidation. The hike in tax rate was expected to raise \$ 2.9 in calendar year 1978 (Romer and Romer, p. 57 using data from 1979 Budget). Since the amendment raised the tax rate for both employer and employee (1972 Treasury Annual Report p. 41) and social security contribution are divided in equal share among the two categories, we can classify the fiscal consolidation as:

REVENUES: \$ 2.9 billion

Taxes on Income, Profits and Capital Gains \$ 2.9 billion (announced: 2.9)

- $\bullet~\$~2.9$ increase in social security contribution (1972 Social Security Amendment)
 - Corporate Taxes \$ 1.45 billion (announced: 1.45)
- $\bullet~\$1.45$ increase in social security contribution (1972 Social Security Amendment)
 - Private Taxes \$ 1.45 billion (announced: 1.45)
- \$1.45 increase in social security contribution (1972 Social Security Amendment)

United States 1980

Fiscal consolidation of 0.07 percent of GDP totally based on tax hikes. The consolidation was a consequence of the 1977 Social Security Amendment that raised the tax rate in January 1979, 1981 and 1982 and increased the tax base in January 1979, 1980, 1981 (Romer and Romer, 2009, p.64). In calendar year terms, the impact of the increase in tax base was \$ 1.7 billion, as estimated by Romer and Romer using data from 1980 Budget. Since the base rose for employees and employers (Social Security Bulletin, March 1978, p.17) and the social security tax is paid half by the employers and half by the employees, we consider \$ 0.85 billion corporate. Thus:

REVENUES: \$ 1.7 billion

Taxes on Income, Profits and Capital Gains \$ 1.7 billion (announced: 1.7)

 $^{^{181}\}mathrm{It}$ includes a New Deal for young people and new schools.

 $^{^{182}(0.4*3/4)}$ The decomposition for this fiscal year is missing in table 5.7 (p. 107) of the 1997-98 Budget.

¹⁸³The U.S. fiscal year begins on October 1st of the previous calendar year and ends on September 30th of the year with with which it is numbered. The sources consulted for the United States are Congressional Budget Office (CBO) reports, Hipple (2010) "Self-employment in the United States", Romer and Romer (2009), various issues of Social Security Bulletin and Budget of the United States Government.

- \$ 1.7 from increase in social security tax base (1972 social security Amendment)

 Corporate Taxes \$ 0.85 billion (announced: 1.45)
- \$0.85 from increase in social security tax base(1972 Social Security Amendment)
 Private Taxes \$ 1.45 billion (announced: 1.45)
- \$0.85 from increase in social security tax base (1972 Social Security Amendment)

United States 1981

Fiscal consolidation of 0.34 percent of GDP totally based on tax hikes. On January 1981 the increase in social security tax rate and the extension of tax base for employers, employees and self-employed projected in the 1977 Amendment become effective, having a budgetary impact of \$ 17.2 billion (Romer and Romer, 2009, p. 64, using data of 1982 Budget). However, in August 1981 the Economic Recovery Tax Act (ERTA-81) was passed, projecting a series of private and corporate tax cuts over a three-year period. Regarding the 1981, calendar year, the cuts had a budgetary impact of negative \$ 8.9 billion (1983 Budget, p. 4-10). Thus over the year fiscal consolidation consisted in:

REVENUES: \$ 8.3 billion

Taxes on Income, Profits and Capital Gains \$ 8.4 billion (unexpected: -8.8; announced: 17.2)

- \$ 17.2 billion from social security tax rate and tax base increase (1977 Amendment)
- \$ -4 billion for the reduction of individual income tax (ERTA-81)
- \$ -4.8 billion for the reduction of corporation income tax (ERTA-81)

 Corporate Taxes \$ 4.55 billion (unexpected: -4.8; announced: 9.35)
- -\$ 4.8 billion for the reduction of corporation income tax (ERTA-81)
- $\bullet~\$~9.35^{184}$ billion from social security tax rate and tax base increase (1977 Amendment)

Private taxes \$ 3.85 billion (unexpected: 4; announced: 7.85)

- \$ -4 billion for the reduction of individual income tax (ERTA-81)
- \$ 7.85 billion from social security tax rate and tax base increase (1977 Amendment)

Taxes on Goods and Services \$ -0.1 billion (unexpected: -0.1)

• lower revenues of \$ 0.1 billion for the reduction of various excise taxes (ERTA-81)

United States 1985

Fiscal consolidation totaled 0.18 percent of GDP, totally based on tax hikes. As Romer and Romer (2009) argue, the tax increase in 1985 follows from the Social Security Act of 1983.

REVENUES: \$ 8.8 billion

Taxes on Income, profits and capital gains \$ 8.8 billion (announced: 8.8)

• OASDHI¹⁸⁵ tax rate increased by 0.4 percentage points, yielding \$ 8.8 additional revenues. (Budget 1986, p.4-16) (anticipated in 1983)

Corporate \$ 4.8 billion (announced 4.8)

• OASDHI tax rate increased by 0.4 percentage points, yields \$ 4.8 billion additional revenues (anticipated in 1983)

 $^{^{184}}$ Tax base increased for employers and employees , but tax rate increased for self-employed as well. To simplify we assumed that the tax rate for self-employed and employee is the same. In reality there is a small difference between the two (Social Security Bulletin, March 1978, pp. 17). In 1980 self-employed were 8.70 percent of total workers according to Hipple, "Self-employment in the United States", 2010. Corporate share is calculate as follow: 17.2*8.70% + (17.2*(1-8.70)%)/2.

¹⁸⁵It is a Federal tax withheld from the paychecks of all covered workers, which includes most workers with the exception of public employees and certain union employees. Self-employed persons are also required to pay the tax. OASDHI is funded by a payroll tax known as the Federal Insurance Contribution Act (FICA) tax.

Personal taxes \$ 4 billion (announced: 4)

• OASDHI tax rate increased by 0.4 percentage points, yields \$ 4 billion additional revenues¹⁸⁶ (anticipated in 1983).

Our version

We noticed that Romer and Romer (2009) and consequently Devries et al. (2011) consider the realized levy from the reform instead of the announced level of revenues. Therefore, we construct a new version of disaggregated shocks that is consistent with the procedure we follow. In 1983 changes in tax rates were announced with a long time horizon, that scheduled the changes over a 7 years period. Given our aim, we try to take the expected tax change whenever possible. However, not all the expected revenues yield by the reform are reported in year 1983, as would be ideal for our purposes. Thus, we take as announced in 1983 the first projected value we have for a year in which the Amendment has effect. Moreover, Romer and Romer (2009) use the revenues of the first fiscal year where the reform has been in office. Since we want to be consistent with Devries et al. (2011), we need to take the tax levy for the calendar year in which the reform is introduced.

