

Principal Components Analysis: smefit2.0, linear correction

**PC 1 (5.37e+05):**  $+0.652c_{\varphi B} - 0.624c_{\varphi G} - 0.364c_{\varphi WB} + 0.198c_{\varphi W} - 0.088c_{b\varphi} + 0.039c_{tW} - 0.036c_{tG} - 0.035c_{tZ} - 0.028c_{c\varphi} - 0.013c_{\tau\varphi}$

**PC 2 (1.95e+05):**  $+0.773c_{\varphi G} + 0.534c_{\varphi B} - 0.290c_{\varphi WB} + 0.163c_{\varphi W} + 0.044c_{b\varphi} + 0.042c_{tG} + 0.032c_{tW} - 0.029c_{tZ} + 0.014c_{c\varphi}$

**PC 3 (4.44e+03):**  $+0.827c_{\tau\varphi} - 0.507c_{b\varphi} - 0.164c_{\varphi WB} - 0.101c_{\varphi B} - 0.101c_{\varphi D} - 0.097c_{c\varphi} + 0.046c_{\varphi G}$

**PC 4 (2.49e+03):**  $-0.693c_{b\varphi} - 0.557c_{\tau\varphi} - 0.318c_{\varphi WB} - 0.212c_{\varphi B} - 0.208c_{\varphi D} - 0.120c_{c\varphi} + 0.072c_{\varphi G} - 0.018c_{\varphi W} - 0.014c_{tW} + 0.012c_{tZ}$

**PC 5 (1.56e+03):**  $+0.693c_{\varphi WB} - 0.441c_{b\varphi} + 0.385c_{\varphi D} + 0.345c_{\varphi B} - 0.222c_{c\varphi} - 0.072c_{\tau\varphi} + 0.042c_{\varphi G} + 0.030c_{\varphi W} - 0.021c_{tG} + 0.021c_{tW} - 0.018c_{tZ} - 0.011c_{\varphi\Box}$

**PC 6 (3.32e+02):**  $-0.975c_{tG} - 0.142c_{c\varphi} - 0.079c_{qq}^{1,8} - 0.074c_{qq}^{1,3} - 0.071c_{qt}^8 + 0.060c_{b\varphi} + 0.053c_{\varphi G} - 0.035c_{ut}^8 - 0.028c_{qu}^8 - 0.027c_{\varphi WB} - 0.027c_{\varphi W} - 0.022c_{dt}^8 + 0.022c_{\varphi Q}^3 - 0.019c_{qd}^8 - 0.014c_{\varphi D} + 0.013c_{\varphi Q}^{(-)} - 0.012c_{\varphi\Box} + 0.012c_{tW}$

**PC 7 (2.80e+02):**  $-0.954c_{qq}^{1,3} + 0.284c_{\varphi Q}^3 + 0.075c_{tG} + 0.048c_{tW} + 0.022c_{qq}^{8,3} + 0.020c_{c\varphi}$

**PC 8 (1.75e+02):**  $+0.921c_{c\varphi} + 0.235c_{\varphi W} - 0.226c_{b\varphi} - 0.157c_{tG} + 0.106c_{\varphi WB} + 0.063c_{\varphi D} + 0.062c_{\varphi\Box} - 0.014c_{qq}^{1,8} + 0.014c_{WWW} - 0.013c_{t\varphi} - 0.012c_{qt}^8 + 0.011c_{qq}^{1,3} - 0.010c_{\varphi B}$

**PC 9 (8.47e+01):**  $+0.997c_{tW} - 0.056c_{\varphi B} + 0.055c_{qq}^{1,3} + 0.014c_{\varphi Q}^3 + 0.010c_{qq}^{8,3}$

**PC 10 (3.55e+01):**  $-0.797c_{qq}^{1,8} - 0.430c_{ut}^8 - 0.213c_{qt}^8 - 0.204c_{dt}^8 - 0.202c_{qq}^{1,1} - 0.131c_{ut}^1 + 0.100c_{tG} - 0.096c_{qq}^{8,3} - 0.076c_{dt}^1 + 0.060c_{qu}^1 + 0.049c_{qu}^8 + 0.039c_{\varphi Q}^{(-)} - 0.029c_{\varphi Q}^3 - 0.025c_{\varphi t} + 0.025c_{qd}^1 + 0.014c_{qt}^1$

**PC 11 (2.28e+01):**  $-0.882c_{\varphi W} + 0.305c_{\varphi B} - 0.262c_{\varphi D} + 0.223c_{c\varphi} + 0.065c_{\varphi WB} - 0.060c_{b\varphi} - 0.050c_{WWW} - 0.023c_{t\varphi} - 0.012c_{tG} - 0.010c_{qq}^{1,8}$

