

APPENDIX

Table 1A Words/n-grams that make up the three attitudes.

NFP	RFP	EFP
bond issuance debt instruments debt issuance debt level debt levels debt management debt ratio debt ratios debt securities fiscal and monetary policies fiscal and monetary policy fiscal authorities fiscal authority fiscal balance fiscal capacity fiscal management fiscal drag fiscal framework fiscal measures fiscal policies fiscal policy fiscal policy and monetary policy fiscal position fiscal positions fiscal situation fiscal stance fiscal variables government bonds	austerity budget consolidation budget constraint budget constraints budget deficit consolidation debt burdens debt overhang debt problem debt restructuring debt service default deficit fiscal adjustment fiscal austerity fiscal balances fiscal burden fiscal cliff fiscal compact fiscal conditions fiscal consolidation fiscal crisis fiscal deficit fiscal deficits fiscal devaluation fiscal discipline fiscal imbalances fiscal limit fiscal problems fiscal restraint fiscal rules fiscal soundness debt burden fiscal sustainability fiscal tightening government debt government deficit national debt public debt sound fiscal policies sovereign debt	countercyclical fiscal policy discretionary fiscal policy economic recovery expansionary fiscal policy fiscal action fiscal expansion fiscal expenditure fiscal impulse fiscal multiplier fiscal policy stimulus fiscal spending fiscal stimulus fiscal shocks fiscal stimulus package government action government consumption government expenditure government expenditures government guarantees government intervention government purchases government spending government support optimal fiscal policy public expenditure public expenditures public investment public spending public support stimulus package tax cut tax cuts

Note A

We first estimated a VAR model and then carried out a Granger causality test. VAR models are classical tools for the analysis of multiple time series, given two stochastic processes Y_t and X_t , which are assumed to be jointly stationary. The joint representation of the autoregressive representation is as follows:

$$\begin{cases} Y_t = \beta_0 + A_1 Y_{t-1} + B_1 X_{t-1} + \varepsilon_{1t} \\ X_t = \gamma_0 + C_2 Y_{t-1} + D_2 X_{t-1} + \varepsilon_{2t} \end{cases}$$

where Y_t and X_t denote variables observed at time t , β_0 and γ_0 are constant parameters, A , B , C and D are vectors of estimated coefficients. The noise terms are uncorrelated in time, ε_1 and ε_2 have zero means and variances $\sigma_{\varepsilon_i}^2$, $i=1,2$. The covariance between ε_1 and ε_2 is defined by $\sigma_{\varepsilon_1\varepsilon_2} = \text{cov}(\varepsilon_1, \varepsilon_2)$.

Table 1B CBS6's Topical issues

1999 -0.21 -0.14	2000 -0.25 -0.16	2001 -0.24 -0.14	2002 -0.23 -0.12	2003 -0.20 -0.11	2004 -0.23 -0.09	2005 -0.22 -0.05	2006 -0.21 0.00
Currency (common, European, stable)	Services (financial)	Inflation Targeting	Industry (banking, manufacturing)	Output (growth, services, long-run)	Transparency	Price (stability, house, electricity, oil)	Long term (solutions, growth, interest rates)
2007 -0.16 0.15	2008 -0.07 0.32	2009 0.11 0.32	2010 0.12 0.14	2011 0.20 0.00	2012 0.25 -0.08	2013 0.26 -0.13	2014 0.25 -0.16
Default (expected, probability of)	Investors (losses, instinct of)	Securities (loan, mortgage backed, firms)	Funds (public, providing, firms)	Households (investments, suffering)	Policy (monetary, horizon)	Requirements (liquidity, capital)	Unemployment
				Shock (supply)			Government Debt

Table 2B EC2's Topical issues

1999 -0.44 0.11	2000 -0.33 0.37	2001 -0.27 0.22	2002 -0.41 0.51	2003 -0.27 -0.01	2004 -0.21 -0.12	2005 -0.34 -0.32	2006 -0.43 0.47
Tax Rates (income)	Returns (future, increasing, equity)	Political (institutions, regimes)	Portfolio (choice)	Price (level, stability, shock)	Government (spending, surplus, deficit)	Optimal Policy (monetary policy fiscal policy)	Labour (supply, force, income)
2007 -0.08 -0.25	2008 0.09 -0.19	2009 0.14 -0.10	2010 0.16 0.07	2011 0.03 -0.14	2012 0.14 0.24	2013 0.30 0.00	2014 0.32 0.06
Consumption (private)	Shocks (spending, fiscal, global)	Monetary Policy (active, rule)	Inflation (hyper, control)	Shock (negative, volatility)	Loans (government, corporate, long- term,...)	Recession (deep, second)	Bonds (government)
	Securities (liquid)		Spending (government, public, household)			Cuts (government, spending tax)	

Table 1C Granger causality between attitudes and topical issues in Central Banks from 1999 to 2014. Significant results are shown in bold. The 5% benchmark is used. In brackets are the lags of the significant values.