The new version for the fiscal adjustment of 1985 follows.

Revenues

Income, profits and capital gains: \$ 6.4 billion

• Social Security Amendment of 1983 generates additional revenues of \$ 6.4 billion^a (anticipated in 1983) Personal: \$ 2.92 billion

• Social Security Amendment of 1983 generates additional revenues of \$ 2.92 billion^b (anticipated in 1983) Corporate: \$ 3.48 billion

• Social Security Amendment of 1983 generates additional revenues of \$ 3.48 billion (anticipated in 1983)

^aLooking at the Budget reports of the years going from 1983 to 1985, we noticed that the projections for the fiscal reforms display a change in the time schedule of the tax rate increases. In fact, until the 1984 Budget, the tables report a scheduled increase of the tax rate in 1985 from 13.4% to 14.1%. The 1985 Budget changes this pattern introducing a 0.6% increase (from 13.4 to 14.0) in 1984 and a further increase of 0.1% in 1985. We found apparently no information about the motivation of this change and we cannot tell wheter it was announced in 1983 or in the years between 83 and 85. The Social Security Bulletin 1983 does not schedule this change. We decided to treat it as an announced change allowing for the possibility it was scheduled in 1984. Since we have projections for the change between 13.4% to 14.0%, we divide by 7 the expected revenues and we report the to the calendar year. We used data from the 1984 Budget, which is the first that provides expected revenues for both fiscal 1985 and 1986. A further complication comes from the change in the tax credit rate. In fact, as Romer and Romer (2009) points out and is reported in the "Social Security Bulletin, July 1983", the tax credit is reduced by 0.3%. This implies that the total variation in the social security tax rate is 0.4%. The total change in revenues is therefore \$ 6.4 billion ([8.2*1/7+12.2*1/28]*4).

^bWe implemented the same procedure followed before

United States 1986

Fiscal consolidation totaled 0.092 percent of GDP based on tax hikes. The adjustment is characterized by a tax hike anticipated in the Social Security Amendment of 1983.

REVENUES: \$ 4.3 billion

Taxes on Income, profits and capital gains \$ 4.3 billion (announced: 4.3)

• Social Security Amendment of 1983 generates additional revenues of \$ 4.3 billion (anticipated in 1983)¹⁸⁷.

Corporate taxes \$ 2.33 billion (announced: 2.33)

• Social Security Amendment of 1983 generates additional revenues of \$ 2.33 billion (anticipated in 1983).

Personal \$ 1.97 billion (announced: 1.97)

• Social Security Amendment of 1983 generates additional revenues of \$ 1.97 billion (anticipated in 1983)¹⁸⁸

 $^{^{186}}$ The tax is equally divided between employers (on payrolls) and employees (on earned incomes). Self-employed workers pay the full tax. According to this repartition of the payments, we can reconstruct the corporate and personal components of the whole tax. Hipple (2010) using data from the CPS estimates the percentage of self-employed over the total labour force in 1985 (it is 8.7%). Using this percentage, we compute the share of the tax payed by self-employed, which is \$ 0.77 billion (8.8×0.087). Therefore, the personal tax amounts to \$ 4 billion (8/2) and the corporate one to \$ 4.8 billion.

¹⁸⁷I applied the same procedure as above.

 $^{^{188}\}mathrm{We}$ implemented the same procedure followed before.

Our Version

The same argument we applied to 1985 holds for this year. The exogenous components change as follows: Revenues

Income, profits and capital gains: \$ 3.7 billion

- Social Security Amendment of 1983 generates additional revenues of \$ 3.7 billion (anticipated in 1983)^a
 Personal: \$ 1.7 billion
- Social Security Amendment of 1983 generates additional revenues of \$ 1.7 billion (anticipated in 1983)^b. Corporate: \$ 2 billion
- Social Security Amendment of 1983 generates additional revenues of \$ 2 billion (anticipated in 1983)

United States 1988

Fiscal consolidation amounted to 0.69 percent of GDP, with a tax hike of 0.42 percent of GDP and a spending cut of 0.27 percent of GDP. An increase in revenues of \$ 15.5 billion was announced in 1983 in the Social Security Amendment. In addition, the Omnibus Budget Reconciliation Act of 1987 (signed in December 1987) prescribed a tax hike with an estimated budgetary impact of \$10.8 billion. Finally, for what concerns revenues, these increases were partially offset by the Tax Reform Act of 1986 signed in October 1986 which lowered taxes for \$ 7.2 billion. On the spending side a two-year plan of spending cuts was announced in 1988. However to be consistent with Devries et al. we only include the effects of this plan pertaining to 1988.

REVENUES: \$ 19.9 billion

Income, profits and capital gains \$ 16.6 billion (unexpected: 8.3 announced: 8.3)

- \$ 0.1 billion increase of individual income tax (OBRA 87)¹⁸⁹
- Corporate Income Tax: \$7.5 billion (OBRA 87)
- Employment Tax: \$ 0.7 billion (OBRA 87)
- Social Security Amendment of 1983 increased revenues by \$ 15.5 billion
- \$ -7.2 billion from a reduction individual income tax (announced in 1987¹⁹⁰)

Personal \$ 0 (unexpected: 0.1; announced: -0.1)

- Social Security Amendment of 1983 increased revenues from personal income by \$ 7.1 billion
- \bullet \$ 0.1 billion increase of individual income tax (OBRA 87)
- \$ -7.2 billion from a reduction individual income tax (announced in 1987)

Corporate \$ 16.6 billion (unexpected: 8.2; announced: 8.4)

- Social Security Amendment of 1983 increased revenues from corporations by \$ 8.4 billion
- Corporate Income Tax: \$7.5 billion (OBRA 87)
- Employment Tax: \$ 0.7 billion (OBRA 87)

Goods and services \$ 0.8 billion (unexpected: 0.8)

• \$ 0.8 billion from increase in other user fees (Offsetting receipts)

Not yet classified \$ 2.5 billion (unexpected: 2.5)

^aIn this case there are no doubt on the announcement since the tax rate increase is clearly scheduled in the Social Security Bulletin, 1983. The procedure we followed is the same as the one explained in the previous footnote. We used data from the 1985 Budget.

^bWe implemented the same procedure followed before.

 $^{^{189}\}mathrm{As}$ the Act was signed in December 1987, it is considered unexpected for 1988 in our time-framework.

 $^{^{190}}$ As the reform was signed in October 1986 it is considered announced in 1987 in our time-framework.