**PC 12 (1.81e+01):**  $-0.737c_{qt}^8 + 0.354c_{qt}^1 - 0.304c_{qu}^8 + 0.289c_{qu}^1 + 0.241c_{qq}^{8,3} + 0.163c_{ut}^8 - 0.144c_{qd}^8 + 0.123c_{qd}^1 + 0.106c_{qq}^{1,1} + 0.088c_{ut}^1 + 0.059c_{dt}^8 + 0.059c_{tG} + 0.055c_{\varphi Q}^{(-)} + 0.045c_{\varphi Q}^3 + 0.044c_{qq}^{1,8} - 0.035c_{\varphi t} + 0.020c_{dt}^1 + 0.016c_{qq}^{1,3} - 0.011c_{\varphi W}$

**PC 13 (7.95e+00):**  $-0.946c_{\varphi Q}^3 - 0.283c_{qq}^{1,3} - 0.109c_{qq}^{8,3} + 0.056c_{qq}^{1,8} + 0.047c_{qt}^1 - 0.039c_{qt}^8 + 0.039c_{qu}^1 - 0.035c_{qu}^8 + 0.029c_{tW} - 0.023c_{\varphi Q}^{(-)} + 0.018c_{qd}^1 - 0.015c_{\varphi D} - 0.013c_{qd}^8 + 0.011c_{\varphi W}$

**PC 14 (3.91e+00):**  $+0.396c_{ut}^8 - 0.381c_{qt}^1 + 0.378c_{qq}^{8,3} - 0.360c_{qu}^1 - 0.338c_{qq}^{1,8} + 0.302c_{\varphi Q}^{(-)} + 0.201c_{dt}^8 - 0.194c_{\varphi t} + 0.178c_{qq}^{1,1} - 0.167c_{qd}^1 + 0.166c_{qu}^8 - 0.160c_{qt}^8 - 0.101c_{\varphi Q}^3 + 0.086c_{ut}^1 + 0.079c_{dt}^1 + 0.056c_{qd}^8 + 0.040c_{tZ} - 0.020c_{qq}^{1,3} + 0.014c_{tG} + 0.014c_{\varphi D} - 0.010c_{t\varphi}$

**PC 15 (2.52e+00):**  $+0.988c_{WWW} + 0.098c_{\varphi D} - 0.089c_{\varphi W} - 0.060c_{\varphi WB} + 0.028c_{\varphi Q}^{(-)} - 0.014c_{\varphi \square} - 0.013c_{\varphi t} - 0.012c_{qq}^{8,3}$

**PC 16 (2.26e+00):**  $+0.828c_{\varphi D} - 0.385c_{\varphi WB} - 0.290c_{\varphi W} - 0.177c_{\varphi \square} - 0.139c_{WWW} - 0.126c_{\varphi B} + 0.070c_{\varphi Q}^{(-)} + 0.066c_{c\varphi} - 0.033c_{\varphi t}$   
 $-0.032c_{t\varphi} - 0.031c_{b\varphi} - 0.023c_{qq}^{8,3} + 0.016c_{qq}^{1,8} + 0.016c_{qt}^1 + 0.016c_{qt}^8 - 0.015c_{tZ} - 0.014c_{qu}^8 - 0.013c_{ut}^8 + 0.013c_{qu}^1 - 0.013c_{\varphi Q}^3$   
 $-0.011c_{dt}^8 - 0.010c_{qd}^8$

**PC 17 (1.73e+00):**  $+0.723c_{\varphi Q}^{(-)} - 0.445c_{\varphi t} - 0.304c_{qu}^8 - 0.230c_{qq}^{8,3} - 0.209c_{qd}^8 + 0.138c_{qq}^{1,8} + 0.135c_{qt}^8 - 0.124c_{dt}^8 - 0.119c_{ut}^8$   
 $+0.095c_{tZ} - 0.071c_{\varphi D} - 0.055c_{qq}^{1,1} + 0.035c_{\varphi WB} + 0.026c_{\varphi W} - 0.025c_{WWW} + 0.023c_{\varphi Q}^3 - 0.023c_{qu}^1 + 0.020c_{qt}^1 + 0.019c_{t\varphi} + 0.019c_{qd}^1$   
 $+0.018c_{\varphi B} - 0.017c_{ut}^1 + 0.017c_{\varphi \square} - 0.015c_{dt}^1 + 0.013c_{tG}$