ATTITUDES TOPICAL ISSUES	YEAR	To NFPCB	From NFPCB	To RFPCB	From RFPCB	To EFPCB	From EFPCB
Currency	99	0.025(1)	0.443	0.040(4)	0.913	0.486	0.289
Services	00	0.021(1)	0.729	0.502	0.239	0.630	0.787
Inflation Targeting	01	0.009(2)	0.484	0.441	0.882	0.008(1)	0.870
Industry	02	0.855	0.136	0.061	0.340	0.587	0.780
Output	03	0.048(4)	0.194	0.062	0.005(3)	0.030(2)	0.422
Transparency	04	0.546	0.044(1)	0.679	0.086	0.875	0.011(1)
Price	05	0.335	0.665	0.531	0.642	0.014(1)	0.2143
Long Term	06	0.732	0.892	0.455	0.030(1)	0.489	0.169
Default	07	0.816	0.388	0.603	0.256	0.001(2)	0.279
Investors	08	0.011(1)	0.194	0.109	0.016(1)	0.040(2)	0.110
Securities	09	0.122	0.459	0.762	0.936	0.861	0.740
Funds	10	0.6822	0.017(2)	0.851	0.338	0.551	0.463
Households	11	0.233	0.221	0.039(2)	0.157	0.681	0.260
Shock	11	0.980	0.028 (3)	0.218	0.476	0.501	0.242
Policy	12	0.723	0.359	0.673	0.183	0.525	0.935
Requirements	13	0.322	0.577	0.915	0.599	0.901	0.464
Unemployment	13	0.511	0.200	0.931	0.005(1)	0.148	0.081
Government Debt	14	0.859	0.175	0.406	0.690	0.597	0.566

Table 2C. Granger causality between attitudes and topical issues among academic economists from 1999 to 2014. Significant results are shown in bold. The 5% benchmark is used. The lags of the significant values are shown in brackets.

ATTITUDES TOPICAL ISSUES	YEAR	To NFPEC	From NFPEC	To RFPEC	From RFPEC	To EFPEC	From EFPEC
Tax Rates	99	0.445	0.412	0.164	0.241	0.156	0.013(4)
Returns	00	0.026(3)	0.428	0.960	0.828	0.612	0.425
Political	01	0.350	0.008(3)	0.662	0.021(3)	0.470	0.128
Portfolio	02	0.032(4)	0.370	0.480	0.576	0.344	0.281
Price	03	0.231	0.295	0.028(1)	0.144	0.974	0.010(2)
Government	04	0.353	0.803	0.105	0.168	0.157	0.038(4)
Optimal Policy	05	0.377	0.779	0.921	0.748	0.660	0.530
Labour	06	0.430	0.299	0.201	0.144	0.367	0.749
Consumption	07	0.321	0.039(4)	0.408	0.028 (4)	0.528	0.775
Shocks	08	0.768	0.057	0.637	0.146	0.726	0.001(3)
Securities	08	0.303	0.386	0.735	0.546	0.041(1)	0.403
Monetary Policy	09	0.510	0.676	0.363	0.523	0.613	0.010(1)
Inflation	10	0.680	0.582	0.674	0.699	0.408	0.262
Spending	10	0.131	0.206	0.643	0.011(2)	0.720	0.687
Shock	11	0.702	0.015(1)	0.476	0.313	0.541	0.001(1)
Loans	12	0.464	0.855	0.010(3)	0.218	0.344	0.050(2)
Recession	13	0.488	0.187	0.129	0.036(1)	0.953	0.001(1)
Cuts	13	0.670	0.005(3)	0.475	0.920	0.542	0.016(3)
Bonds	14	0.831	0.384	0.297	0.165	0.238	0.560

Table 1D. Granger causality between CBS6 topical issues and EC2 topical issues from 1999 to 2014. Significant results are shown in bold. The 5% benchmark is used. In brackets are the lags of the significant values.