• Other: \$ 2.5 billion 191

According to the Budget Outlook 89-93 (p. 59), on the spending side the following measures were introduced:

SPENDING: 13.3 billion¹⁹²

Government Consumption and Salaries \$ 5.1 billion (unexpected: 5.1)

• \$ 5.1 billion cuts to national defense

Transfers \$ 5.7 billion (unexpected: 5.7)

- \$ 2.1 billion savings in Medicare
- \$ 1.2 billion cuts to farm price supports
- \$ 0.8 billion cuts to funds for postal service and civil service
- \$ 0.4 billion from reductions in Pension Benefit Guaranty Corporation premiums
- \$ 0.8 billion from cuts in Veterans Administration loan sales and fees
- \$ 0.2 billion from cuts in Guaranteed Student Loan balances
- \$ 0.2 billion from reductions in other entitlements

Other \$ 2.5 billion (unexpected: 2.5)

• \$ 2.5 billion from cuts in nondefense discretionary spending

Our Version

The same argument we applied to 1985 holds for this year. We only changed the exogenous shocks induced by the Social Security Amendment of 1983 and we report them below:

Revenues: \$ 19.1 billion

Income, profits and capital gains: \$ 15.8 billion (unexpected: 8.3; announced: 7.5)

- [...]
- Social Security Amendment of 1983 increased revenues by \$ 14.7 billion

Personal: \$ -0.4 billion (unexpected: 0.1; announced: -0.5)

- [...]
- Social Security Amendment of 1983 increased revenues from personal income by \$ 6.7 billion

Corporate: \$ 16.2 billion (unexpected: 8.2; announced: 8)

- [...]
- Social Security Amendment of 1983 increased revenues from corporates by \$ 8 billion

United States 1990

Fiscal consolidation amounted to 0.30 percent of GDP, 0.07 percent of GDP spending cuts and 0.23 percent of GDP tax hikes. In 1990, a tax hike occurred that was motivated by "reducing the budgetary deficit and putting the social security system on a sustainable path" (Devries et al. 2011). The budgetary income of this Social Security tax was of \$10.3 billion in the first quarter of 1990 (Romer and Romer, 2009, p.73). The tax consisted in an increase of the combined employer-employee old age and survivors, disability and hospital insurance (OASDHI) tax rate from 15.02% to 15.3%. Even though this policy was anticipated from 1983, we code this shock as unanticipated because the time horizon used is of three years.

¹⁹¹Including restrictions on an estate tax deduction for proceeds of a sale to an employee stock ownership plan and certain IRS and BATF user fees (100th Congress, 1st Session House of Representatives Report No. 100-391, 10/26/87, p. 801).

¹⁹²Notice that from the total \$ 23.5 billion spending cuts reported in Devries et al. in we excluded 9 bn as they were due to asset sales and debt service. Moreover we classified the hike in User Fees as a revenue increase, since the economic effects of this measure are closer to tax than spending.

In addition to this policy, the *Omnibus Budget Reconciliation Act of 1990* had repercussions on the late months of this year. The Omnibus Budget Reconciliation Act 1990 was a five-year fiscal consolidation program enacted on November 5, 1990. Its cumulative impact included \$158 billion in tax increases and \$277 billion in spending reductions (excluding debt service spending) (The 1990 Budget Agreement: An interim Assessment, p.6). The implied changes in tax are classified as follows, according to CBO (1998), Projecting Federal Tax Revenues and the Effect of Changes in tax Law, p.31 for OBRA-90 measures and to CBO, 1991 Budget p. A-49 for the Social Security tax increase¹⁹³

REVENUES: \$ 15.3 billion

Taxes on Income, profits and capital gains \$12.3 billion (unexpected: 12.3)

- \$10.3 billion from Social Security tax rate increase (CBO, 1991 Budget p. A-49)
- \$1 billion from corporate income taxes (OBRA-90)
- \$ 1 billion social insurance taxes (OBRA-90)

Corporate taxes \$6.3 billion (unexpected: 6.3)

- \$ 5.3 billion from Social Security tax rate increase 194
- \$1 billion from corporate income taxes (OBRA-90)

Personal taxes \$6 billion (unexpected: 6)

- \$5 billion from Social Security tax rate increase Ideally: \$3.8 billion, see entry for corporate taxes.
- \$ 1 billion fro social insurance taxes (OBRA-90)

Tax on goods and service \$ 3 billion (unexpected: 3)

• \$ 3 billion from excise Taxes (OBRA-90)

¹⁹³Notice that Romer and Romer (2009) rely on a table included in the Budget 1992 (Part three, p.7) to estimate the effects of this policy. Devries et al. (2011) instead take the CBO report: The 1990 Budget Agreement: An interim Assessment, p.6, which slightly differs from the Romer and Romer (2009) estimate. We take the disaggregated projections of this policy from the CBO 1998 document, Projecting Federal Tax Revenues and the Effects of Changes in Tax Law, p.31 because the aggregate perfectly coincides with the Devries et al. (2011) data and because it allows to disentangle the revenue components with sufficient level of detail.

¹⁹⁴2.9%*10.3+(10.3-2.9%*10.3)/2=\$ 5.3 billion, given that the tax is half paid by the employer and that the percentage of the self-employed population in 1990 was of 2.9%, US Self-employment p.20 and CBO, 1991 Budget p. A-49.

Our Version

We noticed that Romer and Romer (2009) and consequently Devries et al. (2011) consider the realized levy from the reform instead of the announced level of revenues. Therefore, we construct a new version of disaggregated shocks that is consistent with the procedure we follow. In 1983 changes in tax rates were announced with a long time horizon, that scheduled the changes over a 7 years period. Given our aim, we try to take the expected tax change whenever possible. However, not all the expected revenues yield by the reform are reported in year 1983, as would be ideal for our purposes. Thus, we take as announced in 1983 the first projected value we have for a year in which the Amendment has effect. Moreover, Romer and Romer (2009) use the revenues of the first fiscal year where the reform has been in office. Since we want to be consistent with Devries et al. (2011), we need to take the tax levy for the calendar year in which the reform is introduced.

The new version for the fiscal adjustment of 1990 follows.

REVENUES: \$ 12.8 billion

Taxes on Income, profits and capital gains \$9.8 billion (unexpected: 9.8)

- \$7.8 billion from Social Security tax rate increase (The budget for fiscal year 1989, p.4-20)^a
- [...]

Corporate taxes \$5 billion (unexpected: 5)

- \$ 4 billion from Social Security tax rate increase^b
- [...]