**PC 18 (9.00e-01):**  $+0.489c_{qt}^8 + 0.445c_{qt}^1 + 0.366c_{qu}^1 + 0.334c_{qq}^{1,1} - 0.310c_{qq}^{1,8} + 0.208c_{qq}^{8,3} + 0.196c_{ut}^1 + 0.179c_{qu}^8 + 0.141c_{\varphi \square} + 0.135c_{ut}^8$   
 $+0.127c_{qd}^1 - 0.124c_{t\varphi} - 0.107c_{qd}^8 + 0.096c_{\varphi Q}^{(-)} + 0.087c_{dt}^1 - 0.067c_{\varphi t} + 0.047c_{dt}^8 - 0.029c_{\varphi Q}^3 - 0.015c_{tG} + 0.015c_{tZ} - 0.014c_{c\varphi}$   
 $-0.010c_{tt}^1$

**PC 19 (6.19e-01):**  $+0.768c_{\varphi \square} - 0.393c_{t\varphi} + 0.267c_{qd}^8 + 0.205c_{qu}^8 - 0.191c_{ut}^8 + 0.181c_{qq}^{1,8} - 0.163c_{qt}^8 + 0.105c_{\varphi Q}^{(-)} + 0.104c_{\varphi D}$   
 $-0.067c_{\varphi t} + 0.060c_{qu}^1 - 0.056c_{qt}^1 - 0.049c_{qq}^{1,1} - 0.049c_{c\varphi} + 0.048c_{qq}^{8,3} - 0.048c_{\varphi WB} - 0.044c_{\varphi W} - 0.036c_{ut}^1 - 0.021c_{dt}^1 - 0.015c_{\varphi B}$   
 $-0.011c_{qd}^1 + 0.010c_{tZ}$

**PC 20 (5.24e-01):**  $-0.456c_{qd}^8 + 0.434c_{ut}^8 + 0.390c_{\varphi \square} - 0.371c_{qu}^8 - 0.325c_{qq}^{1,1} - 0.196c_{qq}^{1,8} - 0.193c_{\varphi Q}^{(-)} - 0.179c_{qu}^1 - 0.175c_{ut}^1$   
 $+0.154c_{qt}^8 - 0.126c_{t\varphi} + 0.108c_{\varphi t} - 0.079c_{dt}^1 + 0.066c_{\varphi D} - 0.064c_{qq}^{8,3} - 0.032c_{tZ} - 0.031c_{\varphi W} - 0.031c_{\varphi WB} + 0.023c_{qd}^1 - 0.019c_{c\varphi}$   
 $-0.012c_{dt}^8 - 0.011c_{\varphi B} + 0.010c_{qt}^1 + 0.010c_{\varphi Q}^3$

**PC 21 (2.55e-01):**  $-0.659c_{t\varphi} - 0.421c_{\varphi \square} - 0.365c_{qq}^{1,1} + 0.328c_{qq}^{8,3} - 0.235c_{ut}^1 + 0.123c_{qu}^1 - 0.107c_{dt}^1 + 0.103c_{tt}^1 + 0.099c_{qu}^8 + 0.091c_{qq}^{1,8}$   
 $-0.086c_{\varphi t} - 0.084c_{\varphi D} + 0.060c_{qt}^8 + 0.058c_{Qt}^8 + 0.053c_{\varphi W} + 0.051c_{QQ}^1 + 0.049c_{ut}^8 + 0.046c_{\varphi Q}^{(-)} - 0.046c_{dt}^8 + 0.038c_{\varphi WB} - 0.032c_{\varphi Q}^3$   
 $+0.025c_{qd}^1 + 0.017c_{QQ}^8 - 0.015c_{tG} + 0.014c_{qt}^1$

**PC 22 (1.81e-01):**  $+0.622c_{qq}^{8,3} + 0.530c_{t\varphi} - 0.231c_{qq}^{1,1} - 0.206c_{ut}^1 + 0.205c_{tt}^1 - 0.184c_{ut}^8 + 0.159c_{\varphi \square} + 0.143c_{qu}^1 + 0.143c_{qt}^8 + 0.127c_{qq}^{1,8}$   
 $-0.120c_{\varphi t} + 0.118c_{Qt}^8 - 0.110c_{dt}^8 + 0.101c_{QQ}^1 - 0.086c_{qd}^8 - 0.070c_{dt}^1 - 0.067c_{\varphi Q}^3 - 0.052c_{qt}^1 + 0.047c_{tZ} - 0.045c_{qd}^1 + 0.038c_{\varphi D}$   
 $+0.036c_{QQ}^8 - 0.034c_{\varphi Q}^{(-)} - 0.023c_{\varphi W} - 0.017c_{\varphi WB}$