	EC2							
CBS6	To Tax Rates	From Tax Rates	To Returns	From Returns	To Political	From Political	To Portfolio	From Portfolio
Currency	0.003(1)	0.671	0.175	0.050(1)	0.010(1)	0.422	0.577	0.017(1)
Services	0.908	0.018(1)	0.859	0.836	0.706	0.677	0.048(3)	0.896
Infl. Targeting	0.699	0.578	0.557	0.000(3)	0.440	0.000(1)	0.744	0.063
Industry	0.020(3)	0.021(3)	0.181	0.028(4)	0.061	0.981	0.001(2)	0.063
Output	0.276	0.418	0.974	0.000(3)	0.260	0.004(1)	0.848	0.767
Transparency	0.789	0.329	0.763	0.440	0.136	0.308	0.863	0.030(2)
Price	0.348	0.001(1)	0.000(1)	0.978	0.201	0.896	0.968	0.467
Long term	0.395	0.311	0.843	0.601	0.891	0.379	0.787	0.475
Default	0.078	0.036(1)	0.371	0.253	0.648	0.331	0.774	0.000(2)
Investors	0.081	0.726	0.014(2)	0.851	0.886	0.463	0.468	0.006(3)
Securities	0.301	0.007(1)	0.273	0.515	0.544	0.321	0.051	0.398
Funds	0.053	0.203	0.086	0.035(3)	0.391	0.149	0.249	0.496
Households	0.277	0.001(3)	0.652	0.830	0.652	0.255	0.530	0.153
Shock	0.215	0.226	0.331	0.868	0.958	0.512	0.793	0.613
Policy	0.041(1)	0.111	0.594	0.138	0.704	0.857	0.737	0.583
Requirements	0.336	0.237	0.026(4)	0.946	0.315	0.927	0.142	0.595
Unemployment	0.882	0.523	0.500	0.344	0.018(3)	0.551	0.784	0.877
Govt Debt	0.408	0.038(2)	0.434	0.018(1)	0.317	0.076	0.550	0.235

EC2	To Price	From Price	To Government	From Government	To Optimal Polity	From Optimal Policy	To Labour	From Labour
CBS6								
Currency	0.002(2)	0.580	0.036(2)	0.407	0.350	0.980	0.952	0.701
Services	0.007(1)	0.455	0.025(1)	0.136	0.041(1)	0.266	0.161	0.000(1)
Infl. Targeting	0.001(1)	0.656	0.029(1)	0.080	0.046(3)	0.775	0.606	0.842
Industry	0.291	0.988	0.258	0.076	0.079	0.909	0.871	0.943
Output	0.003(1)	0.516	0.046(1)	0.669	0.019(3)	0.877	0.495	0.799
Transparency	0.412	0.422	0.335	0.882	0.942	0.810	0.527	0.929
Price	0.024(2)	0.143	0.047(3)	0.207	0.188	0.830	0.027(4)	0.064
Long Term	0.679	0.292	0.638	0.224	0.020(3)	0.336	0.208	0.032(1)
Default	0.913	0.008(1)	0.869	0.022(1)	0.854	0.335	0.363	0.459
Investors	0.355	0.261	0.101	0.540	0.581	0.439	0.631	0.663
Securities	0.039(2)	0.653	0.179	0.183	0.730	0.792	0.021(4)	0.629
Funds	0.017(1)	0.000(1)	0.680	0.509	0.337	0.221	0.809	0.385
Households	0.344	0.018(1)	0.170	0.306	0.349	0.393	0.022(3)	.296
Shock	0.962	0.584	0.707	0.690	0.795	0.467	0.534	0.854
Policy	0.669	0.570	0.403	0.715	0.765	0.996	0.793	0.040(2)
Requirements	0.043(1)	0.976	0.335	0.366	0.863	0.511	0.403	0.023(1)
Unemployment	0.357	0.254	0.717	0.415	0.675	0.417	0.740	0.770
Govt Debt	0.665	0.103	0.871	0.888	0.529	0.157	0.444	0.023(2)