Personal taxes \$4.8 billion (unexpected: 4.8)

- \$3.8 billion from Social Security tax rate increase
- [...]

The implied spending cuts, all projected in OBRA-90, are instead classified as follows, according to CBO (1990), The Budget Agreement: An Interim Assessment (Table 2, p.6)¹⁹⁵

SPENDING: \$ 4.2 billion

Government Consumption and Salaries \$ 3.2 billion (unexpected: 3.2)

- \$0.5 billions from cuts to federal employees retirement benefits
- \$2.8 billion defense outlays

Transfers \$2.1 billion (unexpected: 2.1)

- Medicare, lower reimbursement payments to doctors and hospitals for \$1.1 billion
- Medicare, higher premiums and deductibles for program beneficiaries for \$ 0.3 billion
- \$ 0.4 billion from lower farm price support payments
- \$0.3 billions from administrative actions to increase deposit insurance premiums for banks

Other \$ -1.2 billion (unexpected: -1.2)

- 0.1 billion other spending cuts
- \$-1.3 billion from higher nondefense discretionary spending

 $a_{5.5+0.25*9.2=\$7.8}$ billion

 $^{^{}b}2.9\%*7.8+(7.8-2.9\%*7.8)/2=$ \$ 4 billion given that the tax is half paid by the employer and that the percentage of the self-employed population in 1990 was of 2.9%, US Self-employment p.20 and The budget for fiscal year 1989, p.4-20.

¹⁹⁵Notice that in 1990 Budget Agreement: An interim Assessment, p.6, we do not have a sufficient level of detail to disentangle the spending effects by component in every single year. What we do have is the decomposition of spending in every single year divided in 'entitlements and other mandatory spending', 'enacted appropriations' and 'discretionary spending'. However, we have a good level of detail for the *cumulative* spending cuts. For this reason we assumed that the cumulative five-year changes of spending were spread across the five years proportionally to their closest aggregate flow of spending.

United States 1991

Fiscal consolidation totaled 0.61 percent of GDP, 0.31 percent of GDP spending cuts, 0.30 percent tax hikes. Fiscal consolidation in this year was implemented as part of the Omnibus Reconciliation Act 1990 (see entry for 1990). According to CBO (1998), Projecting Federal Tax Revenues and the Effect of Changes in tax Law, p.31, tax hikes are decomposed as follow:

REVENUES: \$ 17 billion

Taxes on Income, profits and capital gains \$ 6 billion (announced: 6)

- \$1 billion from increase in corporate income taxes
- \$ 4 billion from increase in social insurance taxes
- \$ 1 billion from increase in individual income taxes

Corporate taxes \$1 billion (announced: 2)

• \$1 billion from increase in corporate income taxes

Personal taxes \$ 5 billion (announced: 5)

- \$ 4 billion from increase in social insurance taxes
- \$ 1 billion from increase in individual income taxes

Tax on goods and services \$ 11 billion (announced: 11)

• \$ 11 billion from higher excise taxes

According to CBO (1990), The Budget Agreement: An Interim Assessment (Table 2, p.6), the implied spending cuts are classified as follows:

SPENDING: \$ 17.2 billion

Government Consumption and Salaries \$ 10.1 billion (announced: 10.1)

- \$1.6 billions from federal employees retirement benefits
- \$8.5 billion cuts to Defense outlays

Transfers \$7.4 billion (announced: 7.4)

- Medicare, lower reimbursement payments to doctors and hospitals for \$3.8 billion
- \bullet Medicare, higher premiums and deductibles for program beneficiaries for \$ 1.2 billion
- \$ 1.4 billion from lower farm price support payments
- \$1 billions from administrative actions to increase deposit insurance premiums for banks

Other \$ -0.3 billion (announced: -0.3)

- \$ 0.2 billion other spending cuts
- \$ -4 billion for higher nondefense discretionary spending
- \$ 3.5 billion cuts to discretionary spending, mostly defense

United States 1992

Fiscal consolidation of 0.49 percent of GDP, 0.31 percent of GDP spending cuts, 0.18 percent of GDP tax hikes. Fiscal consolidation in this year was implemented as part of the Omnibus Reconciliation Act 1990 (see entry for 1990). According to CBO (1998), Projecting Federal Tax Revenues and the Effect of Changes in tax Law, p.31, tax hikes are decomposed as:

REVENUES: \$ 11 billion

Taxes on Income, profits and capital gains \$7 billion (announced: 7)

• \$ -1 billion from corporate income taxes

- \$ 5 billion from social insurance taxes
- \$ 3 billion from individual income taxes

Corporate taxes \$ -1 billion (announced: -1)

• \$ -1 billion from corporate income taxes

Personal taxes \$8 billion (announced: 8)

- \$ 5 billion from social insurance taxes
- \$ 3 billion from individual income taxes

Tax on goods and services \$ 4 billion (announced: 4)

• \$ 4 billion from higher excise taxes

According to CBO (1990), The Budget Agreement: An Interim Assessment (Table 2, p.6), the implied spending cuts are instead classified as follows:

SPENDING: \$ 18.4 billion

Salaries \$ 2.5 billion (announced: 2.5)

- \$ 0.6 billions from cuts to federal employees retirement benefits
- \$ 1.9 billion from cuts to Defense outlays

Transfers \$3.9 billion (announced: 3.9)

- Medicare, lower reimbursement payments to doctors and hospitals for \$ 1.7 billion
- Medicare higher premiums and deductibles for program beneficiaries for \$ 1.3 billion
- \$ 0.5 billion from lower farm price support payments
- \$ 0.4 billions from administrative actions to increase deposit insurance premiums for banks

Other \$12 billion (announced: 12)

- \$ 0.1 billion
- \$ -0.9 billion from higher nondefense discretionary spending
- \$12.8 billion cuts to discretionary spending, mostly defense

United States 1993

Fiscal consolidation of 0.41 percent of GDP, 0.3 percent of GDP spending cuts, 0.11 percent of GDP tax hikes. The measures of fiscal consolidation were enacted through the Omnibus Budget Reconciliation Act of 1993 (OBRA-93), approved in August. The act consisted in a plan of spending cuts and tax hikes to be implemented over a four fiscal year period (1994-1998), and had a budgetary impact of \$1 billion on the spending side and \$7 billion on the tax side in the calendar year 1993. This measures were combined with the ones already planned for the year in OBRA-90, calling for \$ 18 billion spending cuts. All the measure contained in OBRA-90 were announced, the ones in OBRA-93 were unexpected. For what concerns the 1993, on the revenues side, according to CBO (1994)—An Economic Analysis of the Revenue Provisions of OBRA-93 (pp. 2-3) for OBRA-93 and to CBO, Projecting Federal Tax Revenues and the Effect of Changes in tax Law (p.31), for OBRA-90, measures included:

REVENUES: \$ 6.275 billion

Taxes on Income, Profit and Capital Gains \$ 4.175 billion (unexpected: 6.175; announced: -2)

- \$ 3.85 billion from the increase in tax rates for high-income individuals, including the imposition of new tax brackets, "the increase in the tax rates and exemption amounts under the individual alternative minimum tax; and the extension of the itemized deduction limitation and personal exemption phaseout" (OBRA-93)
- \$ 0.7 billion from the repeal of Heath Insurance wage base cap (OBRA-93)
- \$ 1.1 billion from increase in corporate tax rate for taxable income above \$ 10 million (OBRA-93)

- \$ 0.525 billion from extension and modification of corporate tax rules (OBRA-93)
- \$ -1 billion from lower revenues from individual income tax (OBRA-90)
- \$ -1 billion from lower revenues from social insurance tax (OBRA-90)

Corporate Taxes \$ 1.625 billion (unexpected: 1.625)

- \$ 1.1 billion from increase in corporate tax rate for taxable income above \$ 10 million (OBRA-93)
- \$ 0.525 billion from extension and modification of corporate tax rules (OBRA-93)

Personal taxes \$ 2.55 billion (unexpected: 4.55; announced: -2)

- \$ 3.85 billion from the increase in tax rates for high-income individuals (OBRA-93)
- \$ 0.7 billion from the repeal of Heath Insurance wage base cap (OBRA-93)
- \$ -1 billion from lower revenues from individual income tax (OBRA-90)
- \$ -1 billion from lower revenues from social insurance tax (OBRA-90)

Taxes on Goods and Services \$ 2.95 billion (unexpected: 1.2; announced: 1.75)

- increase in motor fuel tax for \$ 1.2 billion (OBRA-93)
- higher excise taxes for \$ 1.75 billion (OBRA-90)

Other revenues - \$ -0.25 billion (unexpected: -0.25)

- \$ 0.425 billion not specified higher revenues (OBRA-93)
- \$ -0.45 billion from higher incentives and \$ -0.225 billion for not specified lower revenues (OBRA-93)

According to CBO (1993) – Economic and Budget Outlook, September 1993 (p. 29) for OBRA-93¹⁹⁶ and to CBO(1990), The Budget Agreement: An Interim Assessment (Table 2, p.6) for OBRA-90, on the spending side the consolidation consisted in:

SPENDING: \$ 18.76 billion¹⁹⁷

Salaries \$ 7.05 billion (unexpected: 0.15; announced: 6.9)

- lower federal employee retirement and health benefits for \$ 0.1 billion (OBRA-93)
- lower veterans' benefits for \$ 0.05 billion (OBRA-93)
- lower federal employees retirement benefits for \$ 0.26 billion (OBRA-90)
- \$ 6.64 billion savings on Defense outlays (OBRA-90)

Transfers \$ 1.31 billion (unexpected: 0.1; announced: 1.21)

- \$ 0.525 billion (OBRA-93) from reduction in expenditure for Medicare
- \$ 0.15 billion from the reduction of Federal Family Education Loans (OBRA-93)
- \$ 0.475 billion from the increase in taxable portion of Social Security benefits (OBRA-93)
- \$ 0.45 billion from reduction in deductible portion of business meals and entertainment expenses (OBRA-93)
- \$ 0.025 billion from the reduction of farm programs (OBRA-93)
- \$ 0.81 billion lower expenditure for Medicare including lower reimbursement payments to doctors and hospitals for higher premiums and deductibles (OBRA-90)
- \$ 0.23 billion from lower farm price support payments (OBRA-90)

¹⁹⁶In the document amounts are reported for fiscal years (October-September). We calculated the data for calendar year taking into account of fiscal year 1994 only the three 1993 months.

 $^{^{197}}$ We excluded revenues coming from FCC electromagnetic spectrum auction as they can be considered as assets sale.

• \$ 0.17 billion from lower deposit insurance premiums for banks (OBRA-90)

OBRA-93 comprised as well a series of increases in tax credit for a total \$ -1.525 lower revenues to stimulate investments and consumption, including:

- \bullet \$ -0.05 billion for increased outlays from Earned Income Tax Credit¹⁹⁸
- \$ -0.1 billion for the permanent extension of tax credit for builders of low-income housing
- \$ -0.55 billion for the extension of research and experimentation credit through 30/6/95
- \$ -0.575 billion for the increase in expensing amount (section 179) for small business
- \$ -0.075 billion for the elimination of ACE depreciation adjustment
- \$ -0.075 billion for passive loss relief for real estate professionals
- \$ -0.075 billion for tax incentives for empowerment zones and enterprise communities
- \$ -0.025 billion for the extension of mortgage revenue bonds and mortgage credit certificates

Other \$ 10.4 billion (unexpected: 0.5; announced: 9.9)

- \$ 0.075 billion (OBRA-93) and \$ 0.04 billion (OBRA-90) from other cuts
- \$ -3.14 billion (OBRA-90) for higher nondefense discretionary spending
- \$ 13 cuts to discretionary spending (mostly defense) (OBRA-90)

United States 1994

Fiscal consolidation of 0.88 percent of GDP, 0.48 percent of GDP spending cuts, 0.44 percent of GDP tax hikes. The consolidation was an effect of measures contained in OBRA-90 (\$ 4 billion revenues and \$ 27 billion spending) and OBRA-93 (\$ 24 billion revenues and \$ 5 billion spending). On the revenues side, according to CBO (1994)—An Economic Analysis of the Revenue Provisions of OBRA-93 (pp. 2-3) for OBRA-93 and to CBO, Projecting Federal Tax Revenues and the Effect of Changes in tax Law, p.31, for OBRA-90, the impact of the measures was:

REVENUES: \$ 28.75 billion

Taxes on Income, Profit and Capital Gains \$ 23.9 billion (announced: 23.9)

- \$ 13.4 billion from the increase in tax rates for high-income individuals (OBRA-93)
- \$ 1.75 billion for higher revenues from individual income tax (OBRA-90)
- \$ 1.75 billion from higher revenues from social insurance tax (OBRA-90)
- \$ 2.9 billion from the repeal of Heath Insurance wage base cap (OBRA-93)
- \$ 2.9 billion from increase in corporate tax rate for taxable income above \$ 10 million (OBRA-93)
- \$ 1.2 billion from extension and modification of corporate tax rules (OBRA-93)

Corporate Taxes \$ 4.1 billion

- \$ 2.9 billion from increase in corporate tax rate for taxable income above \$ 10 million (OBRA-93)
- \$ 1.2 billion from extension and modification of corporate tax rules (OBRA-93)

Personal taxes \$ 19.8 billion

- \$ 13.4 billion from the increase in tax rates for high-income individuals (OBRA-93)
- \$ 1.75 billion for higher revenues from individual income tax (OBRA-90)

¹⁹⁸In Devries et al. the increased outlays for is recorded twice, on the spending side and on the tax side. We decided to include it just one as lower tax credit.