**PC 23 (1.15e-01):**  $+0.535c_{tt}^1 + 0.350c_{ut}^8 - 0.347c_{qq}^{8,3} + 0.310c_{qu}^8 + 0.305c_{Qt}^8 + 0.263c_{QQ}^1 + 0.203c_{\varphi Q}^{(-)} + 0.190c_{qu}^1 - 0.174c_{qq}^{1,1}$   
 $+0.165c_{t\varphi} + 0.132c_{\varphi t} + 0.120c_{qd}^8 + 0.096c_{qd}^1 - 0.093c_{qt}^8 + 0.091c_{QQ}^8 - 0.076c_{dt}^1 + 0.066c_{dt}^8 + 0.060c_{tZ} + 0.047c_{qt}^1 - 0.042c_{ut}^1 - 0.040c_{qq}^{1,8}$   
 $+0.037c_{\varphi Q}^3 - 0.011c_{tG} + 0.011c_{\varphi \square}$

**PC 24 (7.45e-02):**  $-0.527c_{tt}^1 + 0.356c_{qu}^1 - 0.298c_{qq}^{1,1} - 0.297c_{Qt}^8 + 0.285c_{ut}^8 + 0.282c_{qu}^8 - 0.259c_{QQ}^1 + 0.211c_{t\varphi} + 0.199c_{\varphi Q}^{(-)} - 0.151c_{ut}^1$   
 $+0.145c_{tZ} + 0.126c_{\varphi t} - 0.114c_{dt}^1 - 0.113c_{qt}^1 + 0.088c_{qd}^1 - 0.087c_{QQ}^8 - 0.046c_{qq}^{8,3} + 0.045c_{qd}^8 - 0.029c_{qt}^8 + 0.023c_{qq}^{1,8} - 0.011c_{tG}$

**PC 25 (4.68e-02):**  $-0.539c_{qu}^1 - 0.480c_{dt}^8 + 0.459c_{qt}^1 + 0.230c_{qd}^1 + 0.214c_{tZ} + 0.208c_{qu}^8 + 0.170c_{dt}^1 - 0.170c_{qq}^{1,1} + 0.141c_{qd}^8 + 0.116c_{ut}^8$   
 $+0.097c_{qq}^{8,3} + 0.084c_{ut}^1 + 0.065c_{qq}^{1,8} + 0.065c_{t\varphi} - 0.059c_{tt}^1 - 0.049c_{qt}^8 + 0.040c_{\varphi Q}^{(-)} + 0.031c_{\varphi t} - 0.029c_{QQ}^1 - 0.029c_{Qt}^8 - 0.010c_{\varphi Q}^3$

**PC 26 (3.56e-02):**  $-0.807c_{tZ} - 0.408c_{\varphi t} - 0.212c_{dt}^8 + 0.199c_{qd}^1 + 0.166c_{ut}^8 - 0.109c_{\varphi Q}^{(-)} - 0.104c_{qq}^{1,1} + 0.103c_{qu}^8 + 0.096c_{ut}^1 + 0.089c_{qd}^8$   
 $+0.085c_{t\varphi} - 0.050c_{qq}^{8,3} - 0.045c_{qt}^1 + 0.045c_{qu}^1 - 0.041c_{tt}^1 - 0.036c_{\varphi B} - 0.026c_{qt}^8 - 0.022c_{Qt}^8 - 0.020c_{\varphi D} - 0.020c_{QQ}^1 + 0.017c_{dt}^1$

$$-0.010c_{\varphi W}$$

**PC 27 (2.64e-02):**  $-0.477c_{tZ} + 0.470c_{\varphi t} - 0.389c_{qd}^1 + 0.376c_{\varphi Q}^{(-)} + 0.303c_{qt}^1 + 0.215c_{dt}^8 + 0.157c_{dt}^1 - 0.151c_{qq}^{1,1} - 0.142c_{qu}^1 - 0.135c_{ut}^8$   
 $-0.099c_{qd}^8 + 0.081c_{qu}^8 + 0.079c_{qq}^{8,3} - 0.073c_{ut}^1 - 0.041c_{tt}^1 + 0.039c_{t\varphi} + 0.032c_{qq}^{1,8} - 0.020c_{Qt}^8 - 0.020c_{QQ}^1 - 0.020c_{\varphi B} - 0.019c_{\varphi D}$   
 $-0.014c_{\varphi Q}^3$