EC2 CBS6	To Consumption	From Consumption	To Shocks	From Shocks	To Securities	From Securities	To Monetary Policy	From Monetary Policy
Currency	0.565	0.148	0.305	0.318	0.369	0.453	0.923	0.253
Services	0.315	0.124	0.611	0.054	0.635	0.353	0.495	0.008(2)
Infl. Targeting	0.691	0.950	0.071	0.219	0.534	0.694	0.181	0.287
Industry	0.498	0.494	0.002(1)	0.319	0.832	0.024(1)	0.372	0.623
Output	0.547	0.693	0.160	0.989	0.021(3)	0.451	0.028(4)	0.262
Transparency	0.420	0.020(1)	0.153	0.034(1)	0.453	0.539	0.230	0.063
Price	0.662	0.045(4)	0.882	0.025(1)	0.093	0.293	0.188	0.830
Long term	0.341	0.896	0.778	0.529	0.025(3)	0.768	0.011(3)	0.961
Default	0.048(1)	0.493	0.831	0.480	0.952	0.505	0.053	0.938
Investors	0.703	0.344	0.927	0.751	0.054	0.187	0.303	0.012(3)
Securities	0.179	0.750	0.036(1)	0.466	0.529	0.005(2)	0.677	0.261
Funds	0.441	0.627	0.446	0.637	0.189	0.140	0.942	0.016(2)
Households	0.287	0.015(2)	0.260	0.926	0.431	0.001(1)	0.024(1)	0.348
Shock	0.674	0.258	0.423	0.762	0.005(1)	0.730	0.019(1)	0.368
Policy	0.385	0.433	0.087	0.468	0.353	0.821	0.014(1)	0.978
Requirements	0.761	0.465	0.288	0.261	0.009(4)	0.206	0.527	0.699
Unemployment	0.440	0.512	0.735	0.056	0.204	0.001(1)	0.271	0.017(4)
Govt Debt	0.358	0.70	0.165	0.138	0.021(4)	0.825	0.476	0.089

EC2 CBS6	To Inflation	From Inflation	To Spending	From Spending	To Shock	From Shock	To Loans	From Loans
Currency	0.712	0.279	0.448	0.005(2)	0.823	0.764	0.590	0.688
Services	0.766	0.010(2)	0.180	0.044(1)	0.932	0.637	0.174	0.340
Infl. Targeting	0.852	0.020(2)	0.803	0.368	0.189	0.862	0.046(1)	0.408
Industry	0.967	0.772	0.267	0.416	0.004(1)	0.513	0.849	0.224
Output	0.081	0.284	0.289	0.231	0.955	0.719	0.258	0.646
Transparency	0.403	0.741	0.265	0.182	0.987	0.573	0.158	0.625
Price	0.835	0.697	0.026(3)	0.665	0.543	0.221	0.034(4)	0.194
Long term	0.005(3)	0.387	0.742	0.005(3)	0.521	0.461	0.028(2)	0.006(2)
Default	0.832	0.958	0.620	0.049(3)	0.017(1)	0.796	0.548	0.516
Investors	0.023(1)	0.395	0.611	0.690	0.413	0.612	0.399	0.644
Securities	0.039(1)	0.898	0.870	0.971	0.193	0.231	0.368	0.302
Funds	0.024(4)	0.925	0.501	0.658	0.989	0.316	0.158	0.140
Households	0.770	0.294	0.979	0.387	0.549	0.746	0.360	0.344
Shock	0.029(4)	0.298	0.805	0.006(3)	0.123	0.672	0.804	0.027(2)
Policy	0.015(4)	0.111	0.229	0.526	0.179	0.904	0.323	0.009(2)
Requirements	0.327	0.310	0.594	0.075	0.473	0.866	0.876	0.039(3)
Unemployment	0.999	0.995	0.035(1)	0.314	0.680	0.004(2)	0.351	0.297
Govt Debt	0.566	0.004(1)	0.006(2)	0.293	0.988	0.005(3)	0.181	0.255

EC2 CBS6	To Recession	From Recession	To Cuts	From Cuts	To Bonds	From Bonds
Currency	0.778	0.681	0.633	0.088	0.019(2)	0.401
Services	0.033(1)	0.745	0.698	0.482	0.669	0.480
Infl. Targeting	0.455	0.372	0.506	0.600	0.470	0.285
Industry	0.034(1)	0.379	0.678	0.038(1)	0.916	0.042(1)
Output	0.263	0.188	0.565	0.948	0.986	0.339
Transparency	0.224	0.008(1)	0.297	0.620	0.075	0.219
Price	0.154	0.003(1)	0.029(4)	0.220	0.145	0.056
Long term	0.228	0.450	0.645	0.498	0.044(1)	0.329
Default	0.994	0.764	0.691	0.505	0.034(1)	0.777
Investors	0.771	0.630	0.904	0.648	0.239	0.147
Securities	0.488	0.003(1)	0.627	0.999	0.754	0.033(1)
Funds	0.688	0.028(1)	0.592	0.990	0.594	0.006(2)
Households	0.067	0.031(1)	0.847	0.430	0.382	0.382
Shock	0.000(2)	0.947	0.898	0.003(3)	0.819	0.992
Policy	0.006(1)	0.191	0.575	0.037(2)	0.482	0.599
Requirements	0.013(1)	0.039(1)	0.909	0.148	0.190	0.784
Unemployment	0.099	0.014(4)	0.028(1)	0.387	0.270	0.920
Govt Debt	0.213	0.310	0.039(3)	0.324	0.156	0.824