- \$ 1.75 billion from higher revenues from social insurance tax (OBRA-90)
- \$ 2.9 billion from the repeal of Heath Insurance wage base cap (OBRA-93)

Taxes on Goods and Services \$ 4.35 billion (announced: 4.35)

- increase motor fuels tax by 4.3 cents per gallon for \$ 3.6 billion (OBRA-93)
- higher excise taxes for \$ 0.75 billion (OBRA-90)

Other revenues \$ 0.5 billion (announced: 0.5)

- \$ 2.1 billion not specified higher revenues (OBRA-93)
- higher incentives for \$ -1.1 billion (OBRA-93)
- other lower revenues for \$ -0.5 billion (OBRA-93)

According to CBO (1993)—Economic and Budget Outlook, September 1993 (p. 29) for OBRA-93 and to CBO(1990), The Budget Agreement: An Interim Assessment (Table 2, p.6) for OBRA-90, on the spending side, the impact of the measures was:

SPENDING: \$ 30 billion

Salaries \$ 4.56 billion (announced: 4.56)

- lower federal employee retirement and health benefits for \$ 0.4 billion (OBRA-93)
- lower veterans' benefits for \$ 0.2 billion (OBRA-93)
- lower federal employees retirement benefits for \$ 0.44 billion (OBRA-90)
- \$ 3.52 billion savings on Defense outlays (OBRA-90)

Transfers \$ 4 billion (announced: 4)

- reduction in expenditure for Medicare for \$ 2.4 billion (OBRA-93)
- reduction in expenditure for Medicaid for \$ 0.3 billion (OBRA-93)
- \$ 0.4 billion from the reduction of Federal Family Education Loans (OBRA-93)
- \$ 0.2 billion from the reduction of farm programs (OBRA-93)
- \$ -0.1 from higher outlays on Food Stamps (OBRA-93)
- \$ 1.7 billion from reduction in deductible portion of business meals and entertainment expenses (OBRA-93)
- \$ 2.1 billion from the increase in taxable portion of Social Security benefits (OBRA-93)
- \$ 0.38 billion from lower farm price support payments (OBRA-90)
- \$ 0.28 billion from lower deposit insurance premiums for banks (OBRA-90)
- \$ 1.34 billion lower expenditure for Medicare including lower reimbursement payments to doctors and hospitals for higher premiums and deductibles (OBRA-90)

OBRA-93 comprised as well a series of increases in tax credit for a total \$ -5 lower revenues to stimulate investments and consumption, including:

- \$- 0.1 billion for the extension and simplification of the Earned Income Tax Credit
- $\bullet~\$$ -0.6 billion for increased outlays from Earned Income Tax Credit
- \$ -0.4 billion for the permanent extension of tax credit for builders of low-income housing
- \$ -1.4 billion for the extension of research and experimentation credit through 30/6/95
- \$ -1.4 billion for the increase in expensing amount (section 179) for small business

- \$ -0.4 billion for the elimination of ACE depreciation adjustment
- \$ -0.3 billion for passive loss relief for real estate professionals
- \$ -0.3 billion for tax incentives for empowerment zones and enterprise communities
- \$ -0.1 billion for the extension of mortgage revenue bonds and mortgage credit certificates

Other savings of \$ 21.44 billion (announced: 21.44)

- \$ 0.2 billion (OBRA-93) and \$ 0.06 billion (OBRA-90) from other cuts
- higher nondefense discretionary spending for \$ 1.57 billion (OBRA-90)
- \$ 22.75 cuts to discretionary spending (mostly defense) (OBRA-90)

United States 1995

Fiscal consolidation of 0.52 percent of GDP, 0.32 percent of GDP spending cuts, 0.2 percent of GDP tax hikes. The consolidation consisted in measures contained in OBRA-90 and OBRA-93. On the revenues side, according to CBO (1994)—An Economic Analysis of the Revenue Provisions of OBRA-93 (pp. 2-3) for OBRA-93 and to CBO, Projecting Federal Tax Revenues and the Effect of Changes in tax Law, p.31, for OBRA-90, the implemented measures were:

REVENUES: \$ 13.7 billion

Taxes on Income, Profit and Capital Gains \$ 8.7 billion (announced: 8.7)

- \$ 6.3 billion from the increase in tax rates for high-income individuals (OBRA-93)
- \$ 2.5 billion from the repeal of Heath Insurance wage base cap (OBRA-93)
- \$ -1.2 billion for lower revenues from the increase in corporate tax rate for taxable income above \$ 10 million (OBRA-93)
- \$ 1 billion from reduction in deductible portion of business meals and entertainment expenses (OBRA-93)
- \$ -1.4 billion for lower revenues from the extension and modification of corporate tax rules (OBRA-93)
- \$ 0.75 billion for higher revenues from individual income tax (OBRA-90)
- \$ 0.75 billion from higher revenues from social insurance tax (OBRA-90)

Corporate Taxes \$ -2.6 billion

- \$ -1.2 billion for lower revenues from the increase in corporate tax rate for taxable income above \$ 10 million (OBRA-93)
- \$ -1.4 billion for lower revenues from the extension and modification of corporate tax rules (OBRA-93)

Personal taxes \$ 10.3 billion

- \$ 6.3 billion from the increase in tax rates for high-income individuals (OBRA-93)
- \$ 2.5 billion from the repeal of Heath Insurance wage base cap (OBRA-93)
- \$ 0.75 billion for higher revenues from individual income tax (OBRA-90)
- \$ 0.75 billion from higher revenues from social insurance tax (OBRA-90)

Taxes on Goods and Services \$ 0.8 billion (announced: 0.8)

- increase in motor fuel tax by 4.3 cents per gallon for \$ 0.1 billion (OBRA-93)
- \$ 0.7 billion from the extension of current 2.5 cents per gallon motor fuels tax (OBRA-93)

Other revenues \$ 4.2 billion (announced: 4.2)

• \$ 2.6 billion not specified higher revenues (OBRA-93)