**PC 28 (2.54e-02):**  $+0.606c_{ut}^1 - 0.543c_{qq}^{1,1} + 0.329c_{dt}^1 - 0.264c_{qd}^1 + 0.218c_{dt}^8 - 0.209c_{\varphi t} + 0.152c_{tZ} - 0.136c_{\varphi Q}^{(-)} + 0.114c_{qu}^1 + 0.076c_{qd}^8$   
 $-0.056c_{qu}^8 - 0.040c_{qq}^{1,8} + 0.036c_{qt}^1 - 0.031c_{qq}^{8,3} + 0.030c_{qt}^8 - 0.028c_{ut}^8 + 0.014c_{t\varphi}$

**PC 29 (1.61e-02):**  $+0.486c_{\varphi t} - 0.421c_{qt}^1 - 0.364c_{dt}^8 + 0.337c_{ut}^1 + 0.321c_{qd}^1 + 0.260c_{dt}^1 - 0.217c_{qu}^8 + 0.216c_{\varphi Q}^{(-)} + 0.164c_{qu}^1 + 0.151c_{qq}^{8,3}$   
 $-0.087c_{t\varphi} - 0.079c_{tZ} + 0.071c_{tt}^1 + 0.057c_{qt}^8 + 0.035c_{QQ}^1 + 0.033c_{Qt}^8 - 0.022c_{ut}^8 - 0.022c_{\varphi Q}^3$

**PC 30 (1.14e-02):**  $-0.569c_{dt}^1 + 0.459c_{qd}^8 - 0.322c_{qu}^8 + 0.312c_{dt}^8 + 0.293c_{qd}^1 + 0.207c_{ut}^1 - 0.159c_{qu}^1 - 0.138c_{qq}^{1,1} + 0.136c_{qt}^8 + 0.126c_{qt}^1$   
 $+0.121c_{qq}^{8,3} + 0.118c_{\varphi Q}^{(-)} + 0.110c_{\varphi t} - 0.084c_{qq}^{1,8} - 0.066c_{tZ} + 0.053c_{t\varphi} - 0.023c_{tt}^1 - 0.020c_{ut}^8 - 0.019c_{Qt}^8 - 0.013c_{\varphi Q}^3 - 0.012c_{QQ}^1$

**PC 31 (7.51e-03):**  $+0.598c_{dt}^1 + 0.470c_{qd}^1 + 0.426c_{dt}^8 - 0.404c_{ut}^1 + 0.189c_{qd}^8 - 0.127c_{qu}^8 - 0.077c_{qq}^{1,1} - 0.066c_{ut}^8 - 0.065c_{\varphi t} + 0.053c_{qt}^8$   
 $-0.052c_{qq}^{1,8} - 0.045c_{qu}^1 + 0.043c_{t\varphi} - 0.015c_{tt}^1 - 0.011c_{qq}^{8,3}$

**PC 32 (5.75e-03):**  $-0.572c_{qd}^8 + 0.443c_{qd}^1 + 0.393c_{qu}^8 + 0.311c_{dt}^8 - 0.259c_{ut}^8 + 0.256c_{ut}^1 - 0.183c_{qu}^1 - 0.164c_{dt}^1 + 0.099c_{qq}^{1,8} - 0.095c_{qt}^8$   
 $-0.085c_{qt}^1 - 0.076c_{qq}^{1,1} - 0.015c_{QQ}^8 + 0.015c_{qq}^{8,3} - 0.013c_{Qt}^8$

**PC 33 (1.18e-03):**  $-0.702c_{QQ}^8 - 0.579c_{Qt}^8 + 0.362c_{tt}^1 + 0.168c_{QQ}^1 - 0.110c_{Qt}^1 - 0.014c_{ut}^1 + 0.012c_{dt}^1 + 0.010c_{qd}^8$

**PC 34 (5.11e-11):**  $-0.659c_{Qt}^1 + 0.571c_{QQ}^8 - 0.465c_{Qt}^8 + 0.148c_{tt}^1 + 0.030c_{QQ}^1$

**PC 35 (5.11e-11):**  $+0.889c_{QQ}^1 - 0.366c_{tt}^1 + 0.183c_{Qt}^1 - 0.160c_{Qt}^8 + 0.128c_{QQ}^8$

**PC 36 (5.11e-11):**  $-0.721c_{Qt}^1 + 0.469c_{Qt}^8 - 0.383c_{QQ}^8 - 0.291c_{tt}^1 + 0.168c_{QQ}^1$