- lower incentives for \$ 1 billion (OBRA-93)
- other higher revenues for \$ 0.6 billion (OBRA-93)

According to CBO (1993)—Economic and Budget Outlook, September 1993 (p. 29) for OBRA-93 and to CBO(1990), The Budget Agreement: An Interim Assessment (Table 2, p.6) for OBRA-90, the measures enacted during the calendar year were:

SPENDING: \$ 22.59 billion

Salaries \$ 2.55 billion (announced: 2.55)

- lower federal employee retirement and health benefits for \$ 0.8 billion (OBRA-93)
- lower veterans' benefits for \$ 0.2 billion (OBRA-93)
- lower federal employees retirement benefits for \$ 0.13 billion (OBRA-90)
- \$ 1.42 billion savings on Defense outlays (OBRA-90)

Transfers \$ 6.49 billion (announced 6.49)

- reduction in expenditure for Medicare for \$ 4.1 billion (OBRA-93)
- reduction in expenditure for Medicaid for \$ 0.9 billion (OBRA-93)
- \$ 0.4 billion lower expenditure for Medicare including lower reimbursement payments to doctors and hospitals for higher premiums and deductibles (OBRA-90)
- \$ -0.1 billion from Federal Family Education Loans higher than the previous year (OBRA-93)
- \$ 0.4 billion from the reduction of farm programs (OBRA-93)
- \$ -0.2 from higher outlays on Food Stamps (OBRA-93)
- \$ 2.2 billion from the increase in taxable portion of Social Security benefits (OBRA-93)
- \$ 0.11 billion from lower farm price support payments (OBRA-90)
- \$ 0.08 billion from lower deposit insurance premiums for banks (OBRA-90)
- \$ 0.9 billion for lower research and experimentation credit (OBRA-93)
- \$ 1.1 billion for lower expensing amount (section 179) for small business (OBRA-93)

OBRA-93 comprised as well a series of increases in tax credit for a total \$-3.4 lower revenues to stimulate investments and consumption, including:

- \$ 0.2 billion for the extension and simplification of the Earned Income Tax Credit
- \$ 2 billion for increased outlays from Earned Income Tax Credit
- \$ 0.2 billion for the permanent extension of tax credit for builders of low-income housing
- \$ 0.6 billion for the elimination of ACE depreciation adjustment
- \$ 0.2 billion for passive loss relief for real estate professionals
- \$ 0.2 billion for tax incentives for empowerment zones and enterprise communities

Other savings of \$ 13.55 billion (announced: 13.55)

- \$0.3 billion (OBRA-93) and \$ 0.02 billion (OBRA-90) from other cuts
- higher nondefense discretionary spending for \$ 0.67 billion (OBRA-90)
- \$ 1.9 billion cuts to discretionary spending (OBRA-93)
- \$ 12 billion cuts to discretionary spending (mostly defense) (OBRA-90)

United States 1996

Fiscal consolidation of 0.31 percent of GDP, spending cuts 0.21 percent of GDP, tax hikes 0.1 percent of GDP. The consolidation was a consequence of the measures contained in OBRA-93. According to CBO (1994)—An Economic Analysis of the Revenue Provisions of OBRA-93 (pp. 2-3), on the revenues side, the consolidation consisted in:

REVENUES: \$ 7.5 billion

Taxes on Income, Profit and Capital Gains \$3.2 billion (announced: 3.2)

- \$ 1.9 billion from the increase in tax rates for high-income individuals
- \$ 0.4 billion from the repeal of Heath Insurance wage base cap
- \$ 0.1 billion from increase in corporate tax rate for taxable income above \$ 10 million
- \$ 0.8 billion from extension and modification of corporate tax rules

Corporate taxes \$ 0.9 billion

- \$ 0.1 billion from increase in corporate tax rate for taxable income above \$ 10 million
- \$ 0.8 billion from extension and modification of corporate tax rules

Personal taxes \$ 2.3 billion

- \$ 1.9 billion from the increase in tax rates for high-income individuals
- \$ 0.4 billion from the repeal of Heath Insurance wage base cap

Taxes on Goods and Services \$ 1.9 billion (announced: 1.9)

- \$ -0.1 billion from the decrease of motor fuels tax by 4.3 cents per gallon
- \$ 2 billion from extension of 2.5 cents per gallon motor fuels tax

Other \$ 2.4 billion (announced: 2.4)

- \$ 1.6 billion not specified higher revenues
- \$ 0.5 billion incentives lower than the previous year
- \$ 0.3 billion from higher revenues provisions

According to CBO (1993)—Economic and Budget Outlook, September 1993 (p. 29), on the spending side included:

SPENDING: \$ 15.7 billion

Salaries \$ 1.8 billion (announced: 1.8)

 \bullet lower federal employee retirement and health benefits for \$ 1.8 billion

Transfers \$ 2.9 billion (announced: 2.9)

- reduction in expenditure for Medicare for \$ 5.8 billion
- reduction in expenditure for Medicaid for \$ 0.6 billion
- \$ 0.4 billion from the reduction of Federal Family Education Loans
- \$ -2.2 billion from higher expenditure for Refundable earned income tax credit
- \$ -0.3 billion for increased spending on Food Stamps
- \$ -0.1 billion for increased spending of farm programs
- \$ 0.4 billion for the research and experimentation credit lower than the previous year
- \$ 0.3 billion for expensing amount (section 179) for small business lower than the previous year
- \$ 0.7 billion from the decrease in taxable portion of Social Security benefits

• \$ 0.2 billion from reduction in deductible portion of business meals and entertainment expenses

OBRA-93 comprised as well a series of increases in tax credit for a total \$ -2.9 lower revenues to stimulate investments and consumption, including:

- \$ 0.2 billion for the extension and simplification of the Earned Income Tax Credit
- \$ 0.3 billion for the permanent extension of tax credit for builders of low-income housing
- \$ 0.1 billion for the elimination of ACE depreciation adjustment
- \$ 0.1 billion for the extension of mortgage revenue bonds and mortgage credit certificates
- \$ 2.2 billion for increased outlays from Earned Income Tax Credit

Other lower expenditures of \$ 11 billion (announced: 11)

- other spending cuts for \$ 1.4 billion
- discretionary budget of \$ 9.6 billion 199

United States 1997

Fiscal consolidation of 0.34 percent of GDP, 0.27 percent of GDP spending cuts, 0.07 percent of GDP tax hikes. Measures of consolidation for the year were contained in OBRA-93. According to CBO (1994)—An Economic Analysis of the Revenue Provisions of OBRA-93 (pp. 2-3), on the revenues side, in the calendar year the consolidation totaled:

REVENUES: \$ 5.4 billion

Taxes on Income, Profit and Capital Gains \$2.5 billion (announced: 2.5)

- \$ -0.4 billion from revenues lower than the previous year for the increase in tax rates for high-income individuals
- \$ 0.4 billion from the repeal of Heath Insurance wage base cap
- \$ 0.1 billion from increase in corporate tax rate for taxable income above \$ 10 million
- $\bullet~\$$ 2.3 billion from extension and modification of corporate tax rules
- \$ 0.1 billion for ACE depreciation adjustment lower than the previous year

Corporate taxes \$ 2.5 billion

- \$ 0.1 billion from increase in corporate tax rate for taxable income above \$ 10 million
- \$ 2.3 billion from extension and modification of corporate tax rules
- \$ 0.1 billion for ACE depreciation adjustment lower than the previous year

Personal taxes \$ 0 billion

- \$ -0.4 billion from revenues lower than the previous year from the increase in tax rates for high-income individuals
- \$ 0.4 billion from the repeal of Heath Insurance wage base cap

Other \$ 2.9 billion (announced: 2.9)

- \$ 1.8 billion not specified higher revenues
- \$ 0.3 billion incentives lower than the previous year
- \$ 0.8 billion from higher revenues provisions

 $^{^{199}\}mathrm{To}$ be decomposed according to the decisions taken in the year.

According to CBO (1993)—Economic and Budget Outlook, September 1993 (p. 29), on the spending side the effect of the measures in the calendar year was:

SPENDING: \$ 20.9 billion

Salaries \$ 0.9 billion (announced: 0.9)

- lower federal employee retirement and health benefits for \$ 0.7 billion
- lower veterans' benefits for \$ 0.2 billion

Transfers \$ 4.3 billion (announced: 4.3)

- reduction in expenditure for Medicare for \$ 4.6 billion
- ullet reduction in expenditure for Medicaid for \$ 0.5 billion
- \$ 0.3 billion from the reduction of Federal Family Education Loans
- \$ -0.4 billion for increased spending on Food Stamps
- \$ 0.1 billion for lower spending on farm programs
- \$ 0.7 billion from the decrease in taxable portion of Social Security benefits
- \$ 0.1 billion from reduction in deductible portion of business meals and entertainment expenses
- \$ 0.3 billion for the research and experimentation credit lower than the previous year
- \$ 0.3 billion for expensing amount (section 179) for small business lower than the previous year

OBRA-93 comprised as well a series of increases in tax credit for a total \$ -2.2 lower revenues to stimulate investments and consumption, including:

- \$ 0.1 billion for the extension and simplification of the Earned Income Tax Credit
- \$ 0.4 billion for the permanent extension of tax credit for builders of low-income housing
- \$ 0.1 billion for passive loss relief for real estate professionals
- \$ 0.1 billion for tax incentives for empowerment zones and enterprise communities
- \$ 0.1 billion for the extension of mortgage revenue bonds and mortgage credit certificates
- \$ 1.4 billion for increased outlays from Earned Income Tax Credit

Other \$ 15.7 billion including:

- other spending cuts for \$ 0.5 billion
- discretionary budget of \$ 15.2 billion

United States 1998

Fiscal consolidation of 0.17 percent of GDP consisting in 019 percent of GDP spending cuts partially offset by a tax cut of 0.02 percent of GDP. Fiscal consolidation for the year 1998 was a consequence of the measures contained in OBRA-93.

According to CBO (1994)—An Economic Analysis of the Revenue Provisions of OBRA-93 (pp. 2-3), on the revenues side it included:

REVENUES: \$ -2 billion

Taxes on Income, Profit and Capital Gains \$ -0.7 billion

- \$ 1.3 billion from higher revenues from the increase in tax rates for high-income individuals
- \$ 0.3 billion from the repeal of Heath Insurance wage base cap
- \$ 0.2 billion from increase in corporate tax rate for taxable income above \$ 10 million

- \$ -2.6 billion from extension and modification of corporate tax rules
- \bullet \$ 0.1 billion for ACE depreciation adjustment lower than the previous year

Corporate taxes \$ -2.3 billion

- \$ 0.2 billion from increase in corporate tax rate for taxable income above \$ 10 million
- lower revenues of \$ 2.6 billion from extension and modification of corporate tax rules
- \$ 0.1 billion for ACE depreciation adjustment lower than the previous year

Personal taxes \$ 1.6 billion

- \$ 1.3 billion from higher revenues from the increase in tax rates for high-income individuals
- \$ 0.3 billion from the repeal of Heath Insurance wage base cap

Taxes on Goods and Services \$ 0.1 billion (announced: 0.1)

• \$ 0.1 billion from motor fuels tax by 4.3 cents per gallon

Other revenues for a total \$ -1.4 billion (announced: -1.4)

- a negative \$ 1.8 billion from not specified lower revenues
- \$ 0.2 billion incentives lower than the previous year
- \$ 0.2 billion from higher revenues provisions

According to CBO (1993)—Economic and Budget Outlook, September 1993 (p. 29), on the spending side it comprised:

SPENDING: \$ 15.3 billion

Salaries \$ 0.8 billion (announced: 0.8)

- lower federal employee retirement and health benefits for \$ 0.2 billion
- lower veterans' benefits for \$ 0.6 billion

Transfers \$ 3.2 billion (announced: 3.2)

- \bullet reduction in expenditure for Medicare for \$ 2.9 billion
- reduction in expenditure for Medicaid for \$ 0.3 billion
- $\bullet~\$$ -0.2 billion for increased spending on Food Stamps
- \$ -0.1 billion for higher spending on farm programs
- \$ 0.5 billion from the decrease in taxable portion of Social Security benefits
- \$ 0.2 billion from reduction in deductible portion of business meals and entertainment expenses
- \$ 0.1 billion for the research and experimentation credit lower than the previous year
- \$ 0.2 billion for expensing amount (section 179) for small business lower than the previous year

OBRA-93 comprised as well a series of increases in tax credit for a total \$-0.7 lower revenues to stimulate investments and consumption, including:

- \$ 0.1 billion for the extension and simplification of the Earned Income Tax Credit
- \$ 0.3 billion for the permanent extension of tax credit for builders of low-income housing
- \$ 0.1 billion for passive loss relief for real estate professionals
- \$ 0.2 billion for increased outlays from Earned Income Tax Credit

Other \$ 11.3 billion (announced: 11.3)

- other spending cuts for \$ 0.1 billion
- discretionary budget of \$ 11.2 billion